1. **Project Overview**

The project aim is to create a mobile application that will compete with the latest games on the tablet market. The game would be called Invasion Wasabi. The story line would be aliens invading Earth that use ultra-hot wasabi as their weapon. They would have it shooting from their flying saucers and have it injectable though their syringe like finger nails. These aliens would have large heads shaped like wasabi covered almonds and small wasabi green bodies. They would use the root WasabiaJaponica (Wasabi Root) as their fuel and would have to search for it and attain it during their conquest. The game levels would go from each country on the planet starting with the smallest working up to the largest. Each country would have their own unique strategy for fighting. The game would be set in 3rd person view for when the aliens are in flight in the saucers and 1st person view when the land and exit their saucers. The game would also have special levels for holidays the happen though out the year.

The controls would use the motion sensors on the tablet along with the touch screen to control all aspects of the game. The charactersand worlds in the game would all be cartoon style and also use comical sound affects (funny laughter for the aliens, one liners said be the earth people) Your score would be determined by battles and wasabi root collected. The game would also have single or team play (one or two player).

The gaming market has been on a steady raise and in 2016 reached $99.6 billion, with mobile gaming generating 37%. The mobile gaming market was $36.9 billion in 2016 and is projected to be $52.5 billion in 2019. The mobile market has overtaken the console game market. Even with tablet sales slowing, the tablet game sales have increased faster than smartphone game sales(Gaudiosi, 2015). Revenue for Invasion Wasabi would be generated by in game purchases, this is the leading revenue for mobile apps.

The major competitors in the market are Electronics Arts, Supercell and King.com. The leading games in this market are Clash of Clans and Game of War; Fire Age, which would put Invasion Wasabi in the right genre as other top sellers. Apple leads the tablet market with Android coming in second. Offering this game first on Apple would offer it to a larger market following with offering it on Android(Statista , 2016).

Constraints in the gaming industry can lead to innovation; just look at Minecraft. Other constraints are the ever changing technology, so time becomes a factor in develop and also a clear vision of the game technology that you want to use(Arcila, 2012). Budget can also be a constraint; this game would cost around $250,000(Skreech, 2014). Budget could be supplemented by finding outside investors. Wasabi manufactures or Wasabi covered nut manufactures might find interest in this project.

1. **Stakeholder Overview**

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| --- | --- | --- | --- | --- |
| **Stakeholders** | **Role** | **Interest** | **Influence** | **Managing relationship** |
| K10 Corp | Project sponsor | Very high interest in project development | Very high impact on cost, scope, and deadlines | Detailed documentation and strong communication on project status. |
| Project Team | Development and testing | Very high interest. Team has full project responsibility | High. Will make development decisions | Ensure accurate specifications, timely payments, and equipment needs. |
| Apple | Project service provider | Interest in user usage of game | Moderate. Controls the technology | Must be included in project planning to meet the requirement to operate on their technology |
| Android (Google) | Project service provider | Interest in user usage of game | Moderate. Controls the technology | Must be included in project planning to meet the requirement to operate on their technology |
| Gamers (user) | User of game | Interested but skeptical | Very high. Can have impact on success of game | Advertising and marketing to reach out to users. Offer new add-ons to keep them interested |
| Advertisers | Ads in game | Very high. Interested in making money form purchases from players in game | Very high. Control funding | Document revenue from in game purchases |

1. **Requirements Analysis**
   1. **Overview**

This section provides a functional overview of the system.

* 1. **Functional Requirements**
* The game must be playable by 1-2 players.
* Players must be able to choose a color of their saucer and alien spacesuit.
* Players must be able to load a new game once loaded on tablet.
* Players must be able to able to start a new game while playing the game with confirmation that they what to end their current game.
* The score, alien life force, and power must be displayed at all time on the screen.
* Players must be able to control movement through game with movement controls in tablet and arrow keys displayed on the game screen.
* Players must be able to save games and return to saved games.
* Players must be able to control volume of game with tablet volume controls.
* Players must be able to move the saucers and aliens around the playing field.
* Players life force must move down when they are hit form other characters’ weapons.
* Player life force must go up when alien procure wasabi root.
  1. **Nonfunctional Requirements**
     1. **Usability**
* Game must be able to play on Android and Apple tablets
* System must play a sound when confirming player wants to quit game.
* System must play sound when player wins a level on game.
  + 1. **Reliability**
* Modules of the project code will be tested in conjunction with the execution phase to confirm that they are functional.
  + 1. **Performance**
* Movement on screen must be smooth without any graphical lagging.
  + 1. **Implementation**
* Project will be implemented in Unity 3D.

References

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