



PRE-PRODUCTION REPORT

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Analysis of Project Brief

I was tasked to plan, design, create, test and evaluate a video game for an Android based mobile device. I will start by creating a basic plan of actions that will include a high concept document that will be the basis of the entire game and become the groundwork for the Final Project Plan. After the game idea will be decided I will create basic game design that will allow me to visualise and design my game ideas and put them to live. The next step will be the creation of a mobile game that will have to meet the requirements specified in the project brief. After the game will be created it will then be a testing phase that will make sure that all requirements are being met and it is fully working game. Finally, the last stage will be the evaluation that will cover how well previous stages went, what was good and bad about them and if the plan was accurate.

Requirement Specification

Functional

- Support Android
Video game must be created to support Android
- At least 2 Mobile Interactions
The Video game must have at least 2 mobile interactions for example; Gyroscope, Touch Input, Buttons, Multiple Holds, GPS etc.
- Made with Unity
Must be made with Unity using C# Programming Language
- Object must interact with touch click
When pressed object must interact
- Stamina
Each attack consumes stamina

Non-Functional

- Optimised
Make sure the game is optimised to the operating system and phone specs so it's more efficient
- Secure
Make sure the game files are secure so no attempt on cheating can be made.
- Made in Unity
You must create your game in the Unity
- Android Only
Must support android only

Development Methodology

In this Project I will use Agile Development as it with my workflow since it is a flexible continuous cycle of getting information planning the step and designing it further to the development and finally it will be shared and evaluated if there will need to be any changes this can be repeated and take all new information in to account to upgrade the existing steps with it and provide a better, upgraded version of previous project until it finally meets all the criteria's and is fully functional.

Market research

Current Development Platforms for mobile gaming.

iOS and Android are leading mobile gaming development platforms. However they differ in ease to publish and availability for example to publish your game on iOS AppStore you need to have a Mac computer with OSX installed, have Xcode on the Mac and also have an iOS device like iPad, iPhone etc in addition you also must be a registered apple developer.

To become Apple developer, you will need to provide various developer certificates when uploading the game to Apple AppStore. Which can be troublesome compared to Android, yet your apps are advertised. When it comes to android you will have to register as Android Developer and pay 25\$ for their license and that's basically it the rest you have to do is to go to your developer home page and add your game with your filled game details then fill bunch of questions and activate your game license which is fast and efficient and free although with so many games on android you would like so choose some form of advertising so people can find your game.

Current Trends in mobile game development.

Major trends in mobile game development include 'Freemium' which are games given away for free however their revenue is coming from ads, in-game purchases or additional feature charges, this can be seen since over 81% of all downloads in years 2010 to 2013 were free. As years go by both revenue from advertising and micro transactions drastically increase in 2012 game developers made around £87 million of advertising alone and this value was 10x higher in 2016. Nowadays mobile games become more and more simple from the start and difficulty begin to increase steadily till it gets to a point that average person will take advantage of micro transactions to make sure playability is still as easy as it was when they started the game.

Evaluation of game development tools

There are many mobile game development tools like GameMaker Studio, Unity , Unreal Engine, AppGameKit and Marmalade SDK however they each have pros and cons for example GameMaker Studio has full support with 2D Spine animations and has Steam and Git integrations available with various shaders however its isn't free compared to Unity or Unreal Engine which is for smaller projects. However I have decided to use Unity over Unreal Engine as Unreal Engine is more into traditional C++ where I am already familiar with Unity and it provides multi-platform solutions for creating both 2D and 3D games with a strong community that is great for beginners and it has its own learning tutorial made by its creators, also Unity is available both in college and at home therefor its best development software in my opinion

(Global Industry Analysts, n.d.)

Test Strategy

I will use 'Active Testing' that will allow me to test everything as soon as it is creating to make sure there are no compile errors, code is compatible and efficient to prevent future glitches and bug. This allows me to prevent possible errors and assess the situation at the beginning before it will escalate into something more troublesome. This also allows for simultaneous analysis of the test result which may open new possibilities to make program more efficient. While error will be fixed they will also be recorder for future references so creating/programming is more efficient and is possible to be back traced to the origin of the issue.

Evaluation Criteria

Evaluation criteria will cover how well was the brief understood, if the project met all the requirements. How well worked development methodologies, was the market research accurate and up to date if not then what changed and what impact can it have on the project. It will also include how well did development software worked and were testing strategies efficient and optimal to the project if no what could be changed for future reference or what errors were causing most problems.

Reference

<https://developer.apple.com/>

[https://www.strategyr.com/MarketResearch/Wireless Gaming Market Trends.asp](https://www.strategyr.com/MarketResearch/Wireless_Gaming_Market_Trends.asp)

<https://developer.android.com/about>