Mobile Application Development

Tutor Marked Assignment (TMA)

Introduction

The Mobile Application Development TMA accounts for 25% of the module marks. Documentation should be submitted by in Moodle and the implemented mobile application published on the DCSIS student server before the assignment deadline specified for your class.

TMA Specifications

You are required to design and build a small-scale mobile web application using the jQuery Mobile framework, based on the following scenario.

The University of Zedland has an intake of 5000+ students per annum. A large number of the students find their accommodation through the University Accommodation Services. The accommodation varies from plush houses in upmarket districts to flats studios and shared rooms in less salubrious parts of town. Accomodation is graded using the same star system as hotels (e.g. 1 to 5). Up to now, students have had to make an appointment at the accommodation services offices in order to register an interest, or reserve a particular house, flat or room. You have been tasked with designing a mobile application that will make the process of finding and reserving accommodation for Zedland students much easier. In the first instance, e.g. for this assignment, you will be required to produce a design for the whole application, and to implement the basic structure of the application, including main pages, navigation and textual content.

Deliverables for Assessment

1. Design (50%)

The design must be *professionally* executed using a methodology of your choice. The design should be based on what you perceive to be student **user needs** (e.g. user-centred design).

The design should incorporate:

1. An overall summary statement of the objectives of the application.
2. A statement of the functional specifications of the application, e.g. a clear description of what the application is meant to do (this can be in list format).
3. Diagrams of two application interfaces, including indicative textual and graphical content. Must include landing page and one other.
4. A diagram detailing the information architecture of the application, including navigation.

2. *Partial* Implementation (50%)

Using jQuery Mobile, you should implement a minimum of six, and a maximum of eight, pages of your design from part one. The following features should be included in the implementation:

• Appropriate examples of internal and external jQuery Mobile pages.

• Correctly structured jQuery Mobile pages using headers, footers, and content sections.

• Appropriately implemented primary and secondary navigation using listviews or other mobile specific techniques. Must also include, examples of inter-page navigation, using *back* or *home* buttons positioned in page headers.

• A fixed, persistent, footer menu consisting of a set of common links (e.g. about, login, etc.).

• An example of either a list structured with list dividers, or a searchable list.

• At least one example of page transitions between pages.

All pages must link to the jQuery and jQuery Mobile libraries using a CDN. All code should be standards compliant HTML 5 and CSS 3.

Submission Format

Documentation to be zipped and submitted via Moodle

	summary_statement.docx
username_mad_tma_docs.zip	functional_specifications.docx
	application_interfaces.docx
	information_architecture.docx

Mobile application to be published at:

http://titan.dcs.bbk.ac.uk/~username/madtma/index.html

Landing page to be called **index.html**

Completing the TMA

The TMA must be completed and submitted electronically in the assignment dropbox in Moodle BEFORE the start of session 5.

You should work on your TMA after class and during the self-study session scheduled after Session 4. Begin your work early, as the TMA is a substantial task that requires planning and effort to complete satisfactorily. The TMA prepares you for the FMA, so you greatly reduce your risk of a poor overall mark by completing and submitting a TMA.

Getting support

Support for the TMA work will be available in class during Session 4.

Getting feedback

Feedback on the marked TMA can be downloaded from Moodle and will normally be returned to you within 2 weeks of submission. The feedback on your TMA and any issues that arise can be discussed with your tutor in Session 5, or optionally you can make a tutorial appointment for individual support within 2 weeks of the return of your marked TMA.

Backing up files

Always keep a back-up copy of all work submitted for assessment in case of unforeseen submission problems.

Plagiarism

Plagiarism, which is claiming the work of others as your own, is a serious offence and can result in your exclusion from all colleges of the University of London. You should be aware that we use a range of automated tools to spot potential plagiarism in spreadsheets, databases, programme code and text documents. Providing you clearly reference work done by others that you have included in your TMA you will not be penalised.

In the course of completing the assignment, we acknowledge that you will research code from books and from online sources. *Ideas* and *techniques* from these sources may be used in the completion of your own work. HOWEVER, your own work MUST differ significantly from any third-party sources. If it does not, this will constitute plagiarism. You must also clearly reference any third-party sources you have used.

Likewise, we acknowledge that some students will work together collaboratively to solve problems. Again, if you do this, each student's final submission must be markedly different. If your work is not markedly different from another student's work, again, this will consitute plagiarism.