

Shot iPhone Game

Basic Technical Design

This document describe briefly the screens flow and architechture to use in the development phase.

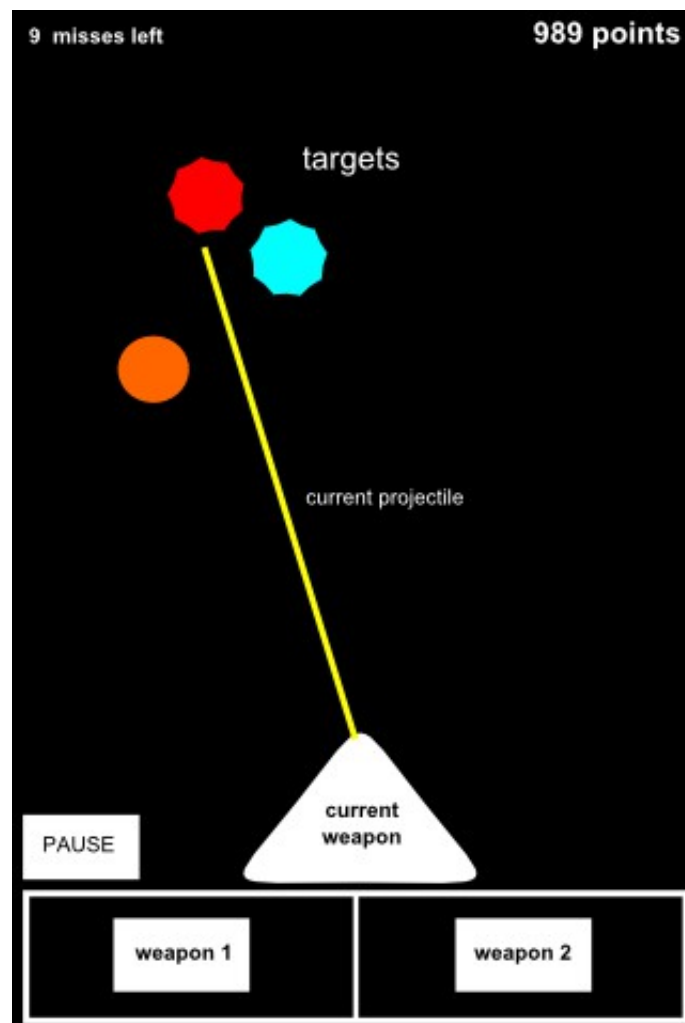
Screens in the game

The screens in which the game is divided are:

- Start screen or splash screen: in which the game will be presented.
- Main screen: the most important screen in which the player can select the weapon, change the weapon, fire projectile to targets, restart the game and pause the game.
- Start new game: the screen to be displayed after the player loses, gives the possibility to start a fresh game again.
- Pause menu: will be shown when the game goes to background or the player wants to stop it. It'll contain a button to return to game.

Main Screen: elements and description

Here is a mockup of the desing for the main screen:



On the bottom of the screen there will be a table in which the weapons will be displayed. We can start with two basic weapons and later make this table flexible in order to load more weapons for a configuration file, so we can add flexibility to the amount and types of weapons available.

The "Pause" button will show the pause layer. While the "current weapon" space will be occupied by the current weapon in use.

By tapping a cell of the weapon's table, the current weapon in use will be changed on the screen and will be ready to be fired against target.

Targets will fly accros the screen, from both side to top as you describe in your project's description.

On the upper side of the screen there will be two sections: remaining misses and current points.

Game's flow

After the splash screen is presented the player will be redirected to the main screen. He/she can start playing after selecting a weapon from the weapon table. Then he/she will start shooting to targets, which will fly accross the screen at different speed.

Player will fire until no remaining misses left. Remaining misses will be displayed to he/she on the top of the screen. Also current points will be displayed.

Once the misses count becomes zero a "start new game" screen will be displayed, telling the player he/she has lost and asking him/her to start a new game.

At any moment the player can pause the game by pressing the pause button.

Once the player loses the game, the game's information (total points and timestamp) will be saved to the player's record of past games.

