

# Ballinora Community Website

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**CARL Research Project**

in collaboration with

**BALLINORA COMMUNITY**



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## **What is Community-Academic Research Links?**

Community Academic Research Links (CARL) is a community engagement initiative provided by University College Cork to support the research needs of community and voluntary groups/ Civil Society Organisations (CSOs). These groups can be grass roots groups, single issue temporary groups, but also structured community organisations. Research for the CSO is carried out free of financial cost by student researchers.

CARL seeks to:

- provide civil society with knowledge and skills through research and education;
- provide their services on an affordable basis;
- promote and support public access to and influence on science and technology;
- create equitable and supportive partnerships with civil society organisations;
- enhance understanding among policymakers and education and research institutions of the research and education needs of civil society, and
- enhance the transferrable skills and knowledge of students, community representatives and researchers ([www.livingknowledge.org](http://www.livingknowledge.org)).

## **What is a CSO?**

We define CSOs as groups who are non-governmental, non-profit, not representing commercial interests, and/or pursuing a common purpose in the public interest. These groups include: trade unions, NGOs, professional associations, charities, grass-roots organisations, organisations that involve citizens in local and municipal life, churches and religious committees, and so on.

## **Why is this report on the UCC website?**

The research agreement between the CSO, student and CARL/University states that the results of the study must be made public through the publication of the final research report on the CARL (UCC) website. CARL is committed to open access, and the free and public dissemination of research results.

## **How do I reference this report?**

Author (year) *Dissertation/Project Title*, [online], Community-Academic Research Links/University College Cork, Ireland, Available from: <http://www.ucc.ie/en/scishop/completed/> [Accessed on: date].

## **How can I find out more about the Community-Academic Research Links and the Living Knowledge Network?**

The UCC CARL website has further information on the background and operation of Community-Academic Research Links at University College Cork, Ireland. <http://carl.ucc.ie>. You can follow CARL on Twitter at @UCC\_CARL. All of our research reports are accessible free online here: <http://www.ucc.ie/en/scishop/rr/>.

CARL is part of an international network of Science Shops called the Living Knowledge Network. You can read more about this vibrant community and its activities on this website: <http://www.scienceshops.org> and on Twitter @ScienceShops. CARL is also a contributor to Campus Engage, which is the Irish Universities Association engagement initiative to promote community-based research, community-based learning and volunteering amongst Higher Education students and staff.

## **Are you a member of a community project and have an idea for a research project?**

We would love to hear from you! Read the background information here <http://www.ucc.ie/en/scishop/ap/c&vo/> and contact us by email at [carl@ucc.ie](mailto:carl@ucc.ie).

## **Disclaimer**

Notwithstanding the contributions by the University and its staff, the University gives no warranty as to the accuracy of the project report or the suitability of any material contained in it for either general or specific purposes. It will be for the Client Group, or users, to ensure that any outcome from the project meets safety and other requirements. The Client Group agrees not to hold the University responsible in respect of any use of the project results. Notwithstanding this

disclaimer, it is a matter of record that many student projects have been completed to a very high standard and to the satisfaction of the Client Group.

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## Overall Objective & Client

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For my Final Year Project, I elected to partner up with Community-Academic Research Links (CARL), which is an initiative within UCC that provides support to community and voluntary groups.

The project which I was interested mostly in, and ended up choosing, was to develop a website for the Ballinora – Waterfall community.

The aim of this project was to develop a website which met the following goals:

- (a) Promote Community Engagement – build strong local relationships.
- (b) Encourage Social Inclusion – make locals feel valued & important.
- (c) Increase Advertising Revenue – to help maintain & update the website.
- (d) Enable administrators to easily & dynamically manage website content.

These goals would be met, provided the following could be accomplished:

- (a) Promote community participation, by enabling locals to create groups.
- (b) Enable locals to share content (upcoming events, knowledge, photos, news, ideas, etc.).
- (c) Deliver an aesthetically-pleasing website layout & design.
- (d) Create an admin panel to allow administrators to frequently update content.



## As-Is (Requirements)

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### Current Website Processes:

#### (a) Mobile-Accessibility

- The current website is not mobile-friendly.
- The navigation bar & landing page slideshow are both unresponsive to screen-size.
- Today, it should be a given that all applications are mobile-friendly.
- This is a massive concern, as it greatly negates user-experience, and I feel it would turn them away from the site.
- This drives visitors away from the sight as it paints the organization in an unprofessional light.
- For more details on the above, please see *Section 1 Mobile-Accessibility* of appendix.

#### (b) Navigation

- Navigation Menu:
  - The current navigation bar consists of several webpage links, and does not include any drop-down menus (*Please see Section 2 (a) of appendix*).
  - The absence of drop-down menus results in a lack of information being displayed.
- 'Too many clicks'
  - My client feels the number of clicks required to navigate to certain pages is excessive.
  - Navigation is an issue because the current website is making it difficult for visitors to find what they're looking for, causing them to drop off from the site.
  - This is a cause for concern as visitors may therefore be unaware of available functionality & content (*Please see Section 2 (b) of appendix*).
  - The 'clicks' issue above is exacerbated by the navigation menu not having any dropdown options.
- Poorly Displayed Links
  - Some links are not visible on the current site, unless you scroll down certain pages.
  - Visitors may only discover such links if they stumble upon them.

- For example, on the newsletter page, you can see a 'Website Index', which displays several links to other areas of the website. These links are not present on any other webpage. This is an issue as it displays poor site-mapping (*See Section 2 (b) of appendix*).
- In addition, on the current landing page, there is an image which acts as a link to the newsletter (*Please see Section 3 (a) of appendix*).
- The problem is that this link, unfortunately, does not resemble a link in any way. I only realized it was in fact a link after it was pointed out to me by my client.
- Issues, such as this link, will need to be resolved as the newsletter is a core component of this website.
- Another issue raised by such links is that they are not consistent across the website.
- For example, this newsletter link / image is not present on any other webpage.
- I feel the fact that a link to such an important element of the website is absent across the site presents a huge opportunity for improvement.

#### **(c) Contacting Admin**

- Current website is purely informational.
- User interaction is limited to reading content.
- To contact / send info or images to admin, you need to send an email directly from your email account.
- This drawn-out process would certainly deter visitors from sending content as it is quite time-consuming. Therefore, there is a tendency for users to drop off during the process.
- The knock-on effect of this deficiency is that website content is not regularly updated, as admin will not receive additional content to post from locals

#### **(d) News**

- Currently, the newsletter is updated weekly, by removing the previous week's newsletter, & entering an updated version.
- No newsletter archive exists, no records of previously posted newsletters are stored.
- If you missed last week's newsletter, there is currently no way of retrieving it.

### **(e) Groups / Sports**

- Structure:
  - Groups & Sports details are displayed in one large text-area, on their respective pages (*Please see Section 4 (a) of appendix*).
  - Apart from a description, there is no further information available.
  - This is an issue as visitors should gain additional information from these pages, rather than just a bare description.
  - The current website is severely underutilizing local community resources.
- Group Images:
  - Images cannot currently be grouped by Group / Sport. Instead, admin have added a scatter of images throughout the webpages.
  - Currently, there are a few webpages which act as photo galleries.
  - *For more information on above points, please see Section 4 (a) of appendix for more*
  - Admin can add to these photo galleries, but cannot create additional galleries.
  - These galleries were created by the previous person who worked with my client, but they did not build functionality to create further albums.
  - The unavailability of such functionality is a grave concern, which I will rectify.
  - My client has flagged this as a major issue, as images should be the most updateable content of any website.
  - Therefore, I have specifically focused on improving this aspect of the website.

### **(f) Church / School / Community Association**

- Structure:
  - You can view these unstructured pages in *Section 5 (a) of appendix*.
  - Each page consists of one large text-area.
  - These text-areas contain several sections, which are only separated by admin 'bolding' the section headings whilst logged into the WordPress dashboard.
  - This creates an unpleasant user experience as it is difficult to read these pages due to the abundance of text.
- Images:
  - This refers to the Church & School pages, which you can find in *Section 5 (a) of appendix*.

- Admin can add images to these pages. However, they are not aesthetically pleasing, as you will see in the appendix.
- These images are placed one after another in the text areas, which I have detailed above.
- Also, if the images are different sizes, they do not align. Instead, they vary in size, making the user experience even more unpleasant for visitors.
- Content Management:
  - From the admin side, the above pages consist of one large-text area respectively.
  - Admin use the WordPress dashboard to update the text-field on each page.
  - For more information on above points, see *Section 7 of appendix*.

### **(g) Local Business**

- Displaying Local Businesses:
  - There are currently 22 companies currently advertised on the website, having paid a €50 annual subscription fee to admin.
  - Only company details are displayed on the 'Local Products & Services' page.
  - This page consists of one large text-area to display all company details.
  - This text-area contains all company details which are only separated by admin 'bolding' the company names whilst logged into the WordPress dashboard.
  - This creates an unpleasant user experience as it is difficult to distinguish between the companies due to the abundance of text.
  - Despite subscribing to be displayed on the website, businesses will receive no coverage currently, unless visitors navigate to the Products & Services page.
  - This is an opportunity for improvement as I feel some simple changes to the website structure could result in an increase in the number of companies displayed.
  - The existing structure is explained further in *Section 6 (a) of appendix*.

### **(h) Content Management**

- My client has found it extremely difficult to maintain & update the current websites content, as the website was developed using WordPress, a content management system.
- Images:

- My client has suffered with tasks such as uploading large images, which should be relatively simple for any website.
- This issue arises because the dimensions of uploaded images aren't resized to fit the website.
- You can see evidence of this in *Section 3 (b) of appendix*.
- This is a clear issue as all slideshows should be responsive to your screen-size.
- Page Structure:
  - The current website consists of mostly static text, which is updated by admin.
  - There is no structure to the content.
  - You can see how these pages are structured in *Section 7 (b) of appendix*.
  - Each page is basically one large piece of text, which admin add to whenever they want to update.
  - This makes the webpages look very bare & simplistic, which is not always a good thing.
  - I feel the current website is quite unenjoyable & boring for visitors as they would get easily bored due to the basic content.

**(i) Tiered Admin**

- WordPress does not allow you to have multiple administrator accounts.
- Administrators must use one admin account between them.
- All admin functionality is available to all administrators, even though they would ideally only have access to their area.
- Some admin members felt intimidated by this environment, & became so overwhelmed with the technology that they decided to stop administrating the website, as it was unclear how to effectively utilize WordPress.
- This set-up is also not very secure, as there is no 'trail' to identify who has updated various parts of the website.
- This is contributing to the lack of updated content on the website.
- To see the current WordPress dashboard, go to *Section 7 (a) of appendix*.

## To-Be (Scope / Functionality)

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### (a) Mobile-Accessibility

- Website will be mobile-friendly.
- All content, including navigation bar & slideshows will dynamically respond to screen-size.
- *See Section 8 of appendix.*

### (b) Navigation

- I created a navigation bar, including drop-down menus, which remain consistent across all pages.
- The navigation bar includes links to all pages.
- The landing page contains a series of links to the main functionality available to visitors.
- This allows for easy navigation throughout the website.
- *See Section 11 (a) of appendix for more details.*

### (c) Contacting Admin

- Visitors will directly interact with admin, & indirectly interact with other visitors.
- Direct interaction with admin:
  - Visitors can submit:
    - Company Details
    - Local Groups / Sports
    - Upcoming Events
    - Group / Sport Photos
    - Gardening Tips / Images
  - *See Section 11 of appendix for more details.*
- Indirect interaction with other visitors:
  - The above content, submitted by visitors, will appear on the website, once approved by admin. Exposing this information to other visitors.

#### **(d) News**

- The most recent newsletter will be displayed on the 'News' page.
- A newsletter archive will store all previous newsletters.
- This archive can be found in *Section 12 (a) of appendix*.
- Visitors:
  - Can submit news, as shown in *Section 11 (e) of appendix*.
- Content Management:
  - Admin will input a newsletter each week.
  - Admin can easily re-format newsletters (font styles, sizes, colours, etc.).
  - Admin can also edit & delete previous newsletters quite simply.
  - This functionality can be found in *Section 17 (c) (i)*.

