20COB290 Team Projects - Part 2

Dr Posco Tso

Introduction

There are several aspects of this assessment. One part of this coursework is an extension of the previous task, still focussing on the IT helpdesk and seeking ways in which the task of the operators, technical specialists and users might be made easier using the Web. You will use the MySQL database management system to store and manage information and PHP/JavaScript with HTML/CSS to build your dynamic websites. The second part is concerned with providing a web based project management support system which will help the group manage its own work and demonstrate to their managers what the group is doing.

The Problem

The task is to implement a working system based on your prototype which you have shown and discussed with the users in the demonstration at the end of Part 1. Of course, if the users made any requests for changes in the demonstration or you made any promises, then these too will need to be implemented.

The Programming

You will all be expected to work in your GCP (Google Cloud Platform) accounts with a Linux system and GitHub repository to coordinate the development. The company users will be using a range of web browsers and at least one of the browsers will be minimal. Your customer has therefore specified that you can use JavaScript, but it should require no plug-ins and cookies will not be enabled by all users (as a minimum, make sure your site is available from all the browsers in the lab under Windows, Mac and Linux). All the functionality of the websites must be available through that browser (functions that cannot be accessed from that browser will be treated as if they had not been provided). However, the usability of your websites will be assessed by looking at them from several different browsers.

In Semester 2, help with the programming will be available in the lab at the times shown on your Semester 2 timetable.

Project Management Support System: The Project Management Website

Every group is required to produce and keep up to date a Project Management Website (PMW), e.g. Trello or other alternatives. The main purpose of the site is to enable your busy "manager" to quickly check how your work is progressing; in particular it should alert your manager to anything that might prevent the project from being completed on schedule. It should also act as a resource which you yourselves can use as a team to distribute the work, inform each other of progress and discuss and resolve any issues that occur. The site should:

- Provide a clearly visible link to your helpdesk system, with information of any username(s) or password(s) required to access it;
- Identify the members of the group and indicate the general roles they fulfil within the team;
- List the requirements and constraints that you have identified;
- Describe the work that is planned, giving a breakdown of the problem into sub-problems and for each sub-problem provide information about:
 - the plan for tackling the sub-problem to achieve the final result, including a planned start date and finish date;

- the techniques that are being used;
- the people who are involved;
- the current status of the work indicating, in particular, how progress compares with the planned schedule; this should be readily visible for when your manager wants to make a quick progress check.

The PMW must be available from the start of week 10 of semester 1, the second-to-last week of term (though some of the elements listed above may have very little, or even no content) and should be updated at least once a week once your exams are finished at the end of January. The URL for your Project Management Website, plus any username and password required, should be uploaded as text on Learn by Monday 2.00pm of week 10 in Semester 1.

Software, Reports and Demonstration

By 4pm on Monday of week 3 in Semester 2, you should upload your Helpdesk system URL with any required usernames and passwords to Learn (see the assignment hand-ins for Part 2). Note you should have already provided a URL for your Project Management Website by the Monday of Week 10 of Semester 1 and this, in turn, should also provide a link to your helpdesk system.

During week 3 of semester 2 each group will be expected to give a demonstration (25 minutes), explaining their proposed solution, showing us the dynamic website they have produced and **their project management website**. During the demonstration you may be asked to describe and justify the methods chosen for creating your solution.

In addition, the following submissions are required (A and B from the group as a whole, C from each individual):

- (A) Listings of all of your code scripts on your Team's Github repository. Each script should be written so as to make it as easy as possible for it to be understood and altered by someone not familiar with the code, e.g. choose meaningful variable names, include appropriate comments, etc. All team members are expected to generate some Git commits to your repository.
- (B) An implementation report (maximum 6 pages, with min 11 point text) discussing your implementation strategy and implementation methods to satisfy the requirements.
- (C) Assess the way the group carried out the task and what contribution each member of the group made to each aspect of the work this will also include the contribution made to the organisation, coordination and communication of the team. You will need to log on to Web-PA (instructions are on Learn for how to do this) where you will be asked to allocate a score for each member of your team based on their contribution to different aspects of the Part 2 deliverables.

Source code (A) and Report (B) must be submitted by 4pm on Monday of week 3 in semester 2. Source code (A) must be checked in to your team's GitHub repository, and Report (B) must be submitted as a PDF document on Learn. Web-PA should be used for deliverable (C) (instructions are on the module Learn page) – this should be completed by 11:59pm on Friday of week 3 in semester 2.

Assessment

The split of marks awarded to the group will be:

- Website demonstration 60%
- Project Management Website 15%
- Source code (A) 15%
- Report (B) 10%

Report C will not be directly assessed as part of the group mark, but will be used to enable individual marks to be awarded. The individual marks will be based on, but will not necessarily exactly follow, the Web-PA scores for each member's contribution to the project.

Communication

As for the first part, you should use the same Learn forums you used in Part 1 to ask questions. Make sure you ask your question on the right forum or you won't get a good answer. Don't forget the three rules for asking questions:

- 1. Always use the correct forum, never ask questions by email to any of the staff team.
- 2. Always put your team number in the subject line: Eg. "Team 21 Question about delivery dates".
- 3. Always give possible alternative answers to any question you pose to give the receiver a better idea of your understanding and enable them to give more helpful answers.

Plagiarism

Any copying is plagiarism unless the source is specifically referenced.