Computer Programming - 2nd Semester Project

Destructo Beam : Practice Mode

Developed by:

Hammad Waseem – Section B – 14k-2185

Ali Shah – Section B – 14k-2045

Supervised by :

Sir Kashif Khan

Department of Computer Science – National University of Computer & Emerging Sciences (NU-FAST)

Table of Content

Introduction:

This Project is made for the purpose of gaming. This Project is a first person shoot out game . What is first person shoot out game? Many of you play Counter strike . It is a first person shoot out game same as our project. It include interface and game . In which player can practice his aiming with score board. A person can shoot a model and after some strikes , model disappear and appear on the other position of map.

Need for the project:

The main purpose of games is to entertainment and to relax the mind. Our project have same purpose. Many of the people specially students need some entertainment and mentally relaxation to perform better in studies. This game is good for this.

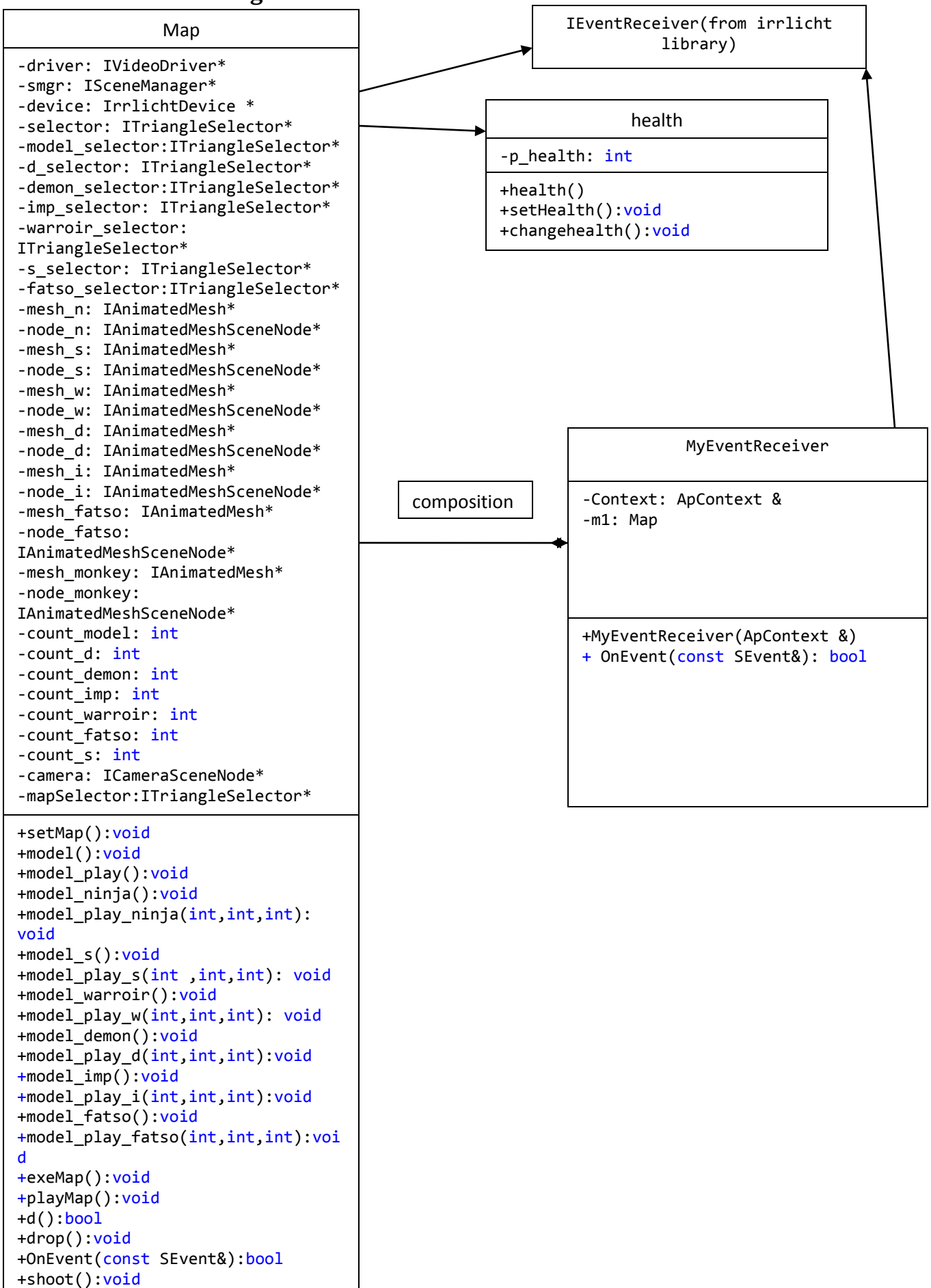
Uniqueness of the project:

Implemented Classes:

We implemented following classes:

No.	Classes	Purpose
1	Map	This Class is responsible for all activites happens on the map that is came camera movement, models , shooting , scoring , bullets and many more
2	MyEventReceiver	This Class is responsible for the event of the interface or In simpler word this class handle the interface(gui).
3	health	This class is responsible for health of player.