#### **(e) Groups / Sports**

- Structure:
  - Local Groups & Sport pages will display a description, upcoming events & a link to their photo gallery.
  - The process which visitors follow to submit a group / sport can be viewed in *Section 11 (c) of appendix*.
- Content Management:
  - After a visitor submits a group / sport, admin receive an email notification, detailing the submission.
  - Then, admin log into the admin panel, & then decide to approve or reject the new group.
  - After approval, the new group is displayed on the website.
  - For more details, see *Section 17 of appendix*.
- Upcoming Events:
  - Visitors can display upcoming events, assuming they have been approved by admin.
  - The process which allows visitors to submit events can be viewed in *Section 11 (d) of appendix*.
- Content Management:
  - After a visitor submits an event, admin receive an email notification, detailing the submission.

- Then, admin log into the admin panel, & decide to approve or reject the new event.
- After approval, the new event is displayed on the website.
- Group Images:
  - Local Groups / Sports can display photo galleries.
  - I have created functionality which displays photo galleries for all existing groups.
  - Visitors send photos to admin, who vet & categorise them.
  - This process can be viewed in Section 11 (e) of appendix.
- Content Management:
  - Admin can create new photo galleries via the admin panel.
  - This functionality allows admin to group images within photo galleries.
  - They can also add photos to existing albums, & delete images from albums.
  - For more details, see Section 17 (c) (ii) of appendix.

#### **(f) Church / School / Community Association**

- Structure:
  - I have given the above pages some much-needed structure.
  - Rather than displaying one text area containing several sections, admin can add / update / delete sections to these pages. (Ministries, Reflections, School Ethos, etc.)
  - These sections will provide visitors with relevant information (Ministries, Reflections, School Ethos, etc.).
  - For more information, see *Section 15 of appendix*.
- Images:
  - Church & School pages will display an image slideshow.
  - For more information, see *Section 15 of appendix*.
- Content Management:
  - Visitors can submit info / images to be displayed on these pages, see in Section 11 (e) of appendix.
  - Admin can also add new sections and update or delete existing sections.
  - The image upload functionality is the same as what can be viewed in *Section 17 (c) (vi) of appendix*.

#### **(g) Local Business**

- Structure:
  - Like above, I have incorporated some much-needed structure to this page.
  - Companies will be grouped by industry (Section 16 (b) of appendix).
  - Company logos will be advertised on all website pages. (Section 16 (a) of appendix)
- Content Management:
  - Companies submit their details via the website. (Section 11 (b) of appendix).



These details are emailed to admin.

After admin receive payment, they will then upload the company details.

- When adding / updating a company, admin will need to specify an industry. This is done by either selecting an existing industry, or adding a new one.

#### **(h) Content Management**

- Customized admin panel will allow administrators to update & manage website content.
- Images:
  - Unlike the existing website, admin will be able to add / delete photo galleries.
- Page Structure:
  - On the Admin panel, admin can view all pending & approved groups, events, companies, etc.
- For further details on the above points, please see *Section 17 of appendix*.

#### **(i) Tiered Admin**

- Only the Master admin has access to all admin sections.
- All other admin accounts can only access their section of the website.
- For example, the only admin accounts responsible for News is the Master admin account and the 'News' account.
- For further details on the above points, please see *Section 17 (b) of appendix*.
- Security:
  - If an admin has forgotten their password, they can request an email to be sent, which will allow them to change their password.
  - They can also change their password by providing their existing password
  - Master Admin also has the capability to change email addresses for each admin account, as well as change their password.
  - For further details, please see *Section 17 (c) of appendix*.

#### **(j) Gardening**

- Structure:
  - A gardening page is to be added, this will contain a 'gardening tips' section for each month.
  - This page will contain a slideshow of gardening images which will have been submitted by visitors.  
For further details on above, please see *Section 18 of appendix*.
- Content Management:
- Visitors can submit images to admin (*Section 11 (e) of appendix*).
- Once visitors have submitted tips / images, admin will log into the admin panel, & either upload the images to the desired month, or update the gardening tips.
- For further details, see *Section 17 (c) (viii) of appendix*.

## Benefits

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### (a) Mobile Accessibility

- As you can see from Section 1 of appendix, when viewed on a mobile device, the current website is not at all flattering.
- When a website is mobile-accessible we usually don't notice. However, if the opposite is true, then it becomes a massive problem.
- Having a website which is dynamically responsive to screen-size should be a given in today's market. However, the fact that the new website will be responsive is a huge step forward for my client.
- A responsive website should be a fundamental aspect of any online presence, however the fact that this doesn't exist in the current solution emphasizes its potential benefit to the customer.
- Mobile accessibility guarantees an increase in the number of website visitors, as the vast majority of screens today are smaller than traditional monitors.
- The fact that this website will be much more accessible to a wider audience greatly promotes community engagement and participation as it allows mobile users access to all available functionality.
- When comparing the new navigation bar & image slideshows with the existing ones, it is clear how much more appealing the new versions are, as they convey a sense of professionalism to the visitor.
- The mobile-accessible navigation bar will increase visitor satisfaction as they will find it easier to navigate through the website, with a smaller screen.

### (b) Navigation

- The new and improved navigation bar allows for easy navigation through the website.
- I have incorporated several dropdown menus under certain menu options.  
For example, if a visitor hovers over the 'Groups' menu option, a dropdown appears of the existing groups.  
This promotes awareness of these groups as their names are displayed on all webpages.  
Even if a visitor never enters the groups page, they only need to hover over the 'Groups' option to be exposed to the existing local groups.
- The main functionality links on the landing page are grouped together to clearly show visitors the options available to them.

(c) Contacting Admin:

- The current process will be streamlined, as all interaction with admin will occur on the website.
- Specifically, the points mentioned in Section (c) of To-Be above, will result in the following benefits:
  - a) Increased advertising revenue
  - b) The ability to raise awareness of local groups & events promotes community engagement, by allowing locals to build strong relationships together.
  - c) Bringing like-minded people together
  - d) The ability to share content (images, etc.) increases social inclusion, by making groups feel valued & important.
  - e) Promoting community participation as we encourage locals to share content & knowledge amongst the community.
- All points above enable the local community to come together as a cohesive unit.
- People living abroad can view what's happening locally.

(d) News:

- There will be a newsletter archive of previously posted newsletters, allowing visitors to look back at previous newsletters.
- If you missed a newsletter, you will be able to look for it within the archive.
- Allowing visitors to submit news promotes social inclusion & shows that we value locals & their information.
- Content Management:
  - Admin can easily rectify any errors (misspellings, etc.) via the admin panel.
  - Admin can make newsletters more appealing to visitors, by adding style to newsletters, to make ensure visitors do not lost concentration whilst reading.

(e) Groups / Sports

- Structure:
  - I have incorporated some much-needed structure to both the Local Groups and Sports pages.
  - Displaying Local Groups / Sports can promote community engagement & participation, as people can discover groups with similar interests, who they may have been unaware of.
  - This new design will improve user experience for visitors.
  - For example, it is will save them time trying to distinguish between groups / sports as it is very clear when a new group is displayed.
- Content Management:
  - Allowing admin to approve or decline groups proposed by admin has many positive effects.
  - We are allowing locals to create groups themselves, thus promoting community engagement, as we are allowing them to build relationships & making them feel valued.

- It is encouraging social inclusion, as we are showing them we value their importance.
- We are promoting community participation, as we encourage visitors to share content.
- We are also improving customer satisfaction for visitors as they do not have to wait for admin to post events, they can simply do it themselves.
- Allowing admin to merely approve groups greatly reduces the required amount of time and effort on their part. Rather than admin having to input groups, we are encouraging visitors to promote their own groups.
- Finally, and most importantly, we are also ensuring that no malicious content is posted as everything submitted by visitors is vetted by admin.
- Upcoming Events:
  - Promoting upcoming events can promote community engagement & social inclusion as groups may see an increase in the numbers of participants as the events are gaining more online exposure.
- Content Management:
  - The Upcoming Events 'approval process' is much the same as the events process above.
  - All admin need to do is approve events to display them, again, saving valuable time.
- Group Images:
  - Allowing visitors to help update website content promotes social inclusion & community participation as we are encouraging visitors to submit images and share content.
  - This also ensures website content will be continuously updated.
- Content Management:
  - Allowing admin to create Group Photo Galleries promotes social inclusion & participation as groups can promote their activities.
  - This easy-to-use functionality creates great value for admin as it takes little effort to add, update or delete photo galleries. Something which was impossible with the previous system.
- For further information, see *Sections 11 (c), 11 (d), 11 (e) and 17 (c)*.

(f) Church / School / Community Association

- Structure:
  - Rather than having to skim through the current pages, the new format allows visitors to quickly identify which sections they would like to visit. Thus, saving time.
  - We expect an increase in number of people visiting these pages, due to the improved structure which crisply separates the various sections.
  - This improved design will cause a knock-on effect as the increased number of visitors will help promote social inclusion & community engagement.
- Images:
  - Ability of visitors to submit images to be displayed on Church & School pages promotes social inclusion, as we are showing that we value local knowledge.
  - For further information, see *Section 17 (c) (ii) of appendix*.
- Content Management:

- The benefit of the admin panel which I have created is that admin can quickly & dynamically add / update / delete sections on these pages. This in turn, saves them great time as the process is very easy.
- For further information, please see *Section 17 of appendix*.

(g) Local Business

- Advertising:
  - The improved structure which allows admin to easily group companies by industry, enables visitors to swiftly differentiate between various business categories, thus saving valuable time.
  - My client expects this new design to result in local companies being more inclined to advertise on the website.  
They expect to see an increase of at least 50% in the number of companies displayed, resulting in a revenue increase of at least €550.  
This money will be ploughed back into the website in the form of hosting, and making further improvements to the website.

(h) Content Management:

- Admin panel allows admin to easily & dynamically manage the vast majority of content (images, groups, events, companies, etc.)
- This panel ensures website content will be frequently updated as it is very easy to use.
- All uploaded images will be resized to a standard size.
- This has a positive knock-on effect for general users, as content is easily updated & maintained, and therefore frequently updated.
- Regarding images, in comparison to the current website, it is much easier to upload & they are also neatly displayed in photo galleries.

(i) Tiered Admin

- This functionality allows website content to be much more easily managed.
- The functionality available is dependent upon which admin account you log into.
- For example, if you log into the 'Gardening' admin, then you will only have access to the gardening aspects of the website.
- This ensures admin cannot get distracted by functionality which they may not be familiar with.
- It also ensures security, as only those with access to each specific section can make changes to that section.
- Security:
  - If you forget your password, you can receive an email which will provide a link to changing the password.
  - Also, if you need to change your password, you can do so by providing the current one.
  - Admin can also easily change emails associated to each admin account.

(j) Gardening

- Tips & Images:
  - Visitors gain the ability to submit gardening tips & images to admin. Promoting social inclusion, as it conveys to the public that we value locals & their knowledge.
  - We promote social inclusion & community engagement as we encourage locals to participate & upload their garden images & advice.
  - For further details, see *Section 11 (e) and Section 18 of appendix.*
- Content Management:
  - Admin can easily & quickly update gardening tips & also upload / delete gardening images
  - For further details, see *Section 17 (c) of appendix.*

## Technical Specifications

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### (a) Front-End:

- Originally, I used WordPress to create the website. However, as outline in appendix *Section 20*, I switched technologies after my working system prototype demonstration.
- I developed the website in Visual Studio. I created an ASP.NET Web Forms website, using C#.
- I used Bootstrap to style my website.
- I used a text-formatting plugin, called ‘Tinymce’, to allow users to re-format text whilst interacting with the system.

### (b) Back-End:

- As no database previously existed, I decided to create an SQL Server database.
- This was created in SQL Server Management Studio.
- This database stores all information which is displayed on the website.

### (c) Implementation:

- I created an account on Microsoft Azure, with a ‘Developer Program Benefit’ subscription.
- This account was used to host my web app, as well as an SQL Server, which contains my SQL database.

### (d) On-Going Hosting Requirements:

- There is a monthly charge associated with hosting the Web App and SQL Server on Azure.
- Currently, I am paying for the service. However, after my demonstration, I will be handing payment responsibility over to my client.

