Design Documentation Deliverable: GetaGame Website

Date 08/10/2014

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Please use the checklist below to ensure that your report contains all the items required.

- ✓ Purpose of the website
- ✓ User types
- ✓ Justification of Functionality
- ✓ Detailed Description
- ✓ Appendices: Web Pages, Process Descriptions, Table Design
- ✓ Technologies

1.0 Purpose of website

The purpose of GetaGame is to provide an online service for GAA clubs throughout Ireland to contact each other quickly and easily. The current GAA calendar is structured in such a way that roughly 2300 GAA clubs are left with long periods of inactivity each year in order to accommodate the playing of the inter-county championships. These periods can be anywhere from a couple of weeks to three or four months.

To bridge these gaps in the calendar clubs often arrange friendly games among themselves. The majority of these games are versus a neighbouring club, simply because these clubs have contact details for each other due to their close proximity. The common consensus among clubs is that the ideal friendly game is versus a club from another county, as both sets of players are unfamiliar with each other and it offers the chance for clubs to travel.

Unfortunately these games are very difficult to organise as most clubs have no contacts outside of their own county. Clubs typically rely on the connections of their players which they make through work and college to make contact with clubs in other parts of the country.

GetaGame can provide an easy way for clubs anywhere in Ireland to contact each other. Each club will set up a profile on the GetaGame website and upload contact details and the availability of their teams which they will be encouraged to update every week in order distinguish which clubs are available for friendly games at any particular time. Other clubs who have joined the site can view these profiles and using the contact details each club has uploaded can communicate with them

1.1 User Types

There is three user types for the proposed website.

- The System Administrator will be have the ability to access the database to add, remove or edit data and make changes to the structure and appearance of the proposed website.
- 2. The end user, which will be a GAA club who has registered on the proposed website. The will have the ability to create a profile by supplying the required information at registration. They can also edit the information on their profile, upload team details. A registered GAA club can also search the system for other clubs and view their full profile.
- 3. **A visitor** to the proposed website can search the system for GAA clubs, however they will not have access to club profiles. A visitor can only view the list of clubs returned from their search.

1.2 Justification of Functionality

The functionality afforded to users of the proposed site will be in some respects limited to a few simple operations. Users will be able to log in using two text boxes, one for email and the second for a password. Once both fields have been completed a sign in button will be clicked granting the user access to the system if the supplied information is correct.

Once logged on users can choose to search clubs by county in a similar way that Hoganstand.com affords users to do so (see figure 1 Appendix 3: Webpages). When the user clicks on a county a list of all the registered clubs in that county will be generated in a comparable fashion to the lists on gaaclub.ie (see figure 2 Appendix 3: Webpages). Users can also use a search box to input their own parameters.

One can see from figure 2 that each club is assigned a row with columns for club colours, whether they are a hurling or football club and their year of establishment.

The proposed website will look similar to this where an available club will have a green tick and unavailable clubs will have a red "X" (see Appendix 1: Figure 4 Webpages). Clicking on a club's name will direct the user to that profile.

1.3 Potential Ramifications

The potential ramifications of such a site on users could be the emergence of a new way for GAA clubs to communicate with each other in a reliable and easy way. The site will provide a contact to any other registered club in the country at click of a button and eliminate the current tedious task of making several phone calls to obtain a contact for the a particular club. The proposed site could develop better relations between clubs throughout Ireland.

Scope also exists for the proposed site to be expanded in future to include other sports, such as Soccer, Rugby and Cricket as well as possibly increasing the content users can display on their profiles. The option to extend the communication power of users is also available through the implementation of chat rooms, forums and instant messaging.

Adversely there are some issues which could potentially occur such as clubs not updating their availability status each week (see 2.0 Detailed Description). To combat this a remainder email will be sent to all registered clubs each week to remind them to ensure they have their availability set correctly. Clubs not updating their availability could potentially result in search results for available clubs producing a list with some clubs who may not be actually be available and vice versa.

Another issue which may arise is clubs not updating their profiles each New Year. Generally managerial positions change each year in GAA clubs. It is important for the accuracy of the site that any personnel changes are updated on each club's profile to avoid contact details becoming inaccurate. Again a reminder email will be sent to each club reminding them of this.

2.0 Detailed Description

When the proposed website is launched a homepage similar to figure 3 (see Appendix 1: Webpages) will be displayed. No processes are required to generate this page. From the homepage users can click buttons to navigate to other pages and initiate processes.

P1 (Registration) is executed when a user wishes to register their GAA club. Users will supply information to a webform on the homepage and submit it. The input is validated and if it is correct the information is passed to the database and the new entries are added in the tables and the user is directed to their new profile page (see figure 4 Appendix 1: Webpages). If incorrect information is supplied the appropriate error message is displayed. E.g. the incorrect fields will be highlighted.

P2 (Find a club) is executed when the user searches for a club on the "Find a club" page. Users can search using a number of parameters such as club name, team grade, availability, county and province. When these parameters are supplied the database is queried and a list of the desired results is generated for the user. Registered users will have will have the ability to select any of the returned clubs and view their profiles. Unregistered user or visitors will only have the ability to initiate a search, they will not be afforded the ability to click on a club and view their profile.

