

COIS 12036 Human Computer Interaction (HCI)

Project B (Term 2 – 2018)

Total marks: 45 marks

Project B: Task

The overall task is divided into two project phases (i.e. two separate, but related projects). It is strongly advised that you read the following project description in conjunction with the description for Project A.

You are to complete the following task in the order given:

- **Develop high-fidelity prototype.** Based on the user test feedback and recommendations that you proposed in the previous phase (Project A), develop a high-fidelity prototype (i.e. reasonably complete version) for the website. Use any combination of HTML5 and CSS3. Remember to indicate which browser (i.e. IE, Firefox, Safari, Chrome, etc.) you are targeting as the main working platform. For the purpose of this project, please exclude mobile devices that runs on fragmented or closed-system technology, such as Android, Apple iOS and Nook. Do not use Rapid Application Prototyping (RAD) tools or any other type of scripting languages or services, eg. Python, Lua, AJAX, Dreamweaver, WordPress etc.
- **Carry out user acceptance test.** Devise two walkthrough scenarios. For example, “Instruct the user to visit the *Coins section*, look up two items, exit and select *Origami* section and look up four other items.” Apply this walkthrough scenario to your test subjects. Invite 3 to 4 potential users (e.g. friends, family members, classmates should be fine, etc.) to play the role of users. You do not need to provide their names. Ask each of the users to perform all the walkthrough scenarios you have devised. Apply appropriate techniques to determine how the website performs under these test conditions. Systematically collect data on the user performance. For example, how long did each of the users take to complete each of the scenarios? Did the users find the interface easy or challenging to use? Does the interface allow users to change their minds? Etc. Refer to your textbook for more detailed and appropriate parameters that suits your requirements.
- **Identify features.** Identify any one or two features of the website that you think deserves particular attention. An example of a feature is, draw attention to interface design elements that are particularly innovative, e.g. visitors can call up a mini navigational ‘menu bar’ from any page.

- **Recommendation.** From the outcome of the user acceptance test, provide recommendations on how the high-fidelity prototype can be improved. Assertions made in your recommendation need to be supported by the test results you have carried out earlier.
- **Write a report.** Produce a report to document the tasks and the outcome of your efforts undertaken for Project B. Remember, this report is intended for your employers. You need to document and support the viability of your website – that is, to convince your employer that your webpage is performing as intended.

Format of Report

As you are performing the tasks prescribed above, you will need to document every step of your activity (i.e. write up what you have done). These pieces of information will be consolidated into a report. For the purpose of this project you are assumed to be a professional. As such, you should attempt at your best to reflect this quality in the preparation of the report. As a minimum, the report should contain the following:

- (1) Introduction – State the purpose and objectives of the report.
- (2) Content – This is the main section where you should document your activities. You should document the design principles you have adhered to in the development of your website. You need to show the relationship of the interface design principles relating to your webpage.
- (3) User acceptance test. Do not include raw or unprocessed data. Summarise your findings. Include only the analysis, evaluation, summarization and outcome of the acceptance test here. If you really need to include critical or important raw data, then do so by appending them to an appendix at the end of the report. Keep a record of your raw data. If required, your instructor or marker may request that you provide them with a copy.
- (4) Features.
- (5) Recommendation.
- (6) Conclusion – This is basically a summation, consolidating the main points of the report.
- (7) There is no minimum or maximum limit to the number of words required in this report. However, the length of your report must be within reason and of adequate length to succinctly support the complete account of tasks you have undertaken.
- (8) Figures or diagrams can be added as required.

Page formatting: A4 size paper, 2.5cm margins on all sides, single-sided, Time Romans or New Time Romans font, 12pt font size, DOC or DOCX format.

Learning Objective

Note that these are not programming project in themselves. The primary purpose of both Project A and Project B is to ensure that students adopt best practice and adhere closely to HCI principles during the *process* of designing and developing the interactive user interfaces. This process is to be fully documented in your report. Full functionality is *not* expected from either Project A or Project B. For example, knowledge of database backend servers and web servers are not required in this course.