### (e) Challenges & Risks:

- This year was my first year using the C# programming language. People I know who have studied it before seemed worried about the idea of me using it, however I didn’t hit any major roadblocks in terms of development.
- I felt that there was really good documentation online, so the most I ever spent on one particular problem was 2 days at the most.
- The most difficult aspect of this was finding out how to correctly host the website.
- The documentation on this was definitely not as good.

**(f) Future Possibilities for Expansion:**

- Possibilities for expansion are discussed in *Section 21 of appendix*.
- This includes the potential for adding a discussion forum and advertisement payment process to the new scope of the website.



## Sustainability of the System

---

- The major addition to the existing website which I have added is the existence of a database which will store all data displayed on the website.
- This addition comes with it, a cost. However, in comparison to what the database is allowing admin & visitors to do, it is worth it.
- Today, the cost of hosting a web app and database is minimal. For my client, it will be manageable due to the revenue which will be available from the local business advertisements on the website.
- Admin will need to pay for the hosting of both a Web App and SQL Server, ideally with Microsoft Azure.
- With regard to the database, for the foreseeable future, there will be no need make any updates or alterations to it, providing the scope for the website does not change drastically.

## Communications Diary

---

### 13<sup>th</sup> October

- I had my first meeting with my client, Pat O'Connor, today in Room 2.122 of the O'Rahilly Building in UCC.
- Audrey Grace, my FYP mentor, and Anna Kingston of CARL were also present.
- During this meeting, I was introduced to the project in detail.
- The high-level requirements of the project were explained to me
- The purpose of CARL was explained to me by Anna.
- I was also talked through the contract which I had to sign for the project.
- Pat also demonstrated the current website to me.
- During this demonstration, we went through each webpage and I made of list of issues which Pat felt needed to be addressed.
- I also had some additional improvements which we discussed.
- I was also given WordPress login details which were used by admin to update the current website.
- During this meeting, Pat highlighted his preference towards using WordPress for the project.

### 24<sup>th</sup> October

- Pat emailed me requesting a project update, and asking if I needed any assistance.
- I advised Pat that I had met no major obstacles, I also sent some paper prototypes looking for feedback.
- See email thread in Section 20 (a) of appendix.

### 7<sup>th</sup> November

- In the days leading up to the Paper Prototype submission, to get some customer feedback, I sent a copy to my client.
- Pat responded later that evening, saying that the suggested format was excellent.
- In addition, he provided me with some slight adjustments to be made. For example, additional items to the navigation menu.
- Pat asked if we should meet before my Working System Prototype demonstration, which was scheduled to be on 11<sup>th</sup> November.
- I told Pat that I was available to meet in person to discuss my working system, but we agreed that it would be easier to send my WordPress website's URL and asked him to provide further feedback.
- See email thread in Section 20 (b) of appendix.

### 8<sup>th</sup> November

- My client provided me with additional feedback from the local community on my WordPress website.
- He requested some minor changes to the navigation bar. Such as which headings to add to certain pages, which dropdown menus should I have in the navigation menu, etc.
- I also asked Pat if he could provide me with some sample images to display on the website.

- See email thread in Section 20 (c) of appendix.

#### 11<sup>th</sup> November

- During my working system prototype demo, after finding out I was developing using WordPress, my mentor advised me that it would not be a good idea to continue with this technology.
- Afterwards, we discussed if it was best to continue with WordPress, or switch to a different technology.
- Finally, we agreed that it would be in my best interests to switch technologies.
- I decided to use ASP.NET, C# and SQL Server as my new technologies going forward.

#### 6<sup>th</sup> December

- I received an email from my client asking should we have a meeting before Christmas.
- I advised him that I would be unavailable until 22<sup>nd</sup> December due to my exam timetable.
- Pat was very understanding, and we agreed to meet at a later date.
- See email thread in Section 20 (d) of appendix.

#### 13<sup>th</sup> January

- Having worked on the website over the Christmas holidays, we agreed upon a date to meet to discuss the latest version of the website.
- See email thread in Section 20 (e) of appendix.

#### 18<sup>th</sup> January

- I met Pat in UCC, and showed him the latest website.
- I was very pleased with the progress I made over Christmas, and demonstrated this functionality during this meeting.
- Pat was very pleased with the amount of headway I made over Christmas.
- To quote Pat, I “broke the back of it”, in relation to the functionality I needed to implement.
- At the end of this meeting, we agreed that there was no need to meet in-person for a while as there would not be much to discuss.

#### 8<sup>th</sup> February

- Pat provided me with additional feedback from the local community on my website, which I took on board.
- There were some additional requirements asked of, which had not been defined in the original scope.
- Regarding the above scope change, I informed Pat that I would do my best to incorporate it.
- See email thread in Section 20 (f) of appendix.

#### 27<sup>th</sup> February

- After hosting the website, I emailed the URL to my client, and asked for their thoughts on the latest version.

We met every few weeks to show the latest version

Gave me incremental feedback (positioning, colours, etc.)

Very happy with the current state of the website

Initially, they didn't want any admin setup. They wanted anyone to be able to upload to the website. I felt this wouldn't be acceptable due to the obvious risks associated with allowing anyone to upload images, etc. to your website.

I thought this through, and decided it was best to allow anyone to suggest a group / event. Admin would then be made aware of this suggestion via email, & then either approve / decline the group / event. If approved, it would be displayed on the website, however if declined then it would be simply deleted.

18<sup>th</sup> January

- I demonstrated the website to my client, who was very happy with my progress at that point.
- We understood that there were some small fixes to add, but he felt that the website had come a long way since our last meeting.

## Learning Journal / Reflections

---

### What would I do differently?

Looking back, had I the chance to start again, I would have known from the outset of my project that I would have been better off starting from scratch, rather than messing around with WordPress for several weeks.

I wouldn't have used WordPress up until the Working System Prototype Demonstration on November 11<sup>th</sup>, which would have meant that I would have been able to add further functionality to the current website.

### Issues

WordPress is a content management system, typically used by people with no programming experience to maintain personal websites (blogs, etc.). It is favoured due to its apparent simplicity in terms of keeping a blog up-to-date. It can also be used for other types of websites. My customer originally used WordPress to maintain their website. However, WordPress runs into trouble when you want to add some extra functions, and you don't know how to go about it correctly.

Originally, with WordPress, there was only one admin account. This was shared amongst a number of different people who were responsible for various different website segments. This brought about much confusion as all admin had access to the entire website. The customer told me that some admin members became overwhelmed by the amount of functions / options, etc. available to them on WordPress, which caused them to detest the system & those people simply refused to carry on with administrating the website, due to the complexity of WordPress.

In particular, adding new images, companies, etc.

Despite its complexity, the customer asked me to adopt WordPress as the technology to create the new website. I was skeptical about this approach as I had no prior experience with WordPress. However, I did some research and found some simple administrative templates which I could manipulate. I also felt it would be a good idea to continue with WordPress due to my client's familiarity with the technology.

I began using WordPress, and demonstrated my working system prototype on November 11<sup>th</sup>. After this demo, it became quite clear that it would be very difficult to achieve a satisfactory grade if I continued with WordPress. So, I decided to start from scratch, and create an ASP.NET Web Forms website, using C# and an SQL Server database to store the data.

At the beginning, I thought I was going to use a Content Management System (WordPress) to build my customers website. But it has instead turned out that I have created my own Content Management System which the customer will be using to store their information.

## **Scope Change**

In January, my client asked me to add a photo gallery for each Group and Team on the website.

The original scope only included a single image slideshow for each group.

However, I agreed to do my best to create this photo gallery.

After some time, I eventually managed to get a photo gallery for both pages.

It was pivotal that this photo gallery was easy-to-use for admin, who have no previous programming experience. This links back to the Admin section of the first page here.

The lesson learned here was related to the idea that I did not promise to get the photo gallery working. Instead, I promised that I would do my best to try and implement it within the timeframe.

## Executive Summary

---

For my Final Year Project, I elected to partner up with Community-Academic Research Links (CARL), which is an initiative within UCC that provides support to community and voluntary groups.

The CARL project which I was interested mostly in, and ended up choosing, was to develop a website for the Ballinora – Waterfall community.

The Ballinora – Waterfall community currently have a website in place. However, the administrators are experiencing serious difficulty when attempting to maintain and update the content.

This issue arises from the fact that WordPress was used to develop the current website, and the administrators are finding the WordPress dashboard quite complex to deal with.

With WordPress websites, you cannot interact directly with the database used.

For this project, I have created an SQL Server database which will store the website's data. Admin will be able to quickly, easily & dynamically interact with this database to update website content.

All interaction with the database will occur via the website which I have developed.

The aim of this project is to develop a website to meet the following goals:

- (e) Promote Community Engagement – build strong local relationships.
- (f) Encourage Social Inclusion – make locals feel valued & important.
- (g) Increase Advertising Revenue – to help maintain & update the website.
- (h) Enable administrators to easily & dynamically manage website content.

These goals will be met, provided the following can be accomplished:

- (e) Promote community participation, by enabling locals to create groups.
- (f) Enable locals to share content (upcoming events, knowledge, photos, news, ideas, etc.).
- (g) Deliver an aesthetically-pleasing website layout & design.
- (h) Create an admin panel to allow administrators to frequently update content.

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## Appendix

### 1. Mobile-Accessibility

Here you will find screenshots of the current website when viewed on a mobile device.

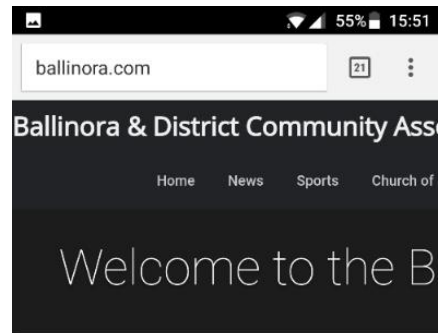
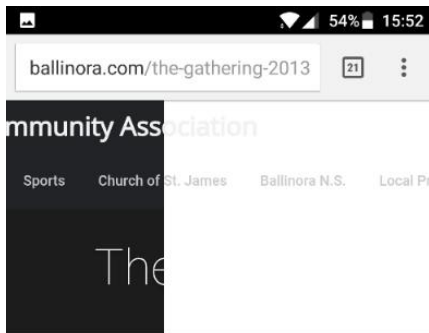
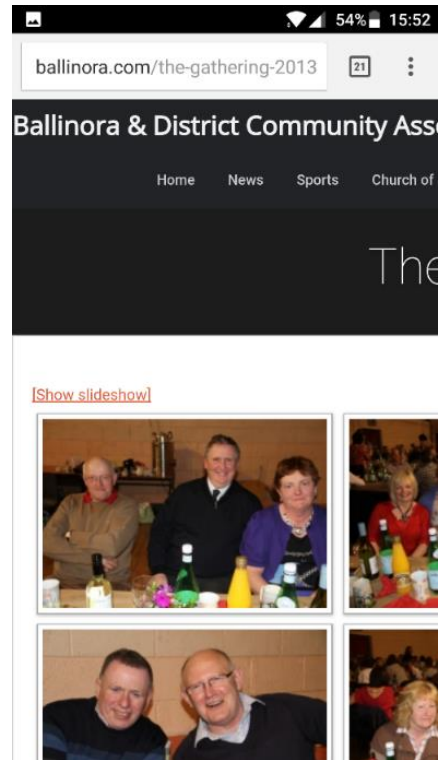
As you can clearly see, the website is not at all responsive to screen-size.

This is not acceptable because this is the first impression a visitor gets of the website.

As you can see, neither the navbar, or the landing page slideshow adapt to screen size.

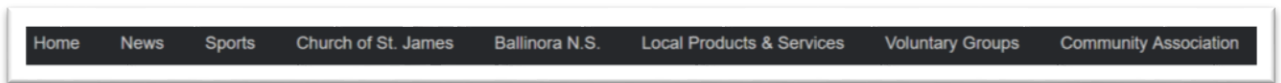
Images cannot be viewed on mobile devices either.

I have not included screenshots of other content such as the newsletter, church, etc. but the same issue arises when you navigate to those pages.



