CS 319 - Object Oriented Software Engineering

System Final Report

Iteration 1

Road Block

Group 1A

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Introduction

Implementation Process

We have begun with our development process at the end of our first iteration. We arranged multiple meetings per week in order to stick to a certain schedule. Even though we have decided to go with a "division of labor" way; we kept the number of meetings to a minimum of 2 each week. By this way, we aimed to achieve a interactive programming environment. Every single person in our group contributed to our reports on different levels and we have brought our individual work to a whole during our meetings, after double checking each other's work. Each member of our group tried their best to contribute to group work meaning, none of us has tried to slip away from our personal responsibilities. This is probably one of the main reasons why we have not had any issues with our process so far.

After delivering our Project Design Report we have decided that we need to speed things up with our development process and started coding more. We have again distributed our workload as we did in our reports and started coding. However, after a while, we have come to an agreement that communicating using our mobile phones is slowing us down. Therefore instead of coding separately, we have decided to hold coding sessions in addition to our weekly group meetings. This process was most useful for debugging since we now had 5 more pairs of eyes to see what was wrong with a certain code segment that is causing an error. This process was also beneficial for us while doing our research about singleton pattern and how to implement it in our project.

Lessons Learnt

Through this iteration, we have discovered each other's abilities. Meaning, our team consists of different members equipped with different abilities. By distributing our work proportionally with our skills (assigning work based on skill and demand) we have obtained a group that is fun to do a project with, rather than a one turning into a nightmare.

We also have learnt about the implementation of the GUI in detail.In this project,we make use of serialization pattern. In this iteration, we have had the opportunity about design patterns and object-oriented approach as we design our classes and their abstraction and encapsulation. Polymorphism was one of our priorities. We wanted to use as many methods as possible. This was a huge opportunity for us to try and learn these concepts. Also, we learnt how architectural styles work and why they are important. We worked on making the architectural styles to be seen on each part of the game.

What is missing and what is changed

Most of the game is finished but still there's room for improvement. At first,our map was 6x6. Then, we have added borders to each side of the map and enlarged it to 8x8 to create a map that is more detailed and one that offers more entertainment elements. We are still

missing the main gameplay mechanics of our game but we are done with the part that is related with our first demo.

Design Changes

Low Level Design Changes

There were not any significant low level design changes made during this iteration.

High Level Design Changes

There were not many important changes with our high level design. We stick with the information that was proposed in our design report and still are thinking that the pattern and design of our project offers us a more neat and clear code. We still rely on singleton pattern design when it comes to the implementation of our GameEngine platform.

Main Menu Screen

This is the main menu.That offers the playing the new game,help option,about us

information,settings information.By clicking exit game,user exits the game.

How to Play Screen
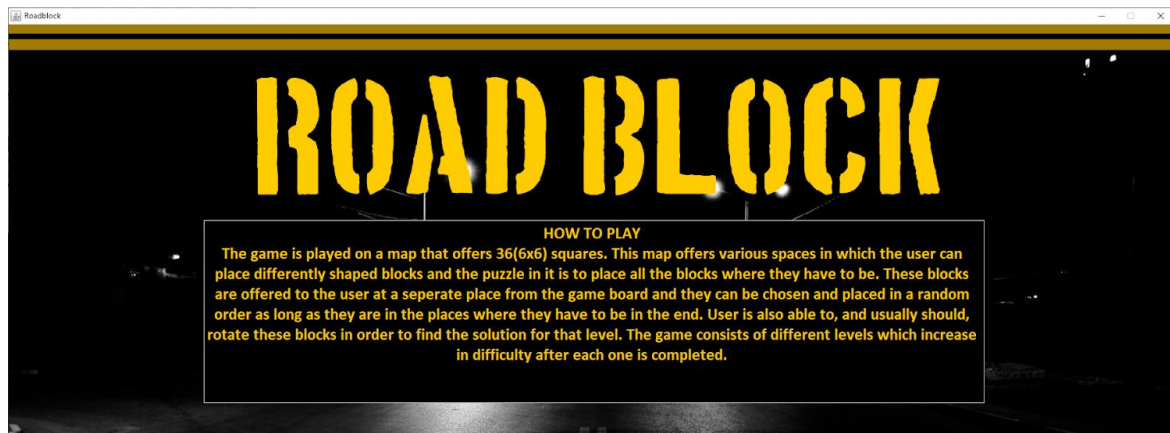
From this page user obtains detailed information about how to play the game.

