**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 (Cimigo, 2012). 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 (Warner, 2010). 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.

(Trustee Board Regulations Schedule 3 v4, 2011)

## Planning (see appendix A)

A project planner in excel format is used to track the process of project.

## Initial References

Cimigo, 2012. *NetCitizens,* Hochiminh: Cimigo.

Trustee Board Regulations Schedule 3 v4, 2011. *CODE OF CONDUCT FOR BCS MEMBERS.* Swindon: British Computer Society.

Warner, J., 2010. Mobile Web Design For Dummies. In: New York: Wiley Publishing, Inc., p. 114.

# Appendix A - Schedule of Work