## 2. Navigation

### a. Navigation bar

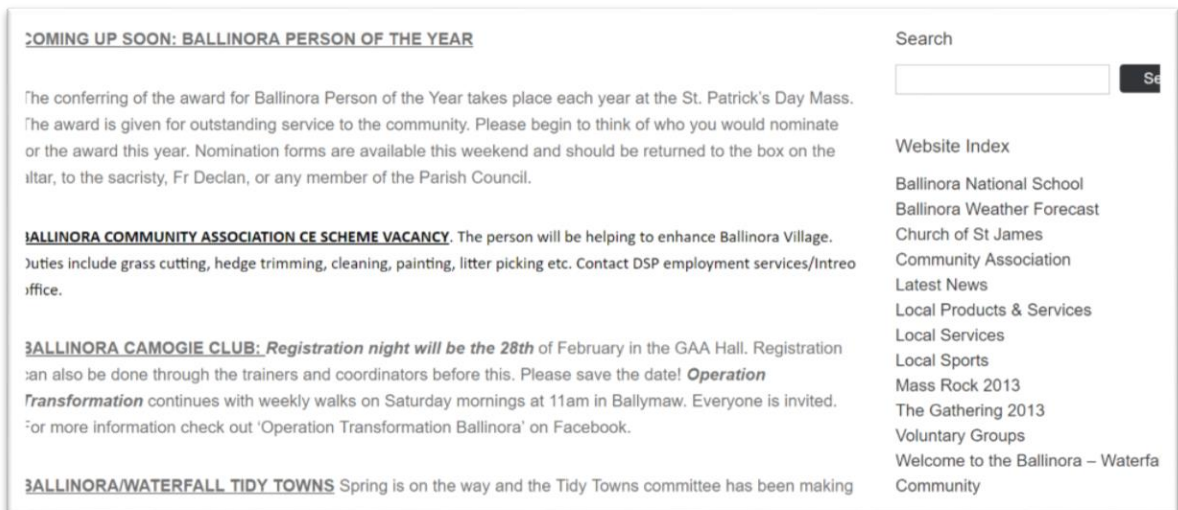


Above is the current websites navigation. As mentioned above, there are no drop-down menus associated.

This is not at all descriptive as the only information available to first-time visitors are these links.

Visitors are unaware what Sports, Groups, etc. are displayed. In order to view these, visitors must navigate to those pages.

### b. Website Index



Above is a screenshot of the current 'News' page. On the right-hand side, you can see the 'Website Index' which I have mentioned previously.

This 'Website Index' is not found on any other webpages. Therefore, in order to navigate to these pages the only way is by accessing the 'News' page first.

### 3. Landing Page

#### a. Newsletter Link

Here, you can see the 'link' to the Newsletter. As mentioned above, the link is represented as this image.

You can see why I wasn't aware of this until my client pointed it out.

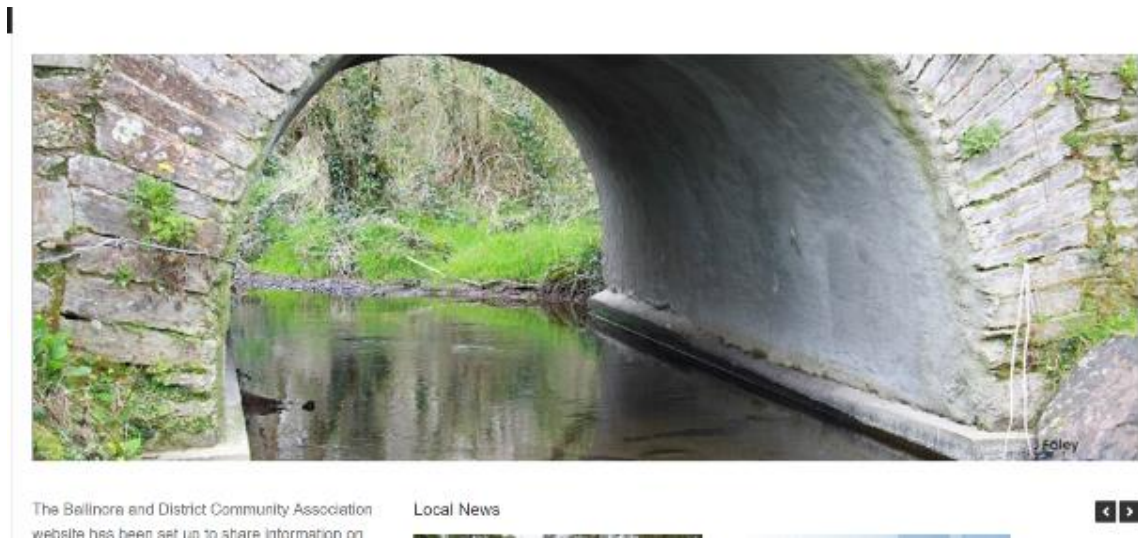
It is one of many poor sign-posting attempts on the current website.

Local News



February 25th 2017

#### b. Slideshow



Above is a screenshot of the image slideshow on the current website's landing page.

When this slideshow moves onto the next image, which is smaller, the slideshow will contract to fit that image. In simpler terms, visitors are not viewing the images correctly.

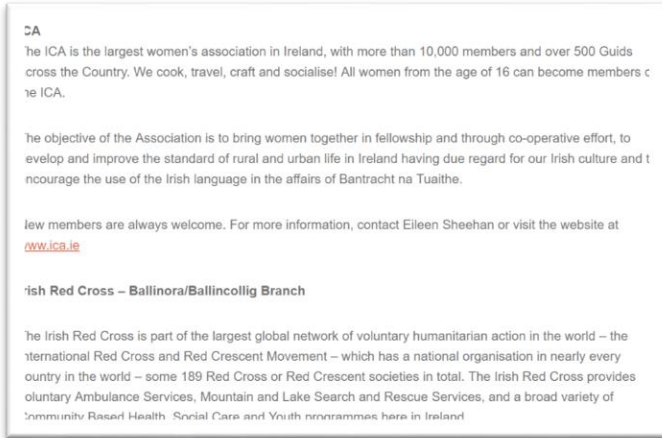
This should not occur. Instead, the uploaded images should re-size to fit the container which they will be occupying.

#### 4. Groups / Sports

##### a. Structure

On the right is a screenshot of groups displayed on the current website.

As you can see, the current structure would not be appealing to visitors, and it is also difficult to visually separate the groups.



Here, you can see how group images are displayed on the current website. They are simply added to the end of a group description, in a very unstructured way.

On the right, you can see a photo gallery on the existing website.

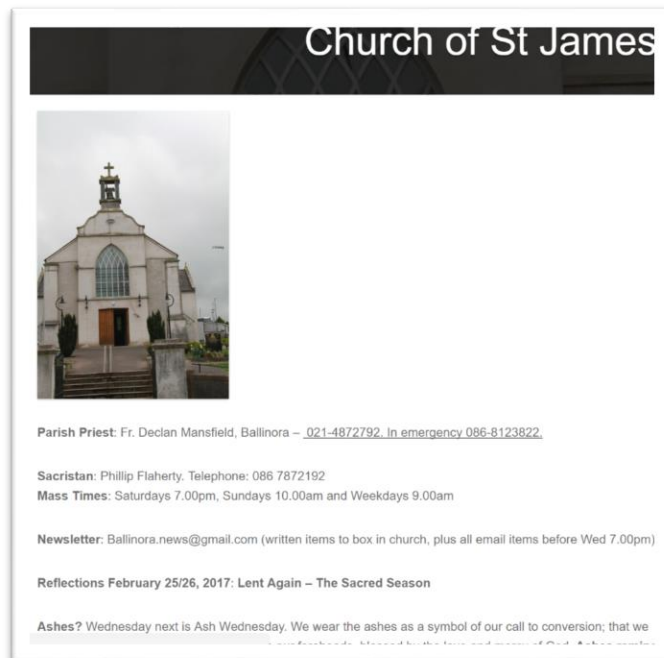
The functionality does not exist on the current website to add additional galleries; however, admin can add to these existing galleries.

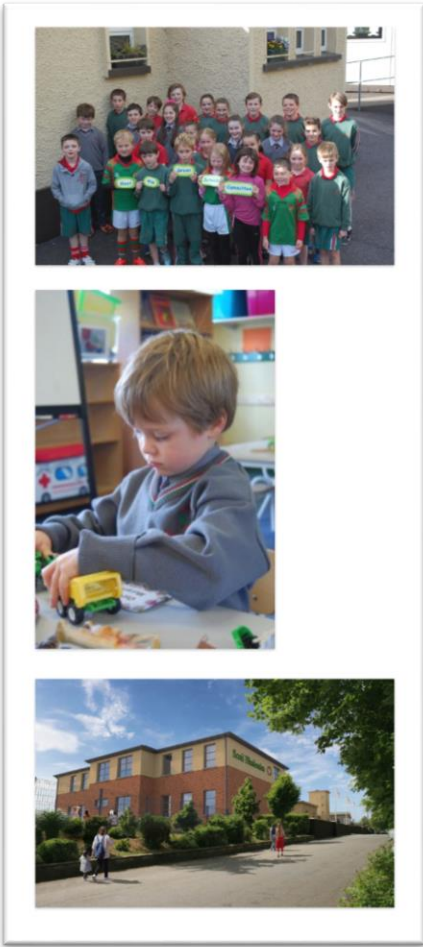
**5. Church & School**  
**a. Structure & Images**

On the right is a screenshot of the content displayed on the 'Church' page of the current website.

This structure is duplicated on the School and Community Association webpages.

Yet again, the structure is poor, & content is quite unattractive & boring to users,





On the left is a screenshot of the images which are currently displayed on the 'School' page of the current website.

Similarly, to the 'Church' page above, there is no structure in place. Also, images like these are displayed on the Church page.

These images also render with different dimensions, adding further to the negative user-experience.

## 6. Local Business

### a. Structure

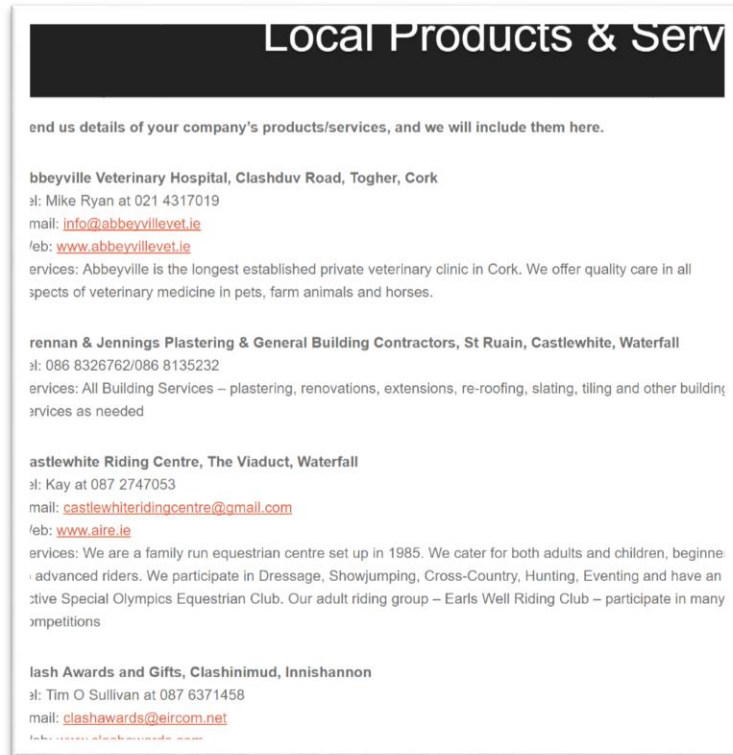
I feel this structure was a very basic approach, and I have a feeling it may have only been adopted in the first place as a matter of convenience for whoever developed the website.

From looking at this webpage myself, I found it quite difficult & time-consuming trying to differentiate between the different companies.

I also felt the companies could have been better organized.

For example, if I were trying to look for a specific type of company, I would have found it extremely difficult to differentiate between the companies as there is no grouping whatsoever. You would also have to carefully read the text to ensure you don't miss what you're looking for.