UML Class Diagram:



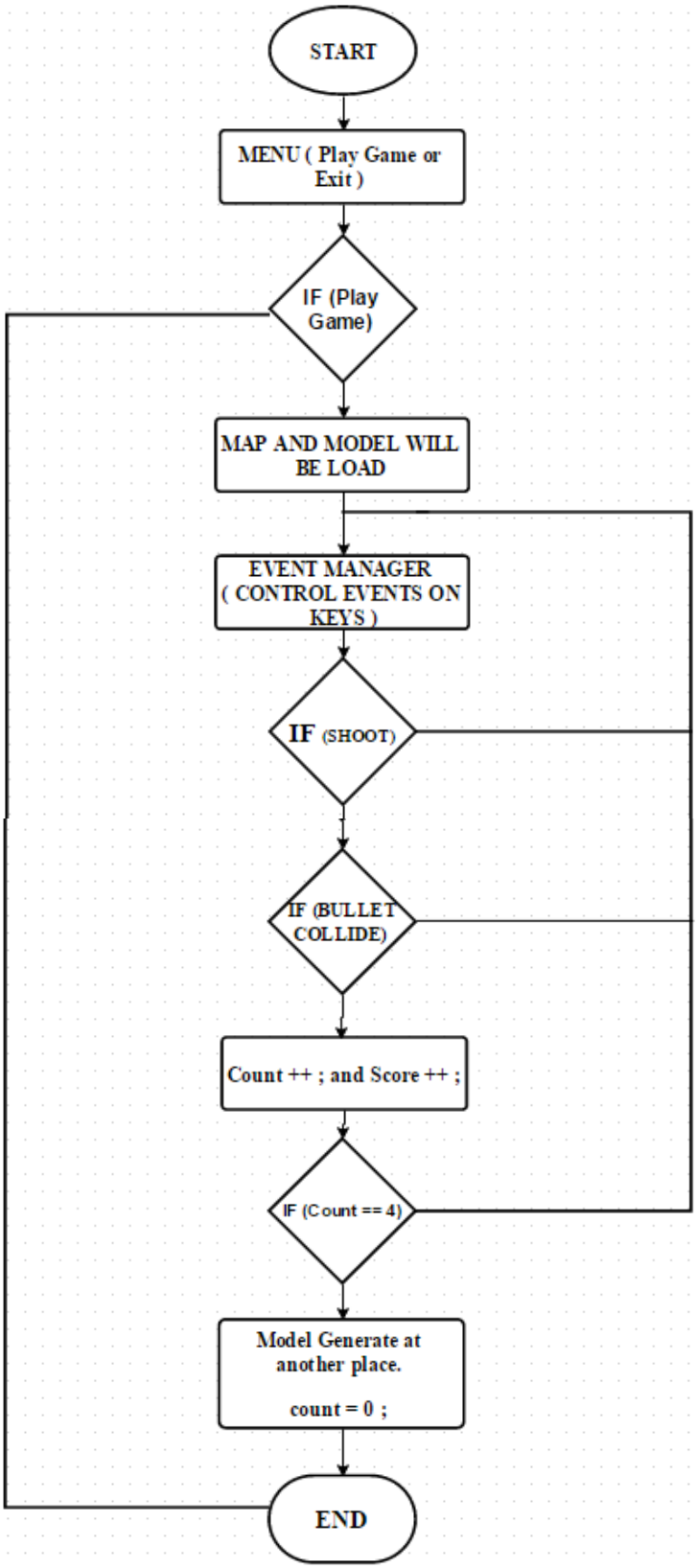
Header Files:

No	Header files	Function	Purpose
1	Irrlicht	Create device	To create graphical device or display.
2	Irrlicht	addCameraSceneNodeFPS	To add a camera
3	Irrlicht	getMesh	To get mesh for model and map
4	Irrlicht	addAnimatedMeshSceneNode	To add node for animation purpose
5	Irrlicht	createTriangleSelector	To add triangle for collision purpose
6	Irrlicht	createCollisionResponseAnimator	Create collision
7	Irrlicht	createFlyStraightAnimator	To change the coordinate of model
8	Irrlicht	getTexture	To get image of model or any image
9	Irrlicht	draw2DImage	Put image on screen
10	Irrlicht	Run	To run the device
11	Irrlicht	Drop	To drop the device
12	Irrlicht	getPosition	To get the present position
13	Irrlicht	getTarget	To get the position of target
14	Irrlicht	getGUIEnvironment	Get gui
15	Irrlicht	getSkin	Get skin for gui
16	Irrlicht	getFont	Get font for gui
17	Irrlicht	addTabControl	Add tab on gui
18	Irrlicht	addButton	Add buttton
19	Irrlicht	setEventReceiver	Set the every event like pressing keys from keyboard
20	Irrlicht	beginScene	To start the scene

ALGORITHM:

- Create Device. (Window will appear in which our game will run)
- Create a Tab Control in gui in starting of game.
- Add Camera.
- Add Title Image and Loading Image.
- Create Map.
- Initialize Key.
- Add different Models.
- Set Models animations, speed, position and collision.
- Create Gun and attach it to Camera.
- Add shoot animations.
- Now add shoot function.
- Add different events on different keys.
- Add collision of bullet to model.
- If bullet hit 4 times to model then model will remove from that place.
- And generate a model from another place and score will add.

FLOW CHART:


START
MENU (Play Game or Exit)
IF (Play Game)
MAP AND MODEL WILL BE LOAD
EVENT MANAGER (CONTROL EVENTS ON KEYS)
IF (SHOOT)
IF (BULLET COLLIDE)
Count ++ ; and Score ++ ;
IF (Count == 4)
Model Generate at another place.
count = 0 ;
END

Source Code:

health.h , Map.h , MyEventReceiver.h

Screen Shot:


Destructo Beam
This game is develop by AH production.The developer of this game are hamnad waseem and ali shah meghani.This was their GP project
Quit
Start Game

Future Enhancement:

We can add more maps , models for future enhancement. We can also involve internet that the game will be play by two players through server.