**DOKUZ EYLUL UNIVERSITY**

**ENGINEERING FACULTY**

**DEPARTMENT OF COMPUTER ENGINEERING**

**CME1252 PROJECT BASED LEARNING – II**

**FINAL REPORT**

**PROJECT – I**

**Who Wants to Be a Millionaire?**

**by**

**Deniz Katayıfçı**

**Eren Çiçek**

**Yasir Uslu**

**Baturalp Erdem Yasa**

**Lecturers**

**Tanzer Onurgil**

**İbrahim Atakan Kubilay**

# 18.03.2022

# CHAPTER ONE

PROGRESS DESCRIPTION

It is a quiz competition with contestants attempting to win a top prize of $1,000,000, by answering a series of five multiple-choice questions with increasing difficulty. A word cloud containing one word from each question at that level appears before the user is asked to write a question, different at each level.

The user enters one of the words that comes across and the question containing that word is displayed on the screen. This situation is repeated in each question. The player has 20 seconds per question. However, there is the "Double Dip" joker, which gives you the chance to answer 2 times, and the "50%" joker, which deletes 2 wrong choices and reduces the number of choices to 2. Each of these jokers can only be used once in the game. Under these conditions, if the contestant gives answers all 5 questions correctly, he/she wins 1,000,000$ and completes the game.

Since we did not know much about java and especially class structures in the first week, sections such as reading the files, creating the "spell check" function and the "word cloud" were completed. In the second week, class structures were created and some methods were defined. In the third week, the questions were displayed in order and the lifelines were completed. In the last week, the timer and statistics were completed and the errors were corrected. Improvements have been made to the code.

Apart from the first two weeks, the project was carried out with code updates on the discord platform by sharing some tasks.

# CHAPTER TWO

TASK SUMMARY

## Completed Tasks

Deniz Katayıfçı : Creating category and difficulty arrays. Reading input files.

Eren Çiçek : I created class structures, dealt with lifelines and some methods, added sound effects and fixed some bugs.

Yasir Uslu : I took part in the spellcheck function, the creation of wordcloud, the display of the questions and the table, the integration of the gamer class into the code and the creation of the timer.

Baturalp Erdem Yasa : I took part in creating the statistics class, integrating it into the previous code and fixing some bugs.

## Incomplete Tasks: Reasons and Explanations

We finished all of our tasks on time.

## Additional Improvements ~~to the Project~~

Sound Effect : During the Check of the answer, we added sounds from the "Who Wants to Be a Millionaire" contest held in Turkey.

# CHAPTER THREE

EXPLANATION of algorıthms

## Screenshots

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

## Functions

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

metin, ekran görüntüsü, iç mekan, ekran içeren bir resim

Açıklama otomatik olarak oluşturuldu

## Algorithms and Solution Strategies

1-

The purpose of the 50 percent wildcard function is to delete 2 random options where there is no correct answer out of 4 options. For this, first a number between 1 and 4 is generated. The numbers 1,2,3,4 represent options A,B,C,D respectively. If "1" is generated randomly and the correct answer is not "A", " " (space) is assigned instead of the answer of this option. In this way, the loop continues until the two options are deleted. Variables such as "fora","forb","forb","forb" are created to prevent deletion of only one option if the same random number occurs consecutively.

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

2-

A function has been created for the table created according to the difficulty level of the questions or according to the categories. A structure similar to Dictionary has been tried to be provided with a one-dimensional array. First, a one-dimensional array is created. Initially, all elements of this array are "null". The category taken as a parameter is checked in the array. If the checked element is equal to "null", the category taken as a parameter is assigned to that element and "1" is assigned to the next element in the array. For example, if the 0th index of the array holds the category, the 1st index of the array holds how many it is. On the other hand, if the category taken as a parameter is already in the array, the value in the index next to the previous index is increased by 1.

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

3-

The spell check algorithm is first of all check if there are (the word and the dictionary) same length or not. If they are the same length, then the function will check all chars at the same index and it will count all same chars. If the count is 1 less from the length, then it will automatically return the new word which is in the dictionary. If the count is 2 numbers less than length, then it will change these 2 indexes to each other and check the new word is in the dictionary. If it is, then the old word will return as a new word.

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

# CHAPTER FOUR

# PROBLEMS ENCOUNTERED

One of the annoying problems encountered was the problem of splitting the birthday. In the function we created to calculate the age of the participants, we could not get results because we could not split the birthday. After a research we did, we solved the problem by trying a different split method.

While creating the table some bugs have occurred. The table wasn't written on the wanted position. To solve this problem we have used the setCursorPosition function. With this function's help, we manage to write this table rightfully.

# CHAPTER FIVE

conclusıon

Although there were some communication deficiencies and problems in task sharing due to this during the project, the goals of the project were completed and successfully overcome every week.

REFERENCES

https://stackoverflow.com/questions/14833008/java-string-split-with-dot