This would not look appealing to other companies who may be looking to advertise on the website, as I feel the companies are gaining extremely limited exposure on the website, in comparison to what it could be.



**Local Products & Services**

Send us details of your company's products/services, and we will include them here.

**Abbeyville Veterinary Hospital, Clashduv Road, Togher, Cork**  
Tel: Mike Ryan at 021 4317019  
mail: [info@abbeyvillevet.ie](mailto:info@abbeyvillevet.ie)  
Web: [www.abbeyvillevet.ie](http://www.abbeyvillevet.ie)  
Services: Abbeyville is the longest established private veterinary clinic in Cork. We offer quality care in all aspects of veterinary medicine in pets, farm animals and horses.

**rennan & Jennings Plastering & General Building Contractors, St Ruain, Castlewhite, Waterfall**  
Tel: 086 8326762/086 8135232  
Services: All Building Services – plastering, renovations, extensions, re-roofing, slating, tiling and other building services as needed

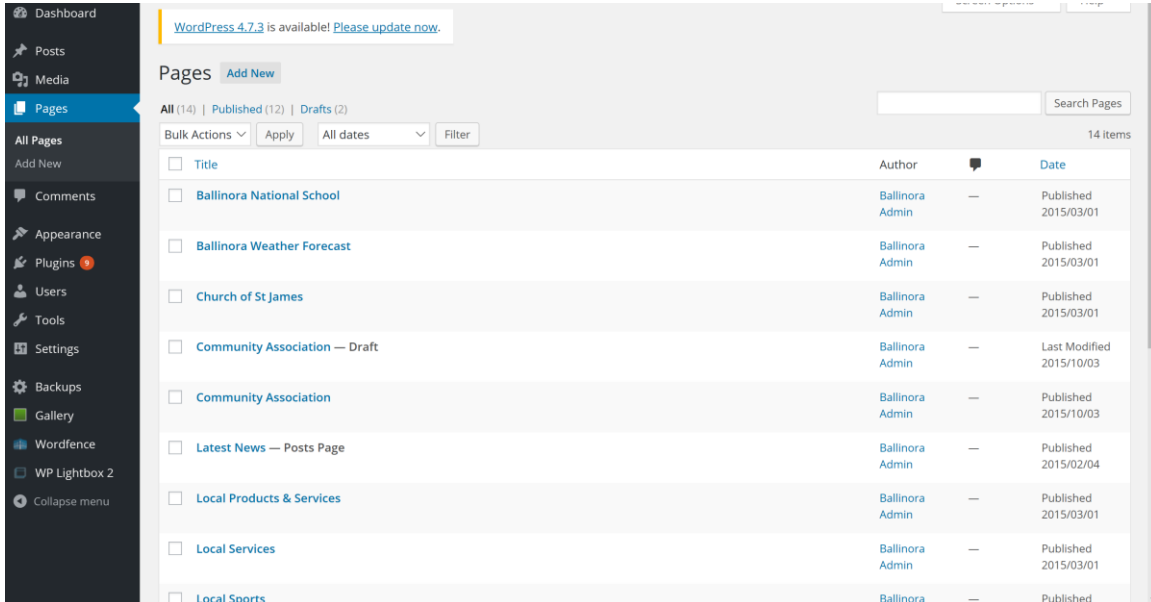
**Castlewhite Riding Centre, The Viaduct, Waterfall**  
Tel: Kay at 087 2747053  
mail: [castlewhiteridingcentre@gmail.com](mailto:castlewhiteridingcentre@gmail.com)  
Web: [www.aire.ie](http://www.aire.ie)  
Services: We are a family run equestrian centre set up in 1985. We cater for both adults and children, beginner & advanced riders. We participate in Dressage, Showjumping, Cross-Country, Hunting, Eventing and have an active Special Olympics Equestrian Club. Our adult riding group – Earls Well Riding Club – participate in many competitions

**Clash Awards and Gifts, Clashinimud, Innishannon**  
Tel: Tim O Sullivan at 087 6371458  
mail: [clashawards@eircom.net](mailto:clashawards@eircom.net)  
Web: [www.clashawards.com](http://www.clashawards.com)



## 7. Admin

### a. Dashboard



The screenshot displays the WordPress admin dashboard. On the left is a dark sidebar menu with options: Dashboard, Posts, Media, Pages (selected), All Pages, Add New, Comments, Appearance, Plugins (with a red notification dot), Users, Tools, Settings, Backups, Gallery, Wordfence, WP Lightbox 2, and Collapse menu. The main content area shows a notification for WordPress 4.7.3, followed by the 'Pages' section with an 'Add New' button. Below this are filters for 'All (14)', 'Published (12)', and 'Drafts (2)', along with a search box and a 'Search Pages' button. A table lists 14 items with columns for Title, Author, Status, and Date. The items include 'Ballinora National School', 'Ballinora Weather Forecast', 'Church of St James', 'Community Association — Draft', 'Community Association', 'Latest News — Posts Page', 'Local Products & Services', 'Local Services', and 'Local Sports'.

<input type="checkbox"/>	Title	Author	Status	Date
<input type="checkbox"/>	Ballinora National School	Ballinora Admin	—	Published 2015/03/01
<input type="checkbox"/>	Ballinora Weather Forecast	Ballinora Admin	—	Published 2015/03/01
<input type="checkbox"/>	Church of St James	Ballinora Admin	—	Published 2015/03/01
<input type="checkbox"/>	Community Association — Draft	Ballinora Admin	—	Last Modified 2015/10/03
<input type="checkbox"/>	Community Association	Ballinora Admin	—	Published 2015/10/03
<input type="checkbox"/>	Latest News — Posts Page	Ballinora Admin	—	Published 2015/02/04
<input type="checkbox"/>	Local Products & Services	Ballinora Admin	—	Published 2015/03/01
<input type="checkbox"/>	Local Services	Ballinora Admin	—	Published 2015/03/01
<input type="checkbox"/>	Local Sports	Ballinora	—	Published

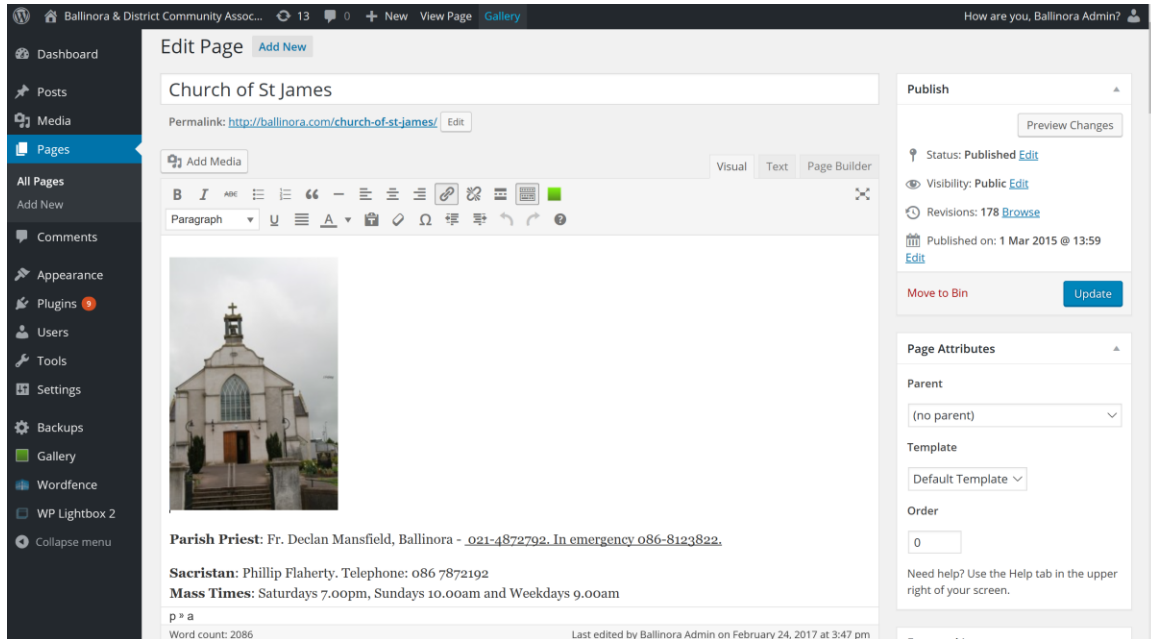
Above is the WordPress admin dashboard which admin were required to use to update website content on the current website.

As you can see, it looks quite intimidating for someone who is unfamiliar with the processes.

The administrators, who have no programming experience, were required to use this dashboard in order to update content.

The fact that they had to use this, drove several administrators away from the responsibility of dealing with WordPress.

## b. Functionality



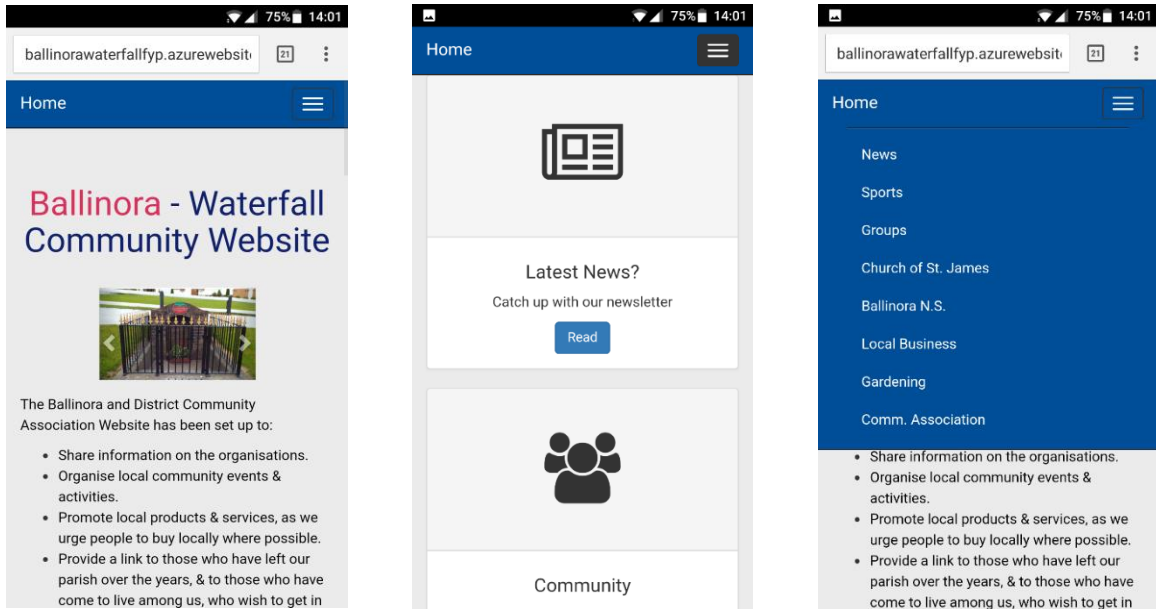
The above is a screenshot of the admin functionality for the 'Church' page. The same format is displayed for all other webpages (School, Community Association, etc.).

As you can see, the page consists of one large text area, including the image and text above.

The issue with this is that all pages remain bland & boring to users. For admin, with no programming experience, it is difficult for them to add any interesting style attributes through Facebook.

For example, they are unable to clearly differentiate between the various sections on these pages.

## 8. Updated Mobile-Accessibility



Above are several screenshots of the new website when viewed on a mobile device.

As you can see, the website content is responsive to screen-size, which is a must-have for any application today.

For example, the image slideshow and navigation bar compress to fit your devices screen.

## 9. Updated Navigation



Above, you can see the new navigation bar has several dropdown menus.

When admin add a Sport team or Local Group via the admin panel, they are automatically added to the navigation menu above.

This shows visitors the currently displayed groups without having to navigate to those pages. Same for Groups.

## 10. Updated Landing Page

On the right, you can see the image slideshow which I have added to the new website.

Unlike the previous website, the images uploaded to slideshows such as this one, will automatically be re-sized to fit their respective slideshows / containers.

