DOKUZ EYLUL UNIVERSITY

ENGINEERING FACULTY

DEPARTMENT OF COMPUTER ENGINEERING

CME1252 PROJECT-BASED LEARNING – II

PROGRESS REPORT

PROJECT – II

GRAVITY

by

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CHAPTER ONE

PROGRESS SUMMARY

1.1 Work Done

We completed the first step together: The design of classes, data structures, and screens. We met online and created our classes together. Afterward, we decided on the methods that would be written for the screen and shared the methods that would be written.

Fulden Gurcan

In the first stage of the project, I completed steps 6 and 7 out of the 7 steps given in the Game Initialization section. In the second stage, I took charge of the Player Movements section and completed it.

Ilkin Mammadov:

Couldn’t make much up to know, as I joined my teammates late.

Selda Nur Turgut:

After creating the project draft together, I started to do research on my own departments. I had to do items two and three in the Game Initialization section. I completed these sections by writing methods in the game manager class we created. Then I got the timing task. My job right now is Computer movements department.

Nazife Nur Temiz

Completed the 4th and 5th sections of the game initialization steps. Integrated the stack class into the project and implemented the backpack logic to the game by writing the code on a separate branch and merging it in version control (GitHub).

1.2 Work in Progress

Fulden Gurcan:

The Boulder Fall task is currently being worked on. Progress has been made, but it is not yet complete. The task involves implementing the logic for handling boulders that fall from a higher level to a lower level. The boulders must fall only if there is no obstruction in their path.

Ilkin Mammadov:

Currently working on menu display with resume and restart options. Then I will assist my teammates with poster, poster background and presentation creation.

Selda Nur Turgut:

I am currently working on robot movements. There are a lot of cases with robot movements. There are situations such as they can only move in empty space, they can move randomly in four directions, the robots cannot get treasure, they cannot move diagonally, and there cannot be more than one element in the same square. I am currently working on the random movement of robots. I will complete it step by step.

Nazife Nur Temiz:

An input queue with a size of 15 will be created and game elements will be placed in it with a given generation probability. This queue will be displayed in the game menu and every 3 seconds the element at the front of the queue will be added to the game area.

1.3 Work to Be Done

From the third week onwards, we shared all the remaining tasks between us. We help each other by being in constant communication. So we will finish all remaining tasks as soon as possible and in the best way. After all, missions are completed, tests will be done to make sure the game is working as intended. Following this, additional improvements will be made to improve the overall experience of the game.

CHAPTER TWO

ALGORITHMS AND SOLUTION STRATEGIES

Fulden Gurcan

In the initializeRobots method, a counter is used to track the number of robots placed on the game board. A while loop is used to randomly select an earth square and place a robot on it. This algorithm ensures that a specified number of robots are placed randomly on the game board. In the initializePlayer method, a while loop is used to randomly select an earth square and place the player on it. This algorithm ensures that the player is placed randomly on the game board…

Ilkin Mammadov:

Selda Nur Turgut:

We added Enigma to the library and worked through it. We used Stack and Queue structures. In general, we wrote our methods in the Game Manager class. We created variables as final inside another class so we could keep them constant. Apart from that, we created classes for other parts of the game. Coloring done.

Nazife Nur Temiz:

While implementing the backpack, functions from the stack class were utilized. Getter and setter methods were used for keeping track of scores and teleport rights and Enigma console output was employed for displaying the menu.

CHAPTER THREE

PROBLEMS ENCOUNTERED

Fulden Gurcan: Finding information about Enigma online was challenging. We had difficulty locating details regarding specific features such as changing the color or font.

Ilkin Mammadov: To be honest, I still don’t understand why we used Enigma, as it is quite outdated and hard to find any information about, on the internet. No other problems.

Selda Nur Turgut: The first problem I ran into is the problem of adding the enigma to the library. Then I had to use an older version of Enigma in java. I couldn't decide where to use it while making the Time part. But we solved this problem with my teammates.

Nazife Nur Temiz: As a result of merging the codes in the game initialization section, the parts I had written had entered into an infinite loop. to fix this issue, I had to rewrite my sections from scratch.