

# **Hangman Game using Python**

*Mini Project Synopsis submitted in partial fulfilment of the requirements for  
the Degree of*

## **BACHELOR OF TECHNOLOGY**

**In**

## **COMPUTER SCIENCE AND ENGINEERING**

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## **ACKNOWLEDGMENT**

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**Place: Lovely Professional University**

**Date: 1.10,2018**

## **DECLARATION**

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We hereby declare that the project on Hangman Game using Python GUI submitted at Lovely Professional University, Phagwara; Punjab is an authentic work and has not been submitted elsewhere.

We understand that the work presented herewith is in direct compliance with Lovely Professional University's Policy on plagiarism, intellectual property rights, and highest standards of moral and ethical conduct. Therefore, to the best of our knowledge, the content of this project work represents authentic and honest effort conducted, in its entirety, by us. We are fully responsible for the contents of our project report.

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# CHAPTER 1

## INTRODUCTION

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### 1.1 Description and Utility of the Game

Hangman is a paper and pencil guessing game for two or more players. One player thinks of a word and the other tries to guess it by suggesting the letters. The word to guess is represented by a row of dashes, giving the number of letters. If the guessing player suggests a letter, which occurs in the word, the program writes it in all its correct positions. If the suggested letter does not occur in the word, the other player draws one element of the hangman diagram as a tally mark. The game is over when: The guessing player completes the word, or guesses the whole word correctly. Thus, the user wins if he can guess the word or else he is a loser. Hangman is often used by teachers to practice spelling, vocabulary and just for fun. The most popular way to play hangman games offline is to draw blank letters for the chosen word on a paper or on the blackboard and let the players guess the letters. For each incorrect guess, another part of the man is drawn. If the picture is completed before the word is revealed the hangman game is lost and the character is hanged, if the word is revealed before the execution the game is won.

### 1.2 Implementation of the Game

In this programming assignment, we intend to implement the user interface by which the code takes input as letters of the word and checks for its presence. In addition, another task is to reduce the no. of chances (lifelines) one by one as the user keeps on guessing incorrect letters. . This game will mainly be based the 26 letters of the English language. Therefore, our input data will be just letters and as output, the player comes to know whether he has won. Thus, there will be a list of words stored with the program from which the player will be asked to guess a word. Our mini project will obviously illustrate the above-mentioned task, and we even intend to enhance the GUI front end by adding some more buttons, message box and label

## **CHAPTER 2**

### **METHODOLOGY**