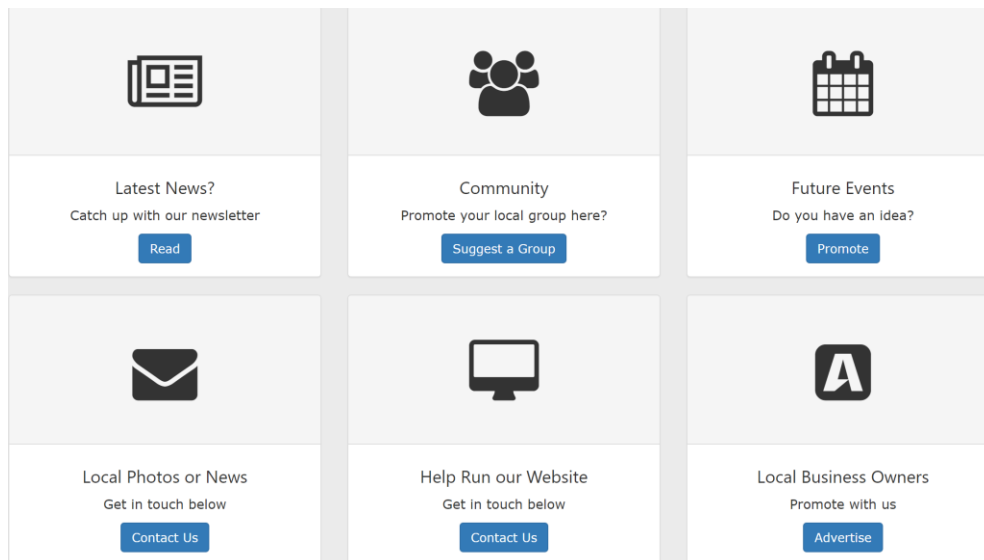
As you can see above, this slideshow will respond to screen size.

## Ballinora - Waterfall Community Website



## 11. Contacting Admin

### a. Visitor Links



Above is the main functionality available to visitors when they access the website.

These links are displayed on the landing page of the website.

Visitors select a link based on which task they want to complete.

The pages which these links navigate to are displayed below.

## b. Local Company Submission

Local companies submit their details to admin by filling out this form.

After entering their details, & uploading a company logo, these details will be emailed to admin.

Admin will contact the company regarding payment to advertise on the website.

Once payment is successful, admin will upload company details via the admin panel.

These details will be displayed on the 'Local Business' page, whilst the logo's will be displayed throughout the website.

Submit your business?

Industry:

Company Name:

Company Email:

Company Description:

Company Logo:

Choose File

No file chosen

Submit

Clear

### c. Local Group / Sports Submission

If a visitor is interested in promoting their local group or sports team, then all they need to do is fill out this simple form.

After this has been filled out, admin will receive a notification email which displays the group details.

Once admin have been notified, they will log into the admin panel, & then approve the group.

Upon approval, the group's activities will then be displayed on the 'Groups' page.

**Suggest a group?**

Group Type:  Sport  Local Group

Email:

Group Name:

Group Description:  

File Edit Insert View Format Table Tools

Formats **B** *I* [List Icons] [Link Icon] [Image Icon] [Print Icon] [Eye Icon] [Table Icon] [Text Color] [Background Color] [Smiley]

Words: 0

### d. Upcoming Event Submission

If a website visitor would like to promote an upcoming event for a group on the website, they can do so by filling out this form.

After choosing a group, & filling in details, admin will receive a notification email containing the event details.

Upon notification, admin can decide to approve the event via the admin panel. This will result in the event being promoted on the 'Groups' page.

**Suggest an Event?**

Group:

Your Name:

Your Email:

Event Title:

Event Cost (€):

Event Description:

Event Location:

Event Date:

Time: 07 : 00

### e. General Feedback

If a visitor has any general feedback, or any images they would like to be displayed on any area of the website, they can submit this information / image to admin by filling out this form.

The administrators also encourage locals to submit news, advice, knowledge, etc. which they would like to share with the rest of the community.

#### Feedback

Your Name:

Your Email:

Subject:

Comments / Feedback:

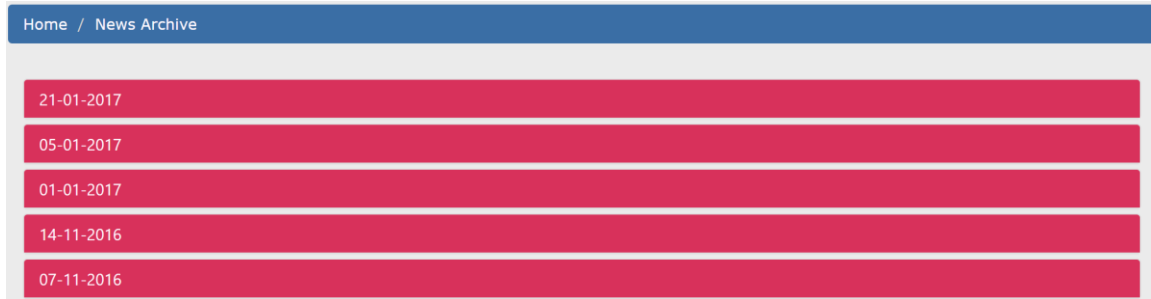
Choose File No file chosen

Submit

Clear

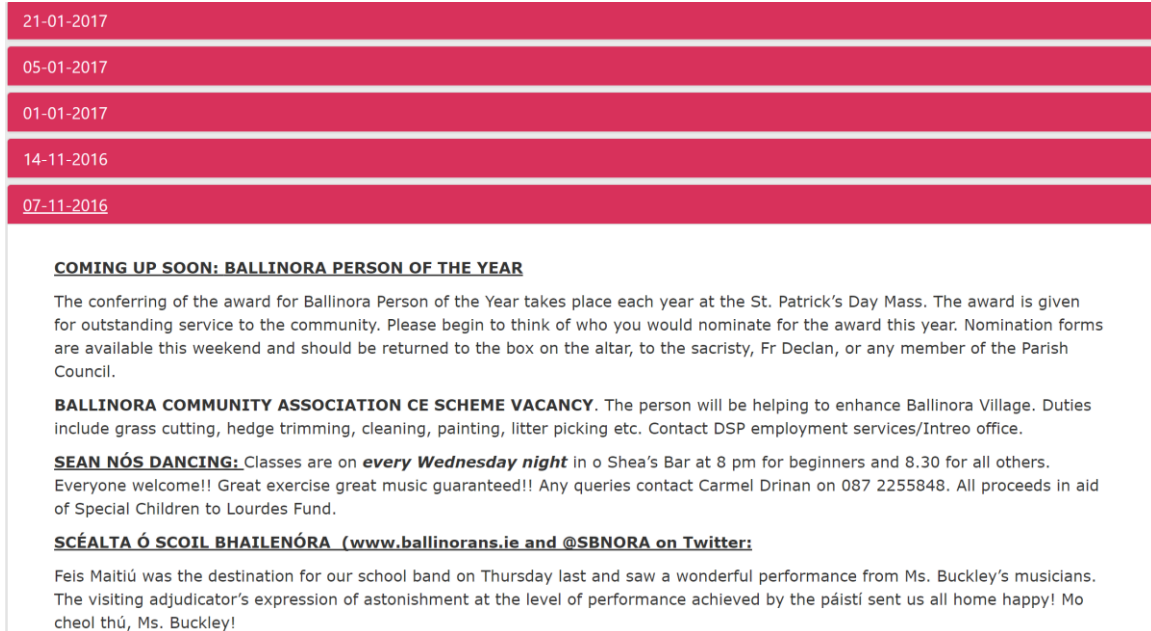
## 12. News

### a. Newsletter Archive



Above is a screenshot of the newsletter archive which I have built into the new website.

This page will contain all previously posted newsletters, allowing visitors to look back at previous news.



Above, is a screenshot of what will be displayed when a visitor clicks on a newsletter.

The accordion will expand to show the details of that newsletter. When a visitor clicks on a different newsletter, the previous one will contract & the newly-selected one will expand.



### 13. Updated Groups / Sports

#### Ballinora GAA

Based in Ballinora, Waterfall, Near Cork, Ballinora GAA is a volunteer led, community based organisation that promotes Hurling and Football, and works with sister organisations to promote Ladies Football and Camogie. The club has in excess of 300 playing members, runs successful summer camps and supports the training of their members in the community.

#### Upcoming Events

<b>Ballinora vs. Bishopstown</b>	<b>Blackrock vs. Ballinora</b>
Description: Intermediate football match	Description: Junior Hurling League
Location: Ballinora club	Location: Blackrock club
Date: 3/3/2017	Date: 3/4/2017
Cost (€): 0	Cost (€): 0
Organiser: James Walsh	Organiser: Mark Owens
Time: 19:30	Time: 16:30



Photo Gallery  
Latest group photo albums

[View](#)

#### Ballinora Camogie Club

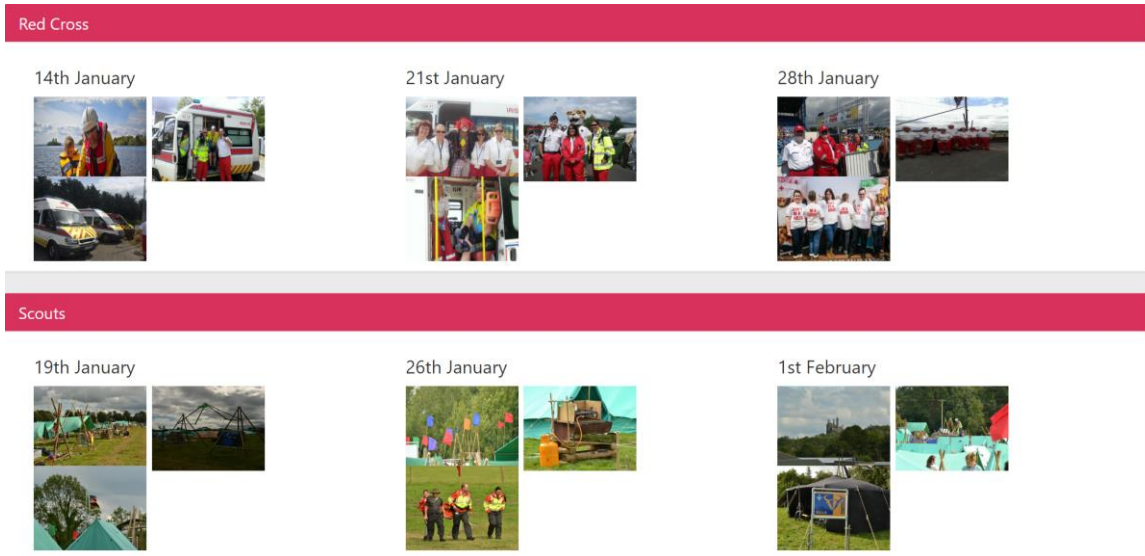
Ballinora Camogie Club was first formed in 1932, but reactivated in 1972 after a period of relative inactivity. It caters for under eights to adult players. New members are always very welcome to learn new skills, keep fit, make new friends and have fun! The players train (depending on age) at least once a week. There are competitive Leagues, Championships and Blitz', as well as friendly games. For more information, contact Club Secretary Claire Dooley at [secretary.ballinora.cork.camogie@gaa.ie](mailto:secretary.ballinora.cork.camogie@gaa.ie)

Above is a screenshot of the 'Groups' page of the new website. The same structure has been implemented on the 'Sports' page.

As you can see, I have added some much-needed structure to this page.

You can see the group description, upcoming events of that group & a link to the group's photo gallery.