P3 (Login) when a registered user wishes to login they supply their email and password. This process is executed when these details are submitted at the login area on the homepage. The details are validated against the details in the database. If the user is authentic the process directs them to their profile page. If the supplied details were incorrect an appropriate error message will be display informing the user their details were incorrect and to re-enter them.

P4 (Upload team details) is executed when a registered user has supplied the information needed to a webform on their profile page to add another team from their club to their list of teams. A user will need to supply their team grade, team name and contact details for that team. These details are validated and if they are in the correct format the new information is added to the relevant tables in the database.

P5 (Reminder email) is executed at a set time each week. This process sends a generic email to all registered users to remind them to ensure the availability status of each of their displayed teams is up to date. This is to avoid inaccurate search results being returned when users search for available teams.

3.0 Benefits and Limitations

The benefits of the proposed website include having all the contact details for each GAA club in Ireland in one database that clubs registered with the site can access quickly and easily. The website will act as a means for GAA members around Ireland to build up relations and help provide friendly games for players throughout the inactive months of the year.

The limitations of the proposed website include only allowing the end user to upload specific information, mostly contact details and a list of teams within their GAA club. GAA clubs will not be able to upload photos, join groups or rate each other. Contacting another club will be via a provided email address, phone number or clicking on the "Ask a game" button allows the user to input a short message and sent it to another user.

4.0 Technologies

Several languages and technologies will be utilised during the development of this project.

 Microsoft Windows 7 Operating System will be used as the operating system for developing the proposed website. Aptana will be used as the integrated development environment for the project.

- PHP will be used to generate dynamic webpages.
- HTML5 & CSS3 are languages used to generate the appearance of webpages.
 These languages are used together. HTML5 consists of tags which dictate where information appears on a webpage. CSS3 is used to assign styles to these tags such as colour, font, positon, margins etc. Both these languages will be used to design the appearances of the webpages.
- JavaScript will be used to add functionally and effects to the webpages. It is and
 object orientated language. JavaScript has the ability to change HTML pages,
 styles and validate data, or produce an event on a click. It will be used as
 deemed fit throughout the project.
- JQuery is one of the JavaScript libraries. It is the most used JavaScript library
 and is open source. JQuery allows for changes to be made to HTML pages in a
 similar way to JavaScript. The key difference is that JQuery requires much

shorter and simplified pieces of code. Changes such as colour or visibility of HTML elements can all be changed using JQuery. It will again be used as deemed fir throughout the project.

- MySQL is a relational database management system. It will be used as the primary means of creating a database for the proposed website.
- Git/Bitbucket (-include-url-here) as the main version control repository.

Appendix 1: Webpages



Figure 1: Search page on Hoganstand.com

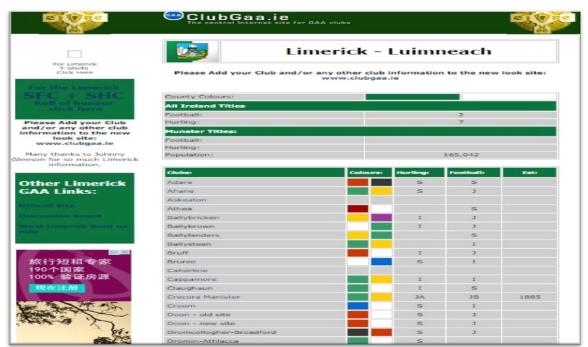


Figure 2: List of Limerick GAA clubs from clubgaa.ie



Figure 3: Profile of a user on the proposed website



Figure 4: Profile of a user on the proposed website

Appendix 2: Processes

Process Number	P1
Process Title	Registration
Brief Description	Accepts registration requests from users. Directs user to their new profile if supplied information is correct or rejects request if information supplied is incorrect.
Inputs	User information as required by the registration form.
Detailed	Users wishing to register fill out a webform on the homepage. If the correct input
Description	is received for each field the user will have successfully registered. If incorrect
	input is supplied the user will be asked to resubmit their registration with the
	incorrect fields highlighted.
Output	Creates the users profile and directs them to it.

Process Number	P2
Process Title	Find a club
Brief Description	Retrieve and generate a list of clubs in response to a query.
Inputs	The user selects parameters to search for.
Detailed	All four tables in the database are queried. These are ClubProfile, TeamDetails,
Description	Sports and Grades. The search will return a list of clubs that match the user's
	parameters.
Output	A list of clubs that match the parameters searched for by the user.

Process Number	P3
Process Title	Login
Brief Description	Validates user details and grants or denies access to their profile.
Inputs	User email address and password.
Detailed	Users will enter their log in details into two text fields. These will be their unique
Description	club email address (Which every club in the country has) and password. The
	process validates these two inputs and allows the user to login if the supplied
	input is correct. If not they are denied access.
Output	Directs users to their profile.

