Group Project

**Module Contribution**

* 80% of module grade

**Time Allowed:**

* You will be allocated one month approx. to complete.

**Deadline**

* Check Moodle for Details

**Notes**

* This is a GROUP PROJECT
* You have to organize yourself into groups of 3 to 4 students per group
* The other members of the group should be in the same Lab Session as you
* If you are not a member of a group please email [**brendan.fogarty@griffith.ie**](mailto:brendan.fogarty@griffith.ie)

**Presentation**

* You will present your work at the end of reading week (Irish students) or during exams (French group)

Description

Students are to work in groups of 3/4. This team work requires you to plan, design, and build a fully functioning dynamic web application. The project aims to develop a web application for Sintoni Sports Club, which will have two sections:

* The first part is public. It should have six or more pages: Home, Services, Membership, Events, News, and Contact Us.
* The second part is private, which is used by the club manager and the staff to manage the club memberships and post content on public pages. This section is password protected.

The club manager should be able to create or delete content on the Membership, Events and News pages. Public section contain the following details:

* The Home page displays a welcome page with some images, opening times and other content which you feel is appropriate.
* The Services page will display the sports facilities offered by the club, for example, Tennis, Squash, Soccer, Table Tennis, Bowls, Restaurant, Summer school, etc.
* The Membership page lists the club membership types, benefits and associated fees.
* The Events page lists upcoming events organized by the club. Each event is displayed with its title, description, an image, data and time, and a register button. The register button allows members and non-members to register to an event. Upon registration, a member will only provide his/her membership number (and no. of attendees), while non-members are asked to provide name, email and phone. The registration to an event must close as it reaches capacity. Victor
* The News page displays news (with posted date and time) related to club activities. Myo
* The Contact Us page displays the contact details (phone, address and opening hours). This information should be editable in the private part of the website. It also displays a 'get in touch' form (name, email, phone, subject, message) that is used by the visitors to send enquiries. The club manager receives a notification after a query is submitted.
* You can also add more pages that you think are relevant to a sports club.

The private section allows the manager and the staff to login to the web application. At the moment, there are only two types of users involved in the system:

* The Manager user is the most powerful user of the system who performs a number of tasks. A dashboard allows the manager to perform tasks, which can include:
  + Add new membership types and update/delete existing ones,
  + Add or update events,
  + Post a news item,
  + Check emails sent by visitors using the contact us form,
  + See reports (simple graphs or numbers showing):
    - For example, membership fees received during last month or year. Statistics related to enquiries from the website, new memberships, expired memberships, etc.
  + Manage sports club staff (CRUD), and
  + Manage memberships (CRUD).
* A Staff user can register new or update existing club memberships. S/he can also add/update information related to membership payments.

As this is a database-backed web application, you're required to store all the relevant information in a relational database (SQL database). The database must store information related to:

* The system users (manager and staff),
* Members (this depends on membership type – single or family),
  + Single membership requires capturing personal data of an individual.
  + Family membership requires recording personal data of all family members.
* Non-members (potential future members),
  + Individuals who do not have a membership but attend events and submit enquires.
* Memberships types, events, and news,
* Payments,
* Enquiries and
* Any other relevant information.

You will need the following technology stack for the development of this project.

* HTML
* CSS (Bootstrap framework is recommended)
* PHP
* MySQL

How to submit?

Keep the following in mind when you're preparing for your project submission.

* Take screenshots of your application (home page + one for each page).
* Create a word file named system\_info.pdf which includes:
  + Overview: how the system is designed and implemented (maximum two pages) including details on any extra features you implemented and details on steps you took to enable ensure that you have a secure website.
  + Screenshots of the web application.
* Create one zipped file that should only contain:
  + system\_info.pdf file (created as above) and
  + source code (include PHP, HTML, IMAGES, CSS, and database schema).
* For submission, name the zipped file as group\_name.zip
* Make the submission on moodle – deadline 05/05/2018.

Marking Criteria

* HTML, CSS, PHP, and MySQL must be original, indented and commented. You will be asked to explain any piece of code. Failure to explain code may be taken as evidence of plagiarism.
* In order to pass, students must present a working and usable application that covers the basic specifications provided above.

Final application marks breakdown:

* 10% Visual design – Layout / HTML / CSS
* 10% Usability, including user friendly navigation, Form validation
* 10% Database design
* 50% Private section of the application
* 10% Code quality
* 10% Extra feature(s) added

Marks are deducted:

* 10% Project not submitted properly as per the instructions (see submission guideline above).
* 20% Late submission (maximum of 48 hours period may be considered).

Frequently Asked Questions

How do we submit the project? What is the late submission penalty?

If you have these questions, then you have not read the instructions! You must spend few minutes to carefully read and understand the entire document before doing anything. In order to ensure the accuracy of your work, it is important that you understand the requirements.

Can we provide advanced functionality?

Your project is free to extend beyond the core functionality outlined above. Provided specifications are the minimum requirements you need to fulfil in order to pass the project work.

Can we use a CSS library other than Bootstrap?

You can use any CSS front-end framework. You are also free to customize the default styles provided by such frameworks.

Can we use JavaScript?

Yes, you can use it. You can also use available JavaScript libraries.

What content should we use for public pages?

You should find some relevant content. Search the web for sports clubs to get some ideas.

Can we propose our own project idea instead implementing the sports club system?

Of course, yes! Feel free to specify your own project proposal. This must be done within the first week. After that you need to get an approval from the lecturer. A basic criterion is that your application must provide equivalent functionalities to those given above.

What will happen in project demo?

You will be asked to prepare 4/5 slides (highlighting key features & limitations) to set the context before doing the demo of your solution. Each group will be given 15-20 minutes for the demo.

Are there any tools recommended for productive collaboration?

* GitHub – version control and source code management
* Slack – team collaboration

What is the best implementation strategy?

* Understand the requirements & carry out discussions to bring all group members on the same page,
* Design and distribute the work between members,
* Develop (& Integrate),
* Test & Fix
* Prepare submission material