## 14. Updated Photo Gallery



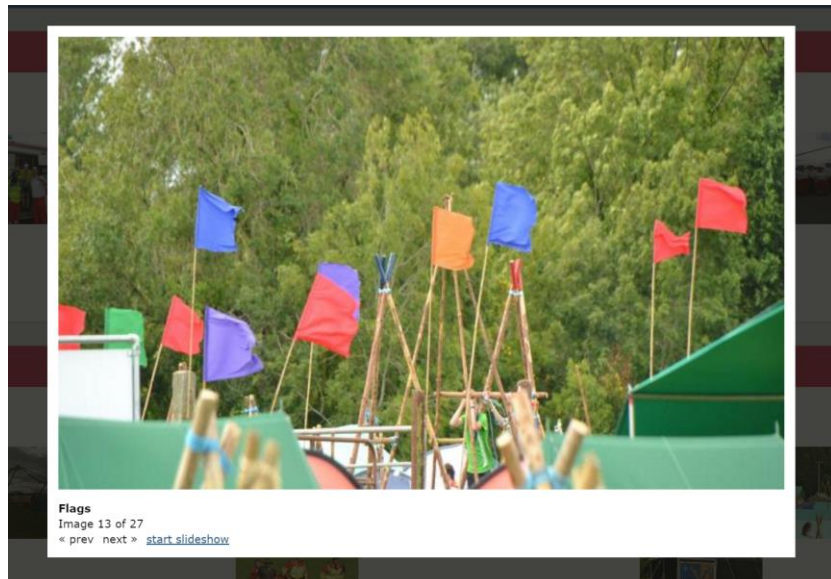
Above is a screenshot of the groups photo gallery. This same structure is replicated on the sports photo gallery.

Unlike before, admin have the capability to create / update photo albums for the specific groups / sports.

Here is a screenshot of what is displayed when you click on an image within the groups photo gallery.

The same occurs when you click on an image whilst in the sports photo gallery.

Also, this slideshow responds to your screen-size.



## 15. Updated Church / School / Community Association



Above is a screenshot of the 'School' page. This same structure is adopted for the 'Church' and 'Community Association' pages.

Each page will consist of an image slideshow, which can be added to / deleted from by admin via the admin panel.

Admin also have the capability to add new sections to these pages, as well as update and delete current sections.

## 16. Updated Local Business

### a. Advertising

Here is the company logo slideshow which will be displayed throughout the website.



When new companies are added via the admin panel, their logo's are automatically added to these slideshows.

Please support local business





### b. Business page

Veterinary

 <p>Abbeyville Veterinary Hospital, Clashduv Road, Togher, Cork</p> <p>Services: Abbeyville is the longest established private veterinary clinic in Cork. We offer quality care in all aspects of veterinary medicine in pets, farm animals and horses.</p> <p>info@abbeyvillevet.ie</p>	 <p>Jeremiah Lynch Veterinary Practice</p> <p>BOOK AN APPOINTMENT We at Macroom Veterinary Clinic are committed to give the best care to our patients and their owners. We are a fully accredited Veterinary Clinic, equipped with all modern diagnostic facilities.</p> <p>jlh@gmail.com</p>
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Equestrian

	
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Above is a screenshot of the 'Local Business' page of the new website. As you can see, companies are grouped by industry, allowing for easier navigation for users.

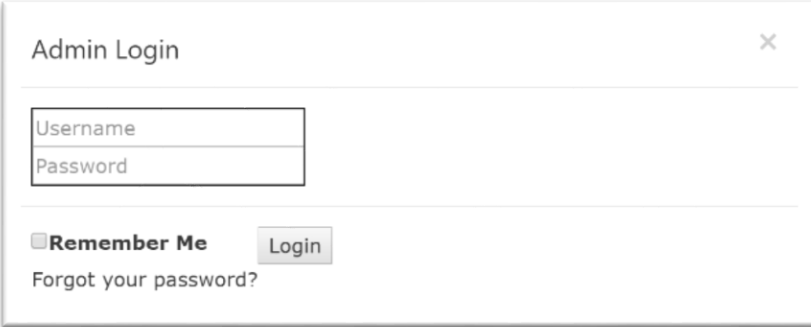
Company logo's are also added via the admin panel.

## 17. Admin

### a. Login

Here is the login modal which admin will use to access the admin panel.

If they have forgotten their password, they can click the link here. I will explain where this link takes the user later in the appendix.



The image shows a modal window titled "Admin Login" with a close button (X) in the top right corner. Inside the modal, there are two input fields: "Username" and "Password". Below these fields, there is a checkbox labeled "Remember Me" and a "Login" button. At the bottom of the modal, there is a link that says "Forgot your password?".

If admin enters an incorrect password four times, that admin account is locked. This account can only be unlocked by Master admin logging in, and enabling the locked account.

### b. Tiered Dashboard



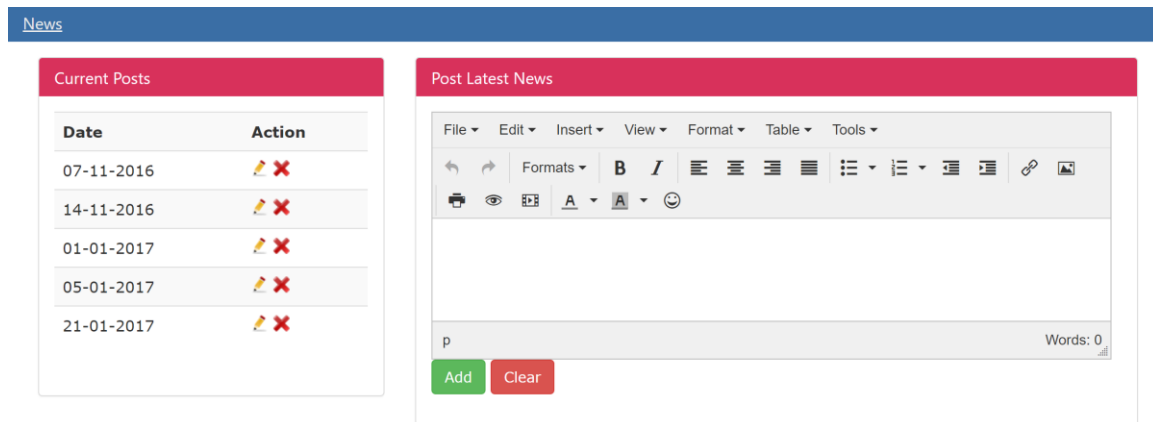
Above, you can see the options available in the admin panel. All options are available to the 'Master' admin account.



The above admin functions are available when 'News Admin' logs in. They will only have access to the news aspect of the site, as well as the ability to change their own password.

## c. Functionality

### i. News



Above is the functionality available to 'News Admin'.

They can edit and delete existing posts, as well as add new ones. They can re-format these posts to make them more appealing to read for visitors.

This functionality is replicated across the other admin panels. For example, 'Groups Admin' can add, update and delete groups using the same process. Same for Local Businesses, etc.

### ii. Photo Galleries

The screenshot shows the 'Add an Image' form. It includes a 'Group' dropdown menu with 'Select Group' as the current selection. Below it is an 'Album' dropdown menu with 'Select Album' and a link to 'Add new album?'. The 'Image' section features a 'Choose File' button and the text 'No file chosen'. There is also an 'Image Description' text input field. At the bottom, there are 'Add' and 'Clear' buttons.

Above, you can see the functionality available for adding images. Firstly, you select a group, then you can choose from the existing albums associated with that group.

If you would like to create a new album, you click on the link above & enter a new photo album name.

Then you select the image and enter a short description, and then you click 'Add'.

The same process is followed on the other admin panels where adding images is available.

On the right, you can see the photos which are associated with the selected photo album.

Firstly, you select a group. Then, you choose from an existing album.

This displays all photos within that album. You can choose to delete the entire album or else delete specific images.

### iii. Local Business

Name	Email	Actions
Abbeyville Veterinary Hospital, Clashduv Road, Togher, Cork	info@abbeyvillevet.ie	
Castlewhite Riding Centre, The Viaduct, Waterfall	castlewhiteridingcentre@gmail.com	
Waterfall House Dental Surgery	info@waterfalldentist.ie	
Cork Sports Injury Clinic, Wheelhouse, Balymah, Waterfall	paul@corksic.ie	
John Dooley Motor Services.	jdms@eircom.net	

Above is the admin panel for 'Local Business'. Admin can edit and delete existing companies by clicking on the actions on the left.

Admin also can upload new companies. When uploading, admin will need to specify an industry. They can choose an existing industry, or they can elect to add a new industry.

#### iv. Admin Settings

The screenshot shows the 'Settings' page with two main panels. The 'Current Admin' panel contains a table with columns for Username, Email, and Edit. The 'Reset Your Password' panel contains input fields for Current Password, New Password, and Confirm New Password, along with a Save button.

Username	Email	Edit
Master	damienuosullivan3266@gmail.com	Edit Email
Groups	damosulli@hotmail.com	Edit Email
Sports	113420422@umail.ucc.ie	Edit Email
News	damienuosullivan3266@gmail.com	Edit Email
Business	113420422@umail.ucc.ie	Edit Email
Descriptions	damosulli@hotmail.com	Edit Email
Community Association	damienuosullivan3266@gmail.com	Edit Email
Gardening	113420422@umail.ucc.ie	Edit Email
Church	damosulli@hotmail.com	Edit Email
School	damienuosullivan3266@gmail.com	Edit Email

Reset Your Password

Current Password  
New Password  
Confirm New Password  
Save

The above panel will only be visible to 'Master' admin. They can edit email accounts associated with each website section. They can also change the password to these accounts if they wish, as well as their own password.

The screenshot shows the 'Settings' page with three main panels. The 'Current Admin' panel is identical to the one above. The 'Reset Your Password' panel is also identical. The 'Update Admin' panel contains a form to update the 'Groups Admin Email' with fields for the email address, New Password, and Confirm New Password, and an Update button.

Username	Email	Edit
Master	damienuosullivan3266@gmail.com	Edit Email
Groups	damosulli@hotmail.com	Edit Email
Sports	113420422@umail.ucc.ie	Edit Email
News	damienuosullivan3266@gmail.com	Edit Email
Business	113420422@umail.ucc.ie	Edit Email
Descriptions	damosulli@hotmail.com	Edit Email
Community Association	damienuosullivan3266@gmail.com	Edit Email
Gardening	113420422@umail.ucc.ie	Edit Email
Church	damosulli@hotmail.com	Edit Email
School	damienuosullivan3266@gmail.com	Edit Email

Reset Your Password

Current Password  
New Password  
Confirm New Password  
Save

Update Admin

Groups Admin Email:  
damosulli@hotmail.com  
New Password  
Confirm New Password  
Update

Above, the 'Update Admin' panel is displaying the 'Groups' admin email address. 'Master' can decide to change this email address and / or password if they so wish.



## v. Forgotten Password

The link on the left is displayed if admin has lost their password.

**Reset my password**

User Name

If admin enter their username in this textbox, an email (*see below*), will be sent to the email account which is currently associated with that admin account.

Dear Gardening,

Please click on the following link to reset your password  
<http://ballinorawaterfallfyp.azurewebsites.net/Public/ChangePassword.aspx?uid=3bf52388-3f38-4e62-a29c-ed3610cde95c>

**Ballinora Community Website**

When admin clicks the above link, they are brought to this screen:

Here, admin can enter a new password, & providing these passwords match, the password for their admin account will be updated.

