CMPE211

TeletubbieShip

Meltem Akkoca

Hatice Esra Yılmaz

Contents

Classes and Methods

Menu Class

public Menu();

In the constructor we created the menu screen, and we arranged the screen's background color and size. We put the game's name, "play" and "exit" buttons, and we set their colors, sizes, fonts etc. If "play" button is pressed, game appears on the screen, if "exit" button is pressed game is over.

public static void main (String[] args);

We created an object of Controller class and we invoke its showMenu() method to set the visibility of the menu.

Controller Class

public void showScreen()

We set the visibility of the menu as false and the visibility of the game as true in this method. Also, we arranged the game screen's size and we add the game to the screen.

public void showMenu()

We set the visibility of the menu as true and the visibility of the game as false in this method.

Meteor Class

public Meteor()

We have adjusted random meteors to flow from the top to the bottom of the screen. At the same time, these random meteors do not come out of the x coordinate of the screen.

public int getMeteorX()

We get the x coordinate of the meteors.

public void setMeteorX()

We set the x coordinate of the meteors.

public int getMeteorY()

We get the y coordinate of the meteors.

public void setMeteorY()

We set the y coordinate of the meteors.

Ship Class

public void picturizeShip()

We inserted the image of the ship.

public void shiftLeft()

We decrease the x coordinate of the ship in order to move the ship to left.

public void shiftRight()

We increase the x coordinate of the ship in order to move the ship to right.

public int getShipX()

We get the x coordinate of the ship.

public void setShipX()

We set the x coordinate of the ship.

public BufferedImage getShipImage()

We put this method to use the ship's image in other classes.

Shot Class

public Shot ()

We set the x and y coordinates of the shots.

public int getX()

We get the x coordinate of the shots.

public void setX()

We set the y coordinate of the shots.

public int getY()

We get the y coordinate of the shots.

public void setY()

We set the y coordinate of the shots.

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Game Class

public Game()

We start the timer, set the game's background and invoked the method of the image of the ship from the Ship class.

public Meteor isCrushMShot()

In this method we have observed the situation of meteors being hit by the shots. In order to do this, we have used shot and meteor array lists. We consider them as rectangles and used intersect method. Then, we have provided to return the meteor which is hit by the shot.

public Meteor isCrushFShot()

In this method we have observed the situation of fuels being hit by the shots. In order to do this, we have used shot and fuel array lists. We consider them as rectangles and used intersect method. Then, we have provided to return the fuel which is kept by the player.

public Meteor isCrushMShip()

In this method we have observed the situation of ship being hit by the meteors. In order to do this, we have used meteor array list. We consider them as rectangles and used intersect method. Then, we have provided to return the meteor which hit the ship.

public void paint()

We set the colors, size and shape of shots, meteors and fuels. If the shot goes out of the screen, we remove it from the shot array list. If meteors are hit by the shot, the player's game score will increase. If the player collects the fuels heart will increase. In other case, if meteors hit the ship, hearts will decrease and if the hearts of the player become 0, the game will be over.

public void keyPressed()

If the player presses the right and left keyboard buttons, the ship moves to right and left but the ship won't be able to leave the screen. If the player presses the space button, the ship will shoot.

public void meteorRandom()

We adjusted the arrival frequency of the meteors which are coming randomly.

public void fuelRandom()

We adjusted the arrival frequency of the fuels which are coming randomly. They come less frequently than the meteors.

public void actionPerformed()

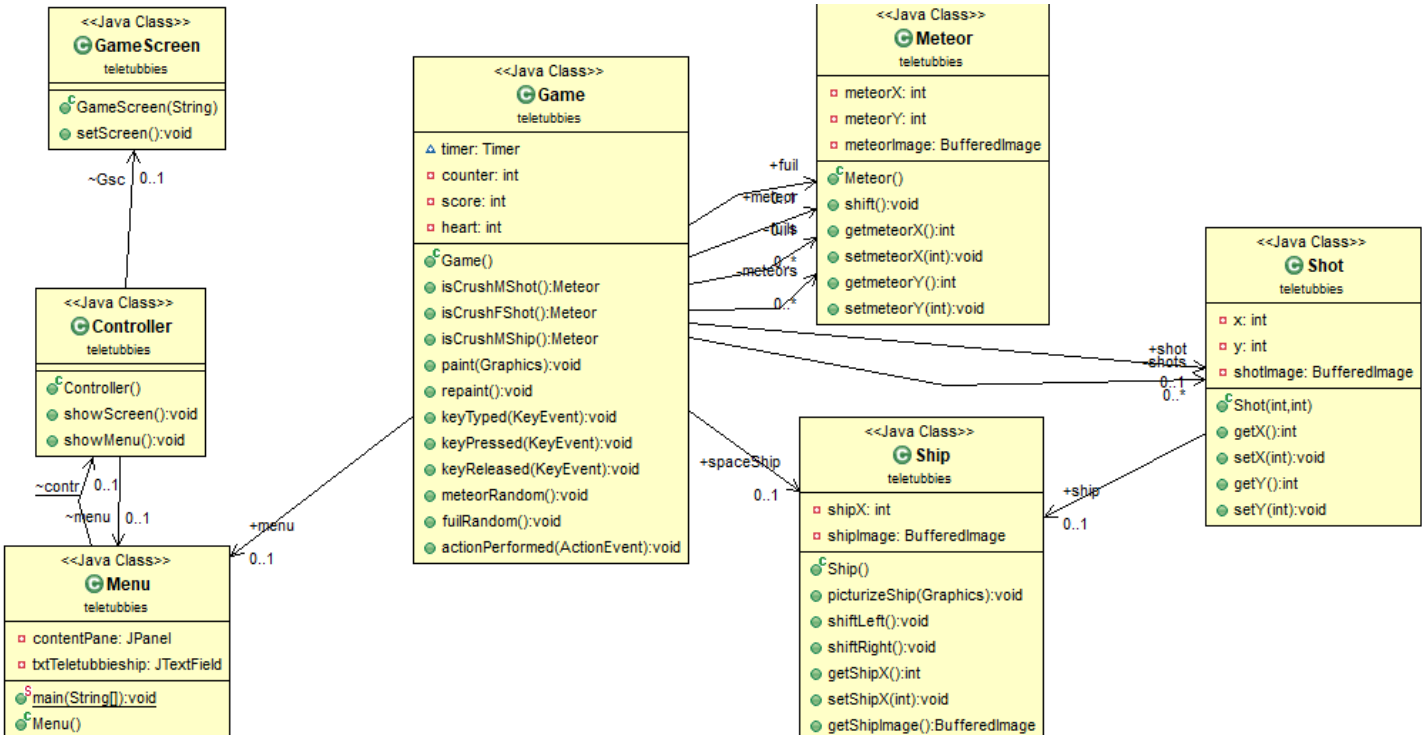
As the time progresses, the shots go through upward and the meteors and fuels go through downward.

GameScreen Class

public void setScreen()

We set the size of the game screen and put the game name to the screen.

Classes and Relationships Diagram



Workload Division

Meltem Akkoca: code + graphics

Hatice Esra Yılmaz: code + graphics

We both worked together in all of the code and graphic parts of the project.