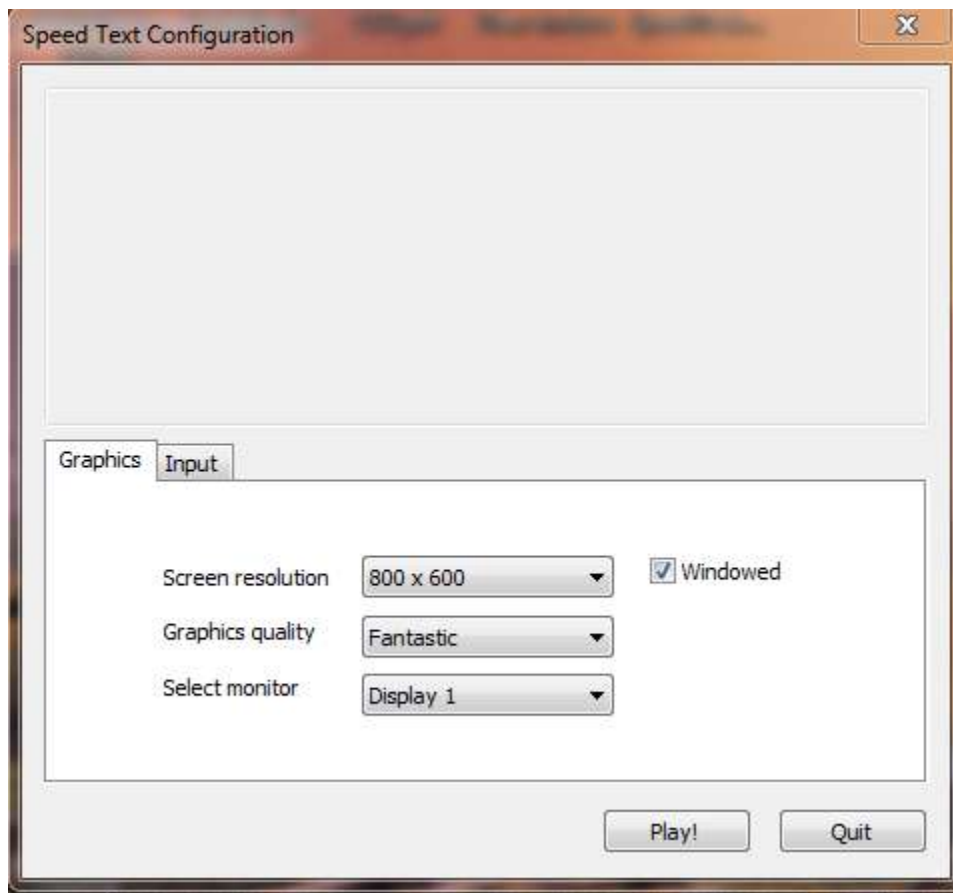


Speed Test

Instructions to play:

The zip file contains the exe file as well as whole project which contain all the assets of the game. If you want to open project you need Unity 5.3.5 to run it in editor mode of unity. You can run exe file by just clicking on it which will open a dialog box like given below:



Remember to check windowed mode and click play to continue. After that click with your computer mouse to select flashes. The Unity Folder contains scripts and other assets in Assets folder.

The Program Code:

