Assessment item 1— Creative work

Due date: 11pm Friday of study week Project
Weighting: 50%

Length: Less than 50 MB

Objectives

This assessment item relates to the course learning outcomes numbers 2, 3, 5 and 6 as stated in the online course profile.

Details

For your creative work you are going to design, specify, implement and test a prototype of a simple web application. You are to come up with your own idea for the app you wish to prototype. Keep it simple as you have only a day a week during term to prototype and develop this idea. You do necessarily have to create a completed app, but you must develop and document enough to justify the time allocated to the project.

You should complete the work in a number of stages, developing new parts of your web application project in parallel with each assignment. The amount of work/time you spend on this about the same as the time spent doing assignment 1 and 2.

The following describes each part that will be assessed and guides you in this assessment process.

App Design and Specification

You are to come up with a **semi-original idea** for a mobile application. You are to consider what the major functions of the app will be. You are also to develop data models for the apps' important information. **Discuss your idea/s with the lecturer/tutors assigned to help you with your study**. When the idea has been developed document the following (if applicable):

- A brief description of what the app is and what it does.
- A brief discussion of the motivation for producing the app, i.e. who will use the app and why they will use the app (target audience).
- A summary of the major tasks to be completed in developing the app.
- A specification (UML) for the major variables and data structures used in developing the application.

Client App Development

The app design and specification is to be used as the basis for the development of a working prototype of the app. The application should be developed using a mixture of html, css and Javascript. The components of the interfaces from the design need to be implemented and linked to the script. The main functions given in the specification

should be implemented. Any data gathered by the application should be stored for later use.

The main tasks to be evaluated are:

- Is the css file appropriately used for style elements?
- Is the structure of the html appropriate for a mobile application and are all necessary sections of html complete?
- Does the Javascript capture data from the interface correctly, is the functionality of the Javascript files correct for use, is the Javascript appropriately factored, is all required Javascripts implemented?
- Does the combination of css, html and Javascript provided meet expectations?

Server App Development

The node server scripts used to support client networking are to be documented. Source files can be included as appendices.

Database Use and Development

The use of server and cloud databases by the app is also to be documented.

App Testing, business and marketing plan, research

You must specify a **plan for testing your app**. Your plan should include how you will test the client Javascript and html. Include the results found from testing your app in your documentation.

Document the business plan for your app in your documentation. To do this you must determine your market demographics, how big you estimate the market is, and estimate how much you think you would be able to charge for the app. From this estimate revenue for your first year. Next estimate development, testing, marketing, maintenance costs and other costs for the year. Will you make a profit in the first year? In the second year?

Finally discuss how you will go about marketing your product.

Also include discussion of research done on research area relevant to the app. This includes researching for similar apps in stores and researching literature on any areas relevant to app (e.g. security, cloud computing, location awareness, social impacts).

You should zip/ rar / tar the documentation and source code for the client and server used to develop your project into an archive file. Submit this .zip, .rar or .tar document online using Moodle in the study week. If you are going to be late with this, let your lecturer know in person or by email to arrange an alternate delivery mechanism. If this item is not submitted by the end of study week, late penalties will apply.

Assessment criteria – Project COIT20269 Mobile Web Apps

Student name : Student Number :

App design and specification – 10 marks

NAME: COURSE: COIT20269

MARK / 10	Poor		Good		Excellent		Mark
Description Well defined description of what the app is intended to be and do	0	0.5	1	1.5	1.5	2	
Motivation Well reasoned choice of target audience and likely interest	0	0.25	0.5	0.75	0. 75	1	
Summary of task A reasonable choice of tasks to be completed in producing the app is given	0	0.25	0.5	0.75	0. 75	1	
Specification of variables and data structures The major data structures and methods are documented	0	0.5	1	1.5	1.5	2	
User interface prototypes Prototypes for the main user interfaces/pages in the app presented	0	0.5	1	1.5	1.5	2	
Originality/Creativity	0	0.5	1	1.5	1.5 Sub TC	2 DTAL/10	

App development – 25 marks

MARK / 25	Poor		Good		Excellent		Mark
Client HTML, Javascript and CSS files, Server Javascript	0	9	10	15	15	20	
Appropriate use of;							
CSS style elements,							
Client HTML,							
Client Javascript,							
Server Javascript,							
Local and remote databases							
Results	0	2	2.5	3.5	3.5	5	
Achievement compared to others							
					Sub TO	OTAL/25	

App testing, business case, marketing plan and research - 15 marks

MARK / 15	Poor		Good		Excellent		Mark
App Testing	0	1	1	1.5	1.5	2	
App testing plan, documentation of tests							
Business plan	0	1.75	2	3	3	4	
Estimating costs, estimating revenue, break-even sales							
Marketing	0	1.75	2	3	3	4	
Demographic identification and							
description of tactics							
<u>Research</u>	0	2	2.5	4	4	5	
Documentation of products and issues							
Deductions:							
					Sub To	OTAL/15	
					Final Mark /50		

General Comments

Marker: Date: