

DT211 Project Proposal Form 2015/2016

Student Name: Christopher Mahon	Student Number: C12380621
Project Title Handheld Games Console	
Summary (approx 200 words) The intention of this project is to create a handheld games console. The console will make use of both an integrated controller and a touch screen to control the system. The buttons will be wired into the Raspberry Pi through a USB Port and then I shall be creating drivers that allow the user to navigate through the OS using them, as well as allowing the controls to be used in various supported programming languages. The casing for this device will be designed using CAD software and 3D printed. Afterward I will be creating a game and other pieces of software designed to test the system. In way of demonstrating the functionality of the buttons and the touch screen. As a part of the report, I intend to look into the handheld console industry as well as a look into the emergence of cheap platforms with widely available development tools.	
Background (and References) Handheld games consoles have been around since the 1970s and 80s. Throughout the years, these consoles have been extremely popular, however they are often rather expensive and often have development for them restricted. My intention for this project is to demonstrate using a Raspberry Pi, that it is very possible a relatively cheap handheld console with easy access for developers to create more software. Related Products: eNcade, Game Boy, Ouya	
Proposed Approach I will be using a Raspberry Pi as the heart of the console as a way of creating a base cost and performance for the console. I will be using the Scrum methodology for this project, for both the hardware and software aspects of this project. This will allow me to have 1 week long sprints and meet with my supervisor weekly to reflect on my progress. Scrum will also help me to go back and look through any issues I discover through testing.	
Deliverables My deliverables will be a handheld console with a Raspberry Pi as the heart of it, various pieces of software designed to test the additional hardware and a report about the handheld gaming market and the emergence of open games platforms.	
Technical Requirements This project will require access to a Raspberry Pi/2*, 3.5 inch Raspberry Pi touch screen*, 3D printer or something similar to create the casing, CAD software to design the casing, battery pack and assorted other parts* *(See attached Document for specifications)	

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Proposal Sign off:	
Lecturer Comments	
Student Signature	Date
Lecturer Signature	Date