Process Number	P4
Process Title	Upload team details
Brief Description	Allows users to upload details about their club's teams.
Inputs	User input as required by the upload team details webform.
Detailed	Users wishing to upload new team details onto their profiles supply the required
Description	information to a webform. This information is validated and to insure the correct input has been supplied. If the input is correct the tables in the TeamDetails, Sports and Grades tables are updated in the database. If incorrect details are submitted the user will be asked to resubmit with incorrect fields highlighted.
Output	Newly uploaded details appear on the user's profile page.

Process Number	P5
Process Title	Reminder email
Brief Description	Sends an email to all registered users at a specific time each week.
Inputs	Email address of each user as received during registration.
Detailed	A generic email is sent to every registered user at the same time each week to
Description	remind them to insure their availability stance is up to date.
Output	A generic email to all registered users.

Appendix 3: Database Tables

= Primary Key

Table name:ClubProfilePrimary ID:ClubCode

Description: The ClubProfile table stores the general information about each

club such as their name, county and province.

ClubProfile

Field Name	Data Types	Example
ClubCode	Text	LM101
ClubName	Text	ULGAA
County	Text	Limerick
Province	Text	Munster

Figure 5: Database table for ClubProfile

- ClubCode is the unique identifier for each club. Every club has one unique club code and can have many team IDs (see TeamDetails: TeamID). Each club code consists of two letters and three numbers. (E.g. LM101. LM = Limerick, 101 = club number within the database.)
- **ClubName** is the actual name of each GAA club stored in the table.
- County is the county a club is located in.
- **Province** is the province a club is located in.

Table name: TeamDetails

Primary ID: TeamID

Description: The TeamDetails table stores information about each team

within a club, a club's TeamID, GradeID, SportID, ClubCode, contact number for that team contact and email for that team

contact.

TeamDetails

Field Name	DataTypes	Example
TeamID	Text	H1234
TeamContactEmail	Text	JaneDoe@gmail.com
TeamContactNumber	Text	087-*** ***
ClubCode	Text	LM101
SportID	Text	H101
GradeID	Text	S

Figure 6: Database table f or TeamDetails

- TeamID references an individual team within that club. It is unique to that team. A club can have many TeamIDs as it has many teams. It is used to specifically reference that team. A TeamID consists of the letter representing their grade followed by four digits.
- TeamContactNumber is a phone number for the contact of that team.
- **TeamContactEmail** is an email address for the contact of that team.
- ClubCode is the unique identifier for each club (see ClubProfile: ClubCode). In the TeamDetails table it is used to reference and connect to the ClubProfile table. ClubCode is a foreign key for the ClubProfile table.
- SportID there is two sports in the GAA Hurling and Gaelic Football. It is
 a foreign key for the Sports table. Each of sports has an ID (see Sports:
 SportsID). This ID is used to return searches for either hurling or gaelic
 football clubs or teams.
- GradeID refers to each grades (age groups) of teams each club has. It is a foreign key for the Grades table. There is a GradeID (see Grades:

GradeID) for each grade which allows all teams from a grade to be returned from a search.

Table name: Sports

Primary ID: SportsID

Description: The Sports table stores the SportID for Hurling and Gaelic

Football and the name of each sport.

Sports

Field Name	Data Types	Example
SportID	Text	F100
Sport	Text	Gaelic Football

Figure 7: Database table for Sports

- **SportID** Both Hurling and Gaelic Football have their own IDs. Which allows the results of searches to be grouped into each sport. The IDs will be H100 and F100.
- **SportName** refers to the name of the sport. E.g. Hurling and Gaelic Football. It is returned to the user in searches as oppose to the SportID.

Table name: Grades **Primary ID:** GradesID

Description: The Grades table stores the GradeID for each of the grades in

the GAA.

Grades

Field Name	Data Types	Example
GradeID	Text	S
Grade	Text	Senior

Figure 8: Database table for Grades

GradeID Each of the grades in the GAA has a unique ID which is used to group teams during searches. The ID consist of 1-2 letters for each grade.
 (E.g. S = Senior, I = Intermediate, JA = Junior A).

• **GradeName** refers to the name of the grade and is used to return the name of the grade to the user as oppose to a code.

Relationships within the database

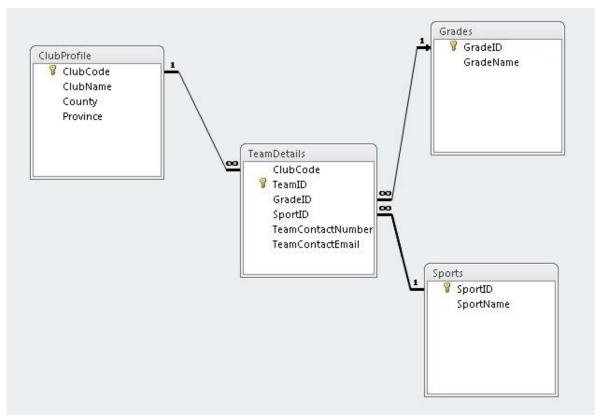


Figure 9: Relationships between tables

- Each user club can has one ClubCode(ID). Each user club can have any teamIDs as they can have any teams.
- A Team within a club has one ID, email contact, phone contact, grade and sport.
- One SportID can be related to many teams within a club.
- One GradeID can be related to only one team within a club. As one team can only compete in one grade.