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Games Technology - COURSEWORK

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# Part I

Implement either:

a) A start screen

b) Asteroids that split into smaller asteroids when hit

To Implement start, screen I removed the code that created spaceship, asteroids and GUI containing lives and score from the Start method in the Asteroids.cpp class. This is what the method should look after removing the code:

Text

Description automatically generated

This method will start an empty game session with all the listeners needed for the game to run as well as animations.

Then I created two new GUI method in the asteroids.cpp to create the gui which will be displayed on the empty game session to provide instruction of how to start and quit the game.

Text

Description automatically generated

Then added the CreateStartScreenGUI method to the start method of the asteroids.cpp class. 

After making the empty session and adding the start screen Gui. The game window’s appearance looks like this:

Graphical user interface, text

Description automatically generated

To implement the start and exit I added another case to the OnSpecialKepPressed method of the asteroids.cpp class.

Text

Description automatically generated

I am using the down arrow key as the means to start the game. The code in the above snippet will create and add spaceship, asteroid objects which would start the game. It will also remove the start screen Gui and add the game Gui which display the lives and score of the player.

Text

Description automatically generated

The case above is to exit the game once the End Key is pressed.

There is one problem so far. When I run the game everything works fine except that if I press the down arrow key again once the game has started it will create another set of spaceship and asteroids.

To fix this issue I created a bool variable game start and set it to false. Changed the down arrow key case so it will only start one time because after the key is pressed the bool variable will be set to true meaning nothing happens if the key is pressed again. Here is the snippet of the down key pressed case:

Text

Description automatically generated

I added another break line after the if statement because if there is no break after the if statement it will close the game if the down key is pressed again.

# Part II

Implement either:

a) A high score table, or

b) A bonus/power-up system

# Part III

Implement either:

a) A demo mode, or

b) An alien spaceship