



Fruit Hero

an Android Multiplayer Mobile Game

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Overview

The current mobile Tower Defense (TD) and Tower Offense (TO) games are monotonous and unattractive to people due to a lack of new game features and interaction between players.

In view of that, we developed Fruit Hero - an Android multiplayer mobile game that combines both TD and TO characteristics and provides players with real-time battle.



Figure 1 - Fruit Hero



Figure 2 - A list of monsters and towers



Figure 3 - Battlefield inside single player mode

Objectives

- Build a game system which mixed Tower Defense and Tower Offense
- Develop a multiplayer mode for users to interact with others
- Provide players with friendly interfaces and simple control methods
- Offer players seamless game experience

Simple Game Flow

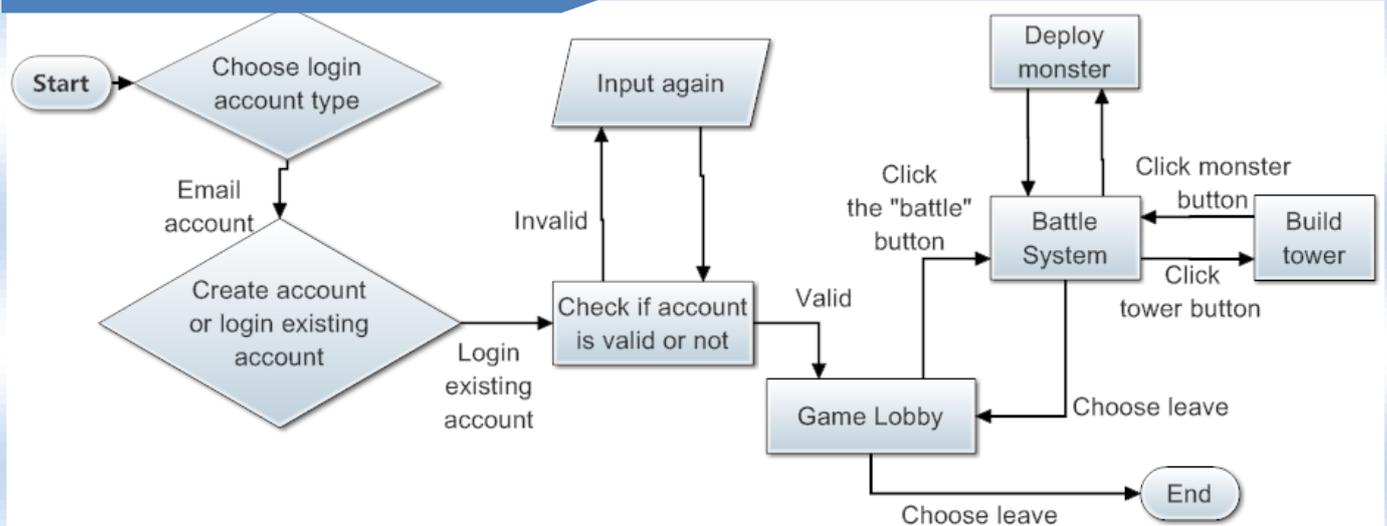


Figure 4 - Game flow of Fruit Hero

Features

1. *Building Towers*

Occupy slots and build towers in order to defend your own castle against attack



2. *Dispatching Hero*

Dispatch hero in order to attack opponent's castle



4. *3D Senses and Models*

Offer 3D monsters, towers and senses during the battle



3. *Challenging Game Stages*

Provide 10 game stages with progressive difficulty



5. *Forming team*

Form your own monster team and then use it in the battlefield



6. *Multiplayer game mode*

Allow two human players to have a real-time battle with each other

Real player

VS

Real player

Methodology

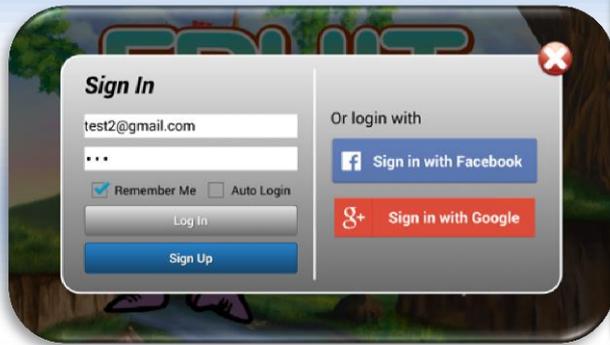


Figure 5 - Login Page

Login Page

Developed by using Android Studio for players to log in to the game or register in three methods:

- ✧ Email Address
- ✧ Facebook
- ✧ Google+

Game lobby

Developed by using Android Studio to provide the following functions:

- ✧ Monsters team management
- ✧ Friend list management
- ✧ Chat room
- ✧ Starting battle

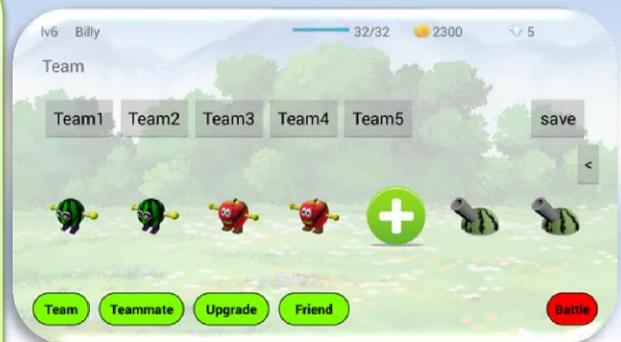


Figure 6 - Game Lobby



Figure 7 - Multiplayer Battlefield

Battle system

Developed by using Unity3D to provide single-player and multiplayer TD-TO mixed battle

Animation

Created by using 3Ds Max and the skeleton attached to each 3D model

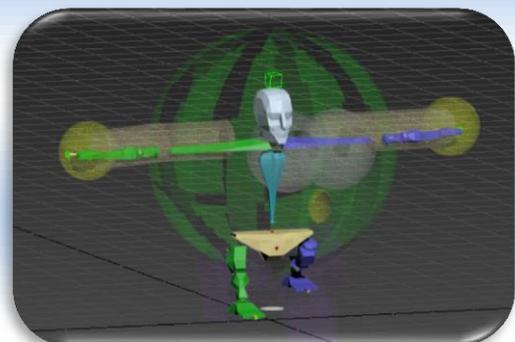


Figure 8 - Skeleton inside a watermelon

Conclusion

We designed and implemented a new and user-friendly Android mobile Tower Defense and Tower Offense mixed game that enhances the interaction between players. The target of our game is everyone who has an Android Smartphone that meets the basic hardware requirements and network connection to enjoy the excitement of our game.