Flexibility and configuration

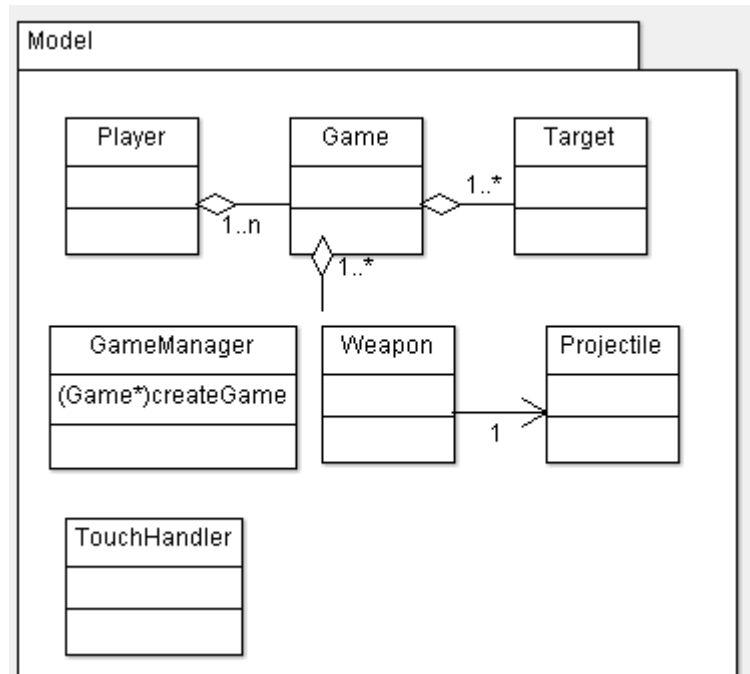
Weapons, projectile and targets can be configured through plist files in which the images to use, the velocity and other parameters describing the object can be expressed as properties.

Also the code can provide flexibility in order to support loading a set of weapons, not only two and populate the weapons table with this information.

Classes in the game

Here are the main groups of classes and classes themselves.

Model



Weapon, Projectile and Target are the key classes of the games. Basically each of them will be described in a configuration file.

A weapon has one projectile.

A projectile has a certain velocity.

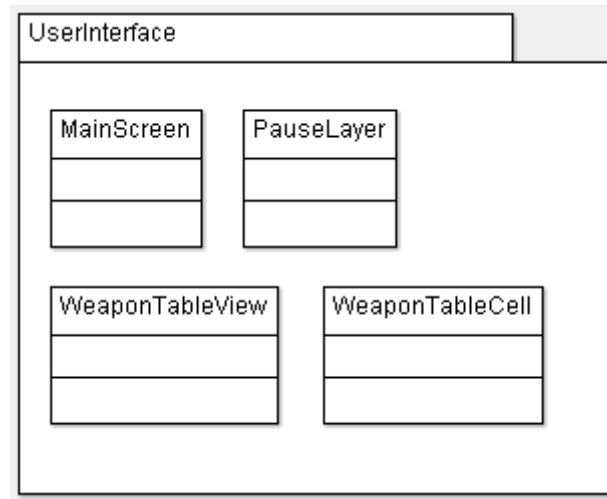
A GameManager will be in charge of creating new games, it has a set of weapons, a set of targets and knows what is the maximum number of misses allowed.

A Game has a set of weapons and targets available, a current score, a maximum number of misses, a current number of misses.

A player has a name, a current game and a record of past games.

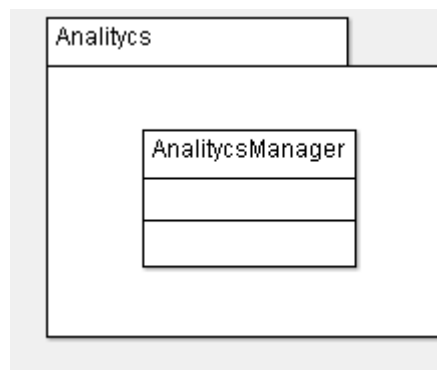
TouchHandler is an auxiliary model class which is in charge of managing user interaction on the main screen.

User Interface



WeaponTableView and WeaponTable cell will be developed using UIKit objects. While MainScreen and PauseLayer will be most probably cocos2D screens in order to use the powerful tools which cocos2d provides to manages sprites and touches.

Analitics



AnaliticsManager is in charge of Chartboost code and events. And possible other SDKs added.