ICT207 Project

By Working Title Inc.

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# Issues

There were many issues that arose with the collision detection that took many hours of testing and debugging to fix, one of which was that you could only push the boxes in one direction, this was fixed by doing separate calculations on each individually axis. Another issue that arose with the collision detection was when you moved a box is sometimes would stick to you and continue to follow you. This was due to the fact that when the camera came into contact with a box the box would then move in the direction the camera would move, to fix this we made a check to see if the camera was moving away from the box before it was moved. There were some bugs that we run out time to fix which was the reason we couldn’t implement a second level.

# Special Features

Some of the special features we have in our game are:

* Intro screen when the game is initially launched the player has his phone out telling him the controls and where he needs to go to transition into the game. After a few seconds he then receives a text message on the phone which tells him the “secret” code to get there. The function displayWelcome() in the bushCourtController deals with this.
* Particle effect explosion which can create an explosion at a given point that needs to be set. The class explosion.h deals with this effect and happens in the game when the timer runs out and the bomb explodes. Control is taken away from the player as the bomb goes off and the game is lost.

# Maintenance Issues

When added the game to the world that was created in assignment one, some issues that arose were to do with transition into the game and back into the world. So for example one issue we had was when you returned to the world from the game you appear in the initially starting position in Shay’s world but when you move, it changes to the actually position we wanted the player to return to in Shay’s world. Another maintenance issue that we had to fix was that the speed of the camera was given a set value but the camera would be slower in Shay’s world then in our game.

# Testing

Whenever a new feature was added to the game it was tested before another feature was added. For example, when the timer was added to the game, it was tested intensely to insure that it worked before it was another feature was added, making sure that would appear on the screen and that the game over screen would appear when the time runs out.

# Improvements

The improvements we could make to the game comes in the form of polish in which the game features are all there, but with more textures, models and some animation to those models would improve the game quite considerably.

# Code Reuse

We have built our class in a way that they can be reused in our own game as well as been able to use them in any other program, for example the explosion class can create an explosion at any position. Another way we have reused code is with our collision boxes, which are automatically created whenever a new game object is create and put into the world.

Our textures, models and game items can all be used as assets in another program as long as they have a texture and model loader that can load .obj, .png and .bmp files.