Undergraduate Final Year Project Proposal

**Investigation of HTML5 in support of game programming
using a turn-based strategy game as example**

Bachelor of Science with Honours in Computing

[Your Banner ID]

Overview

Nowadays, mobile, touchscreen device, internet are no longer unfamiliar concepts. More on more people are using smartphone, tablet for their work and entertainment. NetCitizens' report points out that devices used for connecting online are increasing from laptop, mobile phone and tablet in Vietnam . Each platform for mobile has its own language which uses to develop native application. Under the need of a hybrid language, HTML5 came to the world. With HTML5, advanced Web application features are available in all mobile browsers supporting the mark-up language, using the same standard syntax and displaying the same standard behaviour . Rising up of a technology for cross-platform application like HTML5 is interesting and attractive enough to involve developers exploring it.

In this project, I will firstly focus on analysing the supporting features of HTML5 in animation, audio, storage for mobile game and the theory of game programming. Secondly, I will investigate a free JavaScript engine to build HTML5 game as a native application for popular mobile platform such as iOS, Android, Windows Phone. Then I will go to detail in the process to implement a turn-based strategy game as an example for my research. Finally, a review is taken to check out whether I match my objectives.

Aim

This project fulfils my dream to create a cross-platform game with lasted high technologies.

Objectives
Knowledge of website programming
3.1.1 Learn the definitions, types and basic programming concepts of the website
3.1.2 Study the structure and characteristics of website development strategies
3.1.3 Evaluation of a number of similar websites
3.1.4 Learn more about artificial intelligence (AI) for website
3.1.5 Learn more about website SEO
Learn HTML / CSS / JS
3.2.1 Find general information about HTML
3.2.2 Find general information about CSS
3.2.1 Find general information about JS
3.2.4 Research support libraries
3.3.2 Bootstrap4 Research
3.3.1 Find general information about eCommerce website layout and theme
3.3.2 Study how to write front-end eCommerce website
Learn PHP
3.3.1 Finding general information about PHP
3.3.2 Research support libraries
3.3.3 Laravel Research
3.3.4 Find general information about eCommerce website functionality
3.3.5 Study how to write eCommerce website using Laravel support library
Website implementation

3.4.1 Build website ideas and processes
3.4.2 Design website interface
3.4.3 Design website functions
3.4.4 Website deployment
3.4.5 Check and fix errors in website
Legal, Social, Ethical and Professional

Legal:
HTML5 is a publishing language of World Wide Web.
Other materials which are used in my project will come from free sources or legal copies.
This project is belong to me and University of Greenwich.

Social:
My game
which is used for example will not relate to social evils.

Ethical:
This project is my own effort.
Don't have plagiarism in the project.

Professional:
Not disclose or authorise to be disclosed, or use for personal gain or to benefit a third party, confidential information except with the permission of University of Greenwich, or as required by Legislation.
Respect and value alternative other perspectives, seek and accept honest criticisms about my work.
Avoid any situation that may rise to a conflict of interest between me and relevant authority.

Planning (see appendix A)
A project planner in excel format is used to track the process of project.
Initial References

Appendix A - Schedule of Work

Project Planner

ACTIVITY	PLAN START (DAY)	PLAN DURATION (DAYS)	WEEKS 1	2	3	4	5
Project Proposal		13					
Discuss proposal with supervisor	Wed 22/10/14	1					
Write project proposal	Wed 22/10/14	7					
Upload project proposal	Tue 28/10/14	1					
Discuss proposal with supervisor	Wed 29/10/14	1					
Revise project proposal	Wed 29/10/14	2					
Upload revised project proposal	Thu 30/10/14	1					
Initial Report		33					
Find out definition, types and basic programming concepts	Sat 8/11/14	1					
Study the structure and characteristics of strategy game	Sun 9/11/14	1					
Evaluate some HTML5 strategy games	Mon 10/11/14	5					
Learn deeply about artificial intelligence (AI) for game	Fri 21/11/14	4					
Look for general information about HTML5	Tue 25/11/14	2					
Learn carefully about canvas tag and animation in HTML5	Thu 27/11/14	4					
Study local storage of HTML5	Sat 6/12/14	2					
Study audio support in HTML5	Mon 8/12/14	1					
Look for general information about JavaScript	Tue 9/12/14	1					
Study how to write game with JavaScript	Wed 10/12/14	2					
Search for available JavaScript engines which support to bu	Fri 12/12/14	5					
Learn carefully the features and how to use the chosen Javi	Wed 17/12/14	4					
Upload initial report		1					
Product Development		30					
Construct game idea and flow	Sun 21/12/14	5					
Design functions in game	Fri 26/12/14	3					
Design game interface	Mon 29/12/14	3					
Implement the game	Sat 3/1/15	14					
Test and fix bugs in game	Sat 17/1/15	5					
Interim Report		10					
Prepare interim report	Thu 22/1/15	9					
Upload interim report		1					
Final Report		20					
Prepare final report	Sun 1/2/15	19					
Upload final report		1					
Project Demonstration		20					
Prepare for demonstration	Sun 1/3/15	20					