

Introduction to Computing & Programming

C-CS111

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Search word

Team Members

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Abstract

This project is about the word search game. This game is written by python language and its gui is written by using tkinter. This report gives the reader the outline of the design and the development of the system. We focused on making the game logic user friendly as we could. The report includes a full user manual, as well as the whole of the code that was written..."

1. Introduction

Our project is about the search word game. Search word game is a game where a table is displayed and it has a lot of letters some are randomly placed and other are placed in a horizontal or vertical or a diagonal way to be found by the user. When the user highlights the word it displays for him that he won if he didn't highlight the right word it tell him to try again until he finds it.

2. Motivation

- We selected this project because we all used to play this game on our computers or mobile phones since we were children and until now because it is so challenging and amusing.

3. System Design

➤ System modules and Functions

def newWindow: to create a new window

def exitFile: to exit the opened file

def saveFile:to save the progress done in the file

def openFile: to open a file

def create_table: to create a table

def submit_button_clicked: to tell the system what to be done in when the submit is clicked

def cell_clicked: to tell the system what to be done in when the cell is clicked

def get_highlighted_word: to let the computer read the highlighted letters and see if it make a correct word

direction = random.choice():to state the directions were the letters of the word could be placed

def start_game: to start the game

a. Description

- This code is designed to be able to display a welcome page that a user could enter his first and last name and the system saves this name then the user press the start button. The start button opens a new window that has a table that has a lot of random letters in lowercase and there is the word that

is chosen randomly by the computer placed in a vertical or horizontal or diagonal way and the user know this word as it is displayed by the game for the user to be found. Then the user finds the correct letters in correct order and highlight them if the highlighted word is right the game displays a congratulations message if not it displays a try again message. These messages is displayed when pressing submit.

4. Team's Workload Distribution

- After breaking down the project into smaller tasks and modules, mention how the project modules and tasks are distributed among the teams
- Put together a full list of projects and processes your team is responsible for

Name	Responsibilities
yassin	Gui
ezz	Functions "Def"
Yehia	Game logic
malak	Checking for errors and revising and writing the inputs

5. User Manual

This systems features a save button so you could save your progress also a open button so you can open a saved progress. Features a table with clickable cells and button that have different functions like(submit,start).To play the the game Enter your first and last names and press start choose the letters from the table to make a word and press submit after it.The useful trick to solve this game is to determine the place of the first letter and search for the letters in different diretcions.

6. Testing and Validation

To test our project we always tried to run the program every time we do a change in the code or add anything new to it to see how it is displayed and if we want to modify it or make a change to it. And we tried to play it multiple times to see if any error could occur at any scenario possible

7. Challenges and Conclusions

- We learned a new thing using python which is the gui it was very difficult at the start but at the end we found that it is very fun thing to be able to do it.
- And also we saw that our system ran very smooth without any errors possible and the game is very easy and user friendly.

- One of the challenges is that we faced a lot of errors that we couldn't find at first but at the end we found it and after this we became very aware of the possible errors.

References

https://youtu.be/TuLxsvK4svQ?si=myYd3_7p0w7hNNsc
<https://youtu.be/XKHEtdqhLK8?si=Bucn3ZH3qhlK-Tfw>
<https://youtu.be/vusUfPBsggw?si=Zo8sllb9O08s1L25>