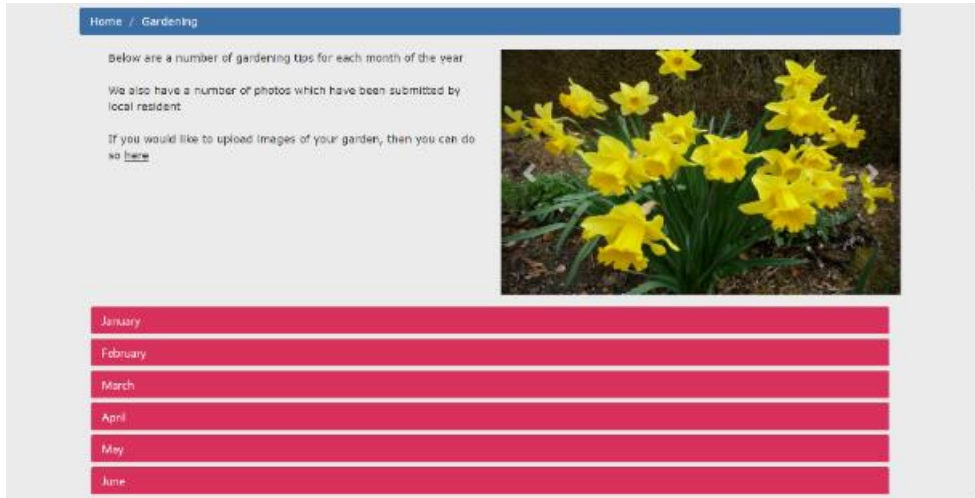
**Change Password**

New Password :

Confirm New Password :

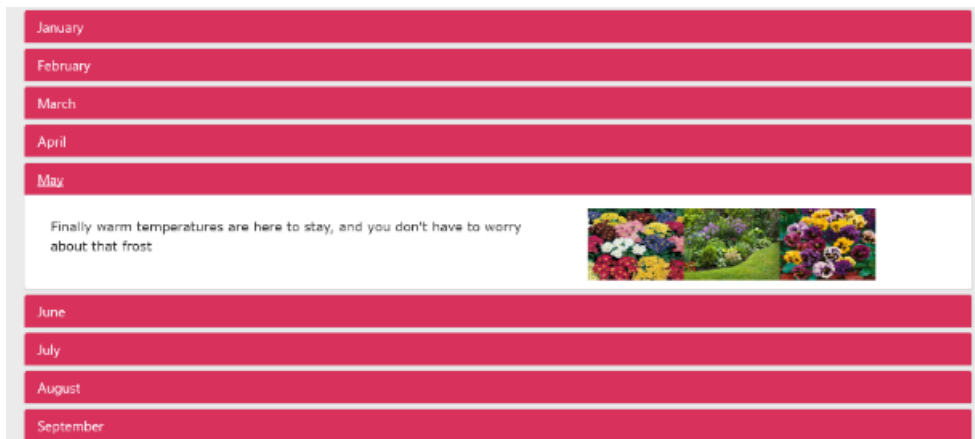
After 2 hours, the above link (email), will become invalid.

## 18. Gardening



Above is a screenshot of the gardening page which I have added to the new website. It contains a page description, which can be updated by admin.

It also contains an image slideshow of all gardening images.



Above is what is displayed when a visitor clicks on the 'May' accordion item. It displays the gardening tips for that month, as well as gardening photos associated with that month.

These tips and images can be added, updated or deleted via the admin panel, in the same way as outlined previously in the appendix.



Above is a screenshot of what appears when you click on an image on the gardening page.

These images are re-sized upon upload as outlined above.

## 19. Client Emails

### (a) 24<sup>th</sup> October

**patkoconnor1@gmail.com**  
to me

10/24/16

Damien – is everything going ok on the project. Let me know if you need me to do anything to assist

---

**113420422@umail.ucc.ie**  
to patkoconnor1

10/24/16

Hi Pat,

Hope you enjoyed your break away.

Everything is going fine with the project, I've met no major obstacles yet.

I have some screen mock-ups of what certain pages would look like. I will send them to you tomorrow morning, and you can reply with any feedback you have about them.

Thanks,

Damien

### (b) 7<sup>th</sup> November

**patkoconnor1@gmail.com**  
to me

Damien – The suggested format is excellent.  
Do you feel we should meet this week - I note that you have a Nov 10 deadline for a working system prototype.  
On the paper prototype of the home page can you name the site Ballinora – Waterfall Community website?  
Also you are showing 6 headings – HOME, NEWS, GROUPS, LOCAL PRODUCTS AND SERVICES, GARDENING  
This needs to be expanded to include COMMUNITY ASSOCIATION, CHURCH OF ST JAMES, NATIONAL SCHOOL.  
Pat O Connor  
087 2 949454  
Sent from Mail for Windows 10

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**Damien O'Sullivan** <113420422@umail.ucc.ie>  
to patkoconnor1

Hi Pat,

Good to hear.

will make those updates to the headings today.

If you would like to look at the website currently, you can find it at the following URL: [ballinorasociety.com](http://ballinorasociety.com)

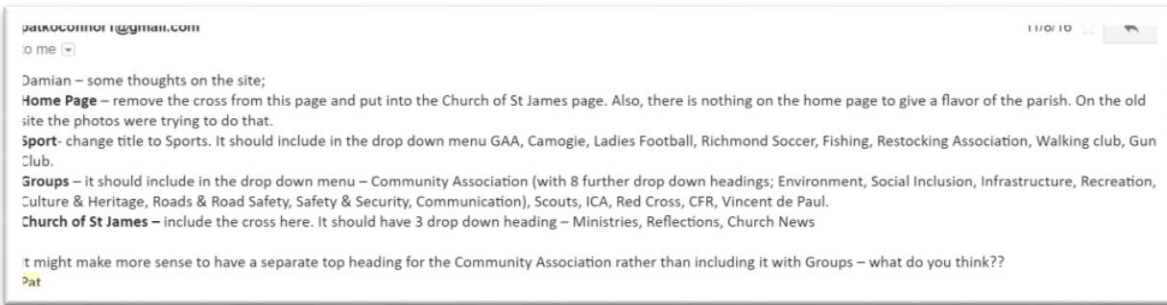
Not all pages are working at the moment but you might have some feedback/opinions regarding those which are working

If you feel it would be better to discuss your feedback in person then I am free tomorrow at any time.

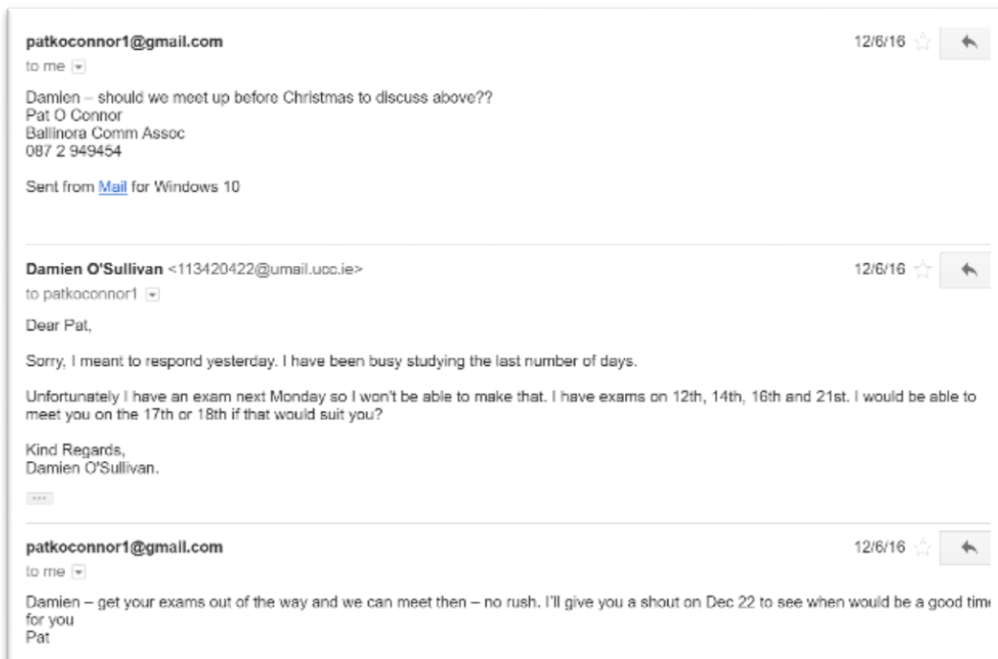
Kind Regard,

Damien.

### (c) 8<sup>th</sup> November



### (d) 6<sup>th</sup> December



(e) 13<sup>th</sup> January

**Damien O'Sullivan** <113420422@umail.ucc.ie> Jan 13 ☆ ↶  
to patkoconnor1 ▾

Hi Pat,

Hope Christmas and the New Year went well.

I've been working on the website, and I have most of the functionality up and running.

I think we should meet up some time next week if you are available. I am free all day Tuesday and Friday, and free after 13:00 on Wednesday and Thursday.

If you're not around, I will be free on those times every other week also.

Look forward to catching up,

Damien O'Sullivan.

...

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**patkoconnor1@gmail.com** Jan 14 ☆ ↶  
to me ▾

Damien – Wed next at 4.00pm is good for me.  
Pat

(f) 8<sup>th</sup> February

**Patrick O Connor** Feb 8 ☆ ↶  
to me ▾

We had a meeting last night. One of the requests was - on the local products and services section, will we be able to group companies by category e.g plumbers and be able to accommodate company logos etc. The current listing system was deemed to be boring. Also, can we have the company names scroll across the home page and if you press on one it will take you to the full content for that company?  
Pat Connor

---

**Damien O'Sullivan** <113420422@umail.ucc.ie> Feb 17 ☆ ↶  
to Patrick ▾

Hi Pat,

At the moment, my latest version of the website accommodates Company Logos.

These logo's can be placed on whatever pages you like, in a slideshow.

can also have the company names scroll across the homepage.

As for grouping the companies, I do not have that functionality built in at the moment, but I will try to get it done.

Kind regards,

Damien O'Sullivan.

...

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**Damien O'Sullivan** <113420422@umail.ucc.ie> Feb 27 (8 days ago) ☆ ↶  
to Patrick ▾

Hi Pat,

You can view the latest version of the website by clicking on the link below:

<http://ballinorawaterfallfyp.azurewebsites.net>

Please let me know what you and others think about it

Kind Regards,

Damien O'Sullivan

## 20. WordPress

The client's current website was developed using WordPress, which is an online website creation tool.

To manage the website content, admin had to log into WordPress and update via that dashboard.

As is the case with most technology, if you don't know how to correctly utilize it, you usually end up drastically underutilizing the software. This happened to be the case with Ballinora.

However, they have been experiencing difficulty in updating the website due to the way in which their site was set up using WordPress.

Due to my customer's familiarity with WordPress, they felt it would be easiest if the new website was developed in WordPress. I had no prior experience with WordPress, and was therefore hesitant regarding WordPress. However, I then decided to go with WordPress as it would have a very mild learning curve for the customer.

As I began developing, I ensured that the WordPress theme which I adopted was quite adaptable and updateable for admin.

As mentioned previously, I demonstrated my WordPress website for my working system prototype. In preparation for this demo, I made out a list of simple steps which admin would carry out to add various sections to the website (new company, new event, etc.). However, as soon as I mentioned the idea of using a WordPress dashboard, Audrey quickly brought it to my attention that it would likely not be a good idea to proceed with developing on WordPress.

My supervisor advised me that it would be extremely difficult to receive a satisfactory grade if my website was developed through WordPress. Audrey also expressed that she felt WordPress was holding me back in terms of the functionality which I could incorporate.

My supervisor also questioned whether it was a good idea to develop the website using WordPress, the very technology with which the client was experiencing problems with in the first place.

I explained to my supervisor that I had specifically implemented a particularly manageable theme, but she again emphasized how difficult it would be to achieve a high grade.

After a discussion, we decided it would be best to create a website without the aid of WordPress, as we agreed it was indeed holding me back in terms of functionality and the fact that it was still not too late in the process to switch to a new technology.

We had this discussion on the afternoon of Friday November 11<sup>th</sup>, after my working system prototype demonstration. When I arrived home after this, I began researching examples of administration dashboards and began to develop this new website.

Within the space of two weeks, I managed to get practically all the required functionality working. I was able to read and write to a database via the website, all that was left to do was manipulate this existing functionality to work with the varying aspects of my website.

If I had continued to use WordPress, I would not have had to create a database. Looking back now, it is quite clear that this would have indeed affected my overall grade, and rightly so. The reason being that the database of this website, it basically the bedrock on which this website is built upon.

Without this database, admin would not be able to easily update website content, which is in my opinion, the strongest aspect of this entire project.

Since then, I have created an SQL Server database in SQL Server Management student, and this database is used to hold all the website's content.

## **21. Phase 2**

I will continue to work with Ballinora in order to further improve on the additions which I have made.

I have plans to create a 'Discussion Forum' on the website. The benefits of this will be that it further promotes social inclusion & community engagement as it would make locals feel valued & help to further build relationships.

I also intend to add a payment process for local businesses (Stripe or PayPal) to upload their details once payment has been processed. This would further entice businesses to advertise as the current submission/payment processes would be merged and streamlined.

Personally, in terms of where I go from here, I have emailed several other local communities near my area, and have asked them what they think about the Ballinora – Waterfall website, and would they be interested in adopting a similar system.

I feel this website / content management system which I have created is quite scalable, and would be quite attractive to local communities who are looking to increase social participation & inclusion amongst their locals.