

**Undergraduate Final Year Project Proposal (grant chart to November)**

**Build Ecommerce clothing shop website**

**Name: Huynh Minh Thong**

**Bachelor of Science with Honours in Computing**

**[Your Banner ID]**

## **1 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.

## **2 Aim**

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

## **3 Objectives**

### **3.1 Knowledge of game programming**

- 3.1.1 Find out definition, types and basic programming concepts of game [1.0]
- 3.1.2 Study the structure and characteristics of strategy game [1.0]
- 3.1.3 Evaluate some HTML5 strategy games [5.0]
- 3.1.4 Learn deeply about artificial intelligence (AI) for game [4.0]

### **3.2 Investigation of HTML5**

- 3.2.1 Look for general information about HTML5 [2.0]
- 3.2.2 Learn carefully about canvas tag and animation in HTML5 [4.0]
- 3.2.3 Study local storage of HTML5 [2.0]

- 3.2.4 Study audio support in HTML5 [1.0]
- 3.3 Evaluation of JavaScript game engine
  - 3.3.1 Look for general information about JavaScript [1.0]
  - 3.3.2 Study how to write game with JavaScript [2.0]
  - 3.3.3 Search for available JavaScript engines which support to build game with HTML5 and choose an appropriate one [5.0]
  - 3.3.3 Learn carefully the features and how to use the chosen JavaScript engine [4.0]
- 3.4 Implementation of the example
  - 3.4.1 Construct game idea and flow [5.0]
  - 3.4.2 Design functions in game [3.0]
  - 3.4.3 Design game interface [3.0]
  - 3.4.4 Implement the game [14.0]
  - 3.4.5 Test and fix bugs in game [5.0]

## 4 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)

## 5 Planning (see appendix A)

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

## 6 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.

# Project Planner