About Us Information Screen

This page gives brief information about the developers of the Road Block project.
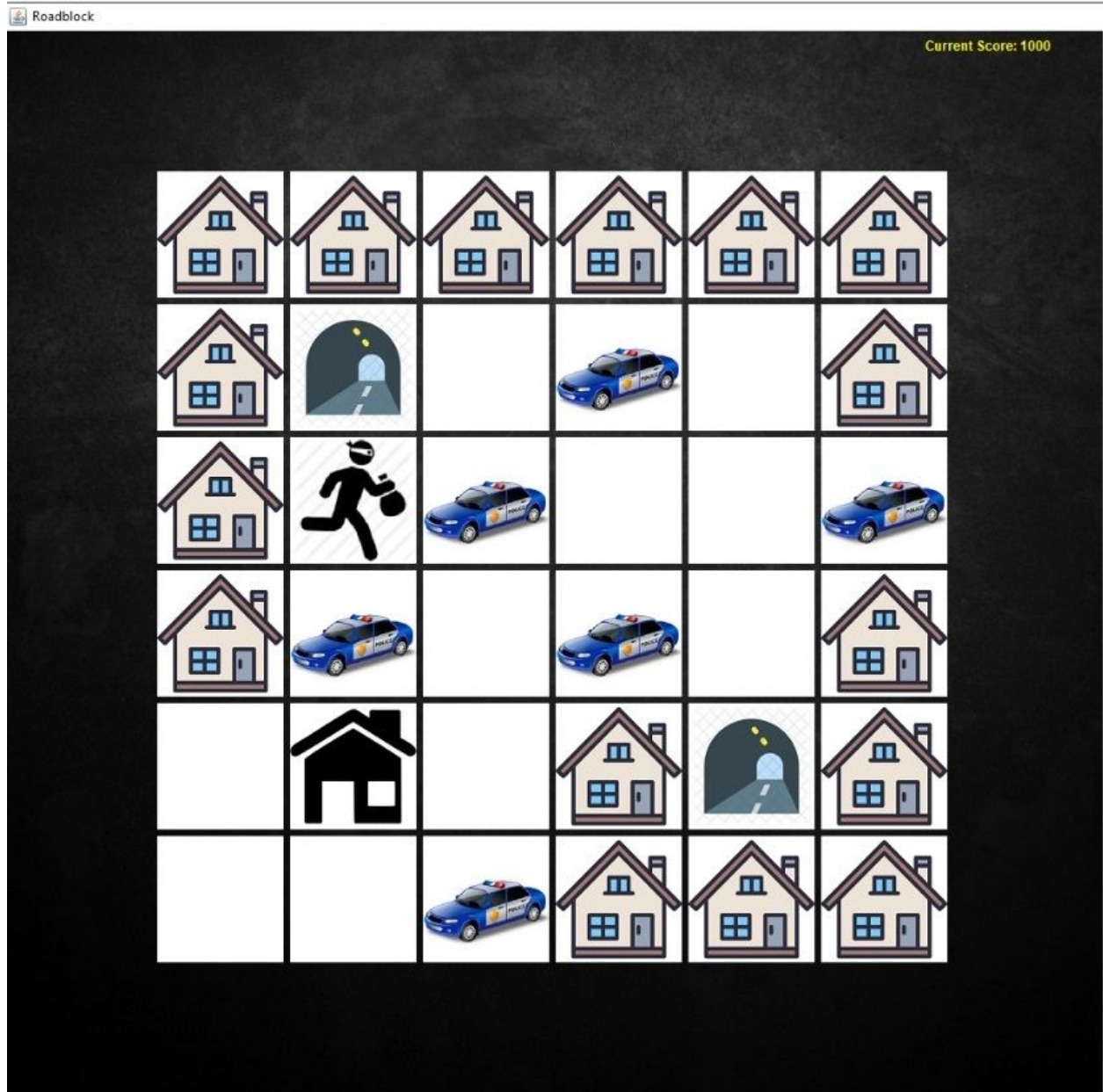
Voice Preferences Screen

From this page,user can turn on/off the music.

"Effect turn off/on" option allows the user to toggle between various effects

Return option returns the main menu.

Active Game Screen

This is the main screen that is offered during the gameplay. Meaning, this the map screen on which the game is played on.