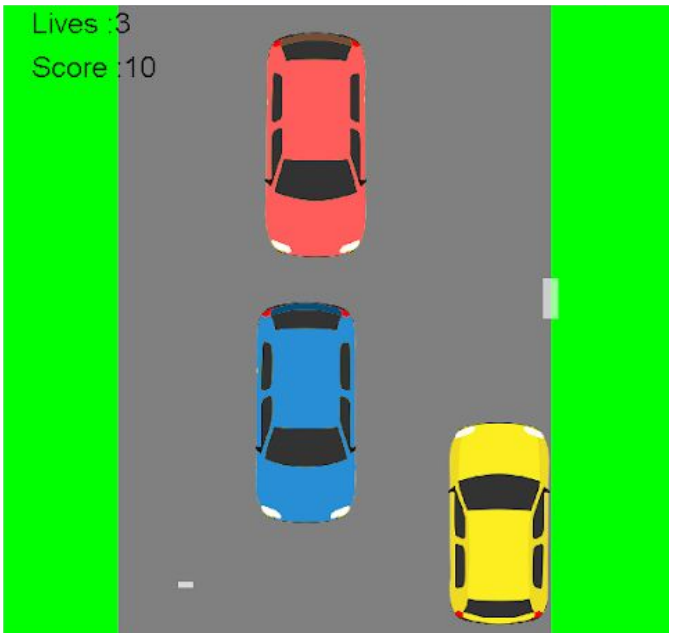
Lab Statement

NEED FOR SPEED !

POOJAN THAKER
(2016A7PS0089G)



Introducing NEED FOR SPEED MINI , the miniature version of the popular open world racing video game - NEED FOR SPEED.The rules of this game are as follows :

1.Player starts off with 3 lives and 0 score.
2. Each car is assigned a ‘level’ represented by an integer.
3. If the player’s car collides with a car whose level is less than or equal to player’s car, score increases by 10 . If the player’s car collides with a car whose level is greater than player’s car, the lives decrease by 1.
4. If lives = 0 then your game is over.

In this lab, you will be designing this game !

IMPORTANT INSTRUCTIONS

1.Class Hierarchy

Create two separate packages ‘System’ and
‘User’ in the src folder.

You are only supposed to write the classes in the User package. Classes in System package are already provided to you. Put those classes in the ‘System’ package in your workspace.

You will be using methods from System class, write these 2 lines at the start of each class.

```
package User;
import System.*;
```

2. Submisssion

Create 2 separate directories in the java folder and put the classes inside their respective directories :

student_solution / java / User /
student_solution / java / System /

3. Methods used from System class

```
KeyBoardInput.isPressed(String key);  //true  if key is pressed
Utilities.checkCollision(Car c1, Car c2);   // true if c1 and c2 collide
Utilities.getRandomLine();   // Returns a random line
Utilities.getRandomCar();  // Returns a random car object
```

4. Values class

Various pre-calculated values can be accessed using Values class.

5. Order

Try writing classes in the following order.It will be more convenient to you:

1. DisplayObject
2. Car
3. MyCar
4. Road
5. Road.Line
6. Screen

Follow the order of execution as mentioned in javadoc !

6. Bonus !

Create a new folder named ‘resources’ in your eclipse workspace, copy the resources file in the folder and run the program !