What to Submit

You should submit two items for assessment. These are:

1. All necessary files, images, scripts, coding and resources should reside in a single main **PROJECT_B.ZIP** folder. The report should be separated from this folder (see item 2 below). It is up to you to organise the files and sub-folders within the main folder. Ensure that all your scripts and coding is stand-alone and portable. That is, your marker or instructor should be able to run your scripts from the type of browser you have specified by clicking on the **main.html** or **main.htm** startup file. Use only HTML5 and CSS3 to develop your website. The web browser you specified should render your markup and scripts without problems.
2. The report should be named **REPORT_B** and saved as a single file in DOC or DOCX format. This file should be located outside the ZIP folder.

Submit (1) **PROJECT_B.ZIP** and (2) **REPORT_B.DOCX** as separate files. That is, submit ONE ZIP file and ONE DOCX file. Both need to be separate items when you submit through the online submission portal.

PLAGIARISM

CQUniversity regards plagiarism as a serious offence and it can have serious consequences for you as a student. To avoid plagiarism, please read:

<https://www.cqu.edu.au/student-life/services-and-facilities/referencing/what-is-plagiarism>

Assessment Criteria

The following criteria will be used to assess your assignment:

| Criteria | Marks |
|--|-------|
| Task as documented in report: <ul style="list-style-type: none"> Overview and description. <i>(2 marks)</i> User acceptance test are appropriate and sufficiently in-depth. <i>(3 marks)</i> <ul style="list-style-type: none"> Walkthrough scenarios are appropriate and sufficiently complex. <i>(1 mark)</i> Results for the test user performance. <i>(6 marks)</i> Evidence that this task have been carried out with users. E.g. analysis and evaluation of data are presented, etc. <i>(3 marks)</i> Features. <i>(3 marks)</i> <ul style="list-style-type: none"> Features are appropriate and suitable for the website. Innovative. Recommendation. <i>(3 marks)</i> | 21 |
| High-fidelity prototype: <ul style="list-style-type: none"> Interface adheres to HCI principles in does not break major HCI rules. <i>(6 marks)</i> The final prototype sufficiently demonstrate the developer's skills in web development tools (i.e. HTML5 and CSS3 (or JavaScript, if appropriate)). Eg. webpages can be rendered to display elements to provide an idea of the overall design. <i>(4 marks)</i> Final expert review. The instructor and/or marker will carry out a final usability and expert review of the website based on: <ul style="list-style-type: none"> Overall interface design, e.g. the design is appropriate for intended users, and use of good metaphors. <i>(3 marks)</i> Aesthetics, innovation, creativity, impression etc. <i>(5 marks)</i> Walkthrough based on the walkthrough scenario you devised above. <i>(2 marks)</i> | 20 |
| Presentation: <ul style="list-style-type: none"> Report professionally presented. <i>(2 marks)</i> Written style, expression and overall presentation. <i>(2 marks)</i> | 4 |
| Total marks for Project B: | 45 |

Marker's Guideline

- To obtain 76-100% of the marks allocated for a specific section of the assessment, the student's work is expected to demonstrate a **very high** level of knowledge and understanding of concepts, facts and procedures, and application of knowledge within the scope of the course.
- To obtain 51-75% of the marks allocated for a specific section of the assessment, the student's work typically demonstrate a **high** level of knowledge and understanding of concepts, facts and procedures, and application of knowledge within the scope of the course.
- To obtain 26-50% of the marks allocated for a specific section of the assessment, the student's work typically demonstrate a **sound** level of knowledge and understanding of concepts, facts and procedures, and application of knowledge within the scope of the course.
- To obtain 1-25% of the marks allocated for a specific section of the assessment, the student's work typically demonstrate a **limited** level of knowledge and understanding of concepts, facts and procedures, and application of knowledge within the scope of the course.
- 0 marks will be allocated for a specific section of the assessment, where an erroneous or no attempt has been made by the student.

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