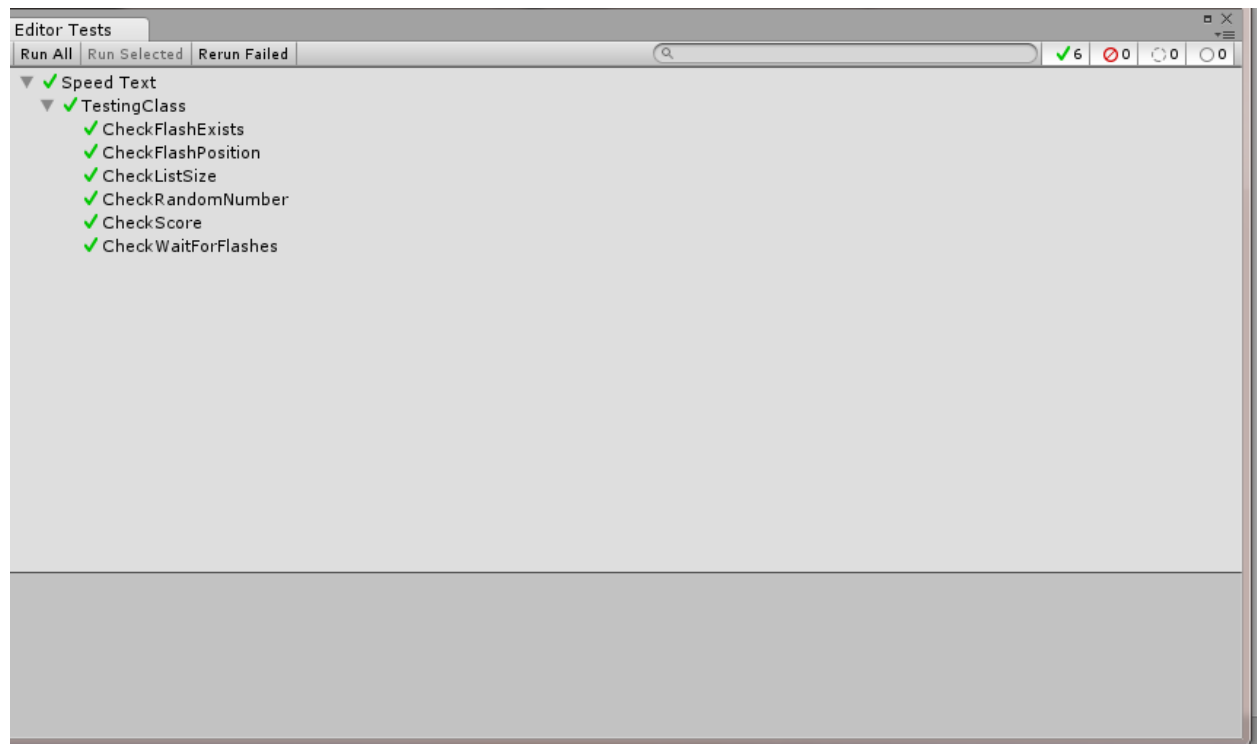
The code file contains the three scripts named as GameController.cs, GameUi.cs , Testing.cs . The Game Controller has the main functionality of the game and Game UI has UI handling in game. Testing contains the unit testing code using unity NUnit framework.

Program Architecture:

At the start there is a black game start image which consists of pointer down event. When it is clicked the image disappears and StartGameClickEvent() method from GameUi class will be called. After calling it there is a delay of 0.8 seconds and after it first flash will be generated. Flash will be generated by calling GenerateFlash() method from GameController class. In Generate flash we are creating a unique random integer to create circle at this random number. As after getting random number, position of the circle created from random index is calculated and store in vector3 which unity default to store x, y and z coordinates. This vector3 cordinates are passed to the flash which is a prefab. In Unity prefab is a copy of the original game object which is converted into reusable asset. After creating it numbers of flashes are counted and coroutine is called. Coroutine are special method which work in intervals. In this code coroutine is used to set delays in flashes and check time not clicking on circle which is 5s by requirement. In coroutine updateflash() the intervals are we are checking number of flashes if the count flashes is greater than 2. If it is greater than 2 the interval between subsequent flashes are decreasing by 0.1s which is according to the requirement. If someone clicked on right flash it is destroyed and again GenerateFlash() is called. GameEnds when someone clicked to wrong circle or there is no click in 5s. The wrong click or right click is checked in Update method which is checking events by mouse of computer.

Unit tests (can be part of the program code).

The Code folder contains the Testing.cs which includes unit testing. Green arrows below on unity editor shows that all test cases are running perfectly.



Other Files:

SpeedTest_Data is a file not related to this project. It comes with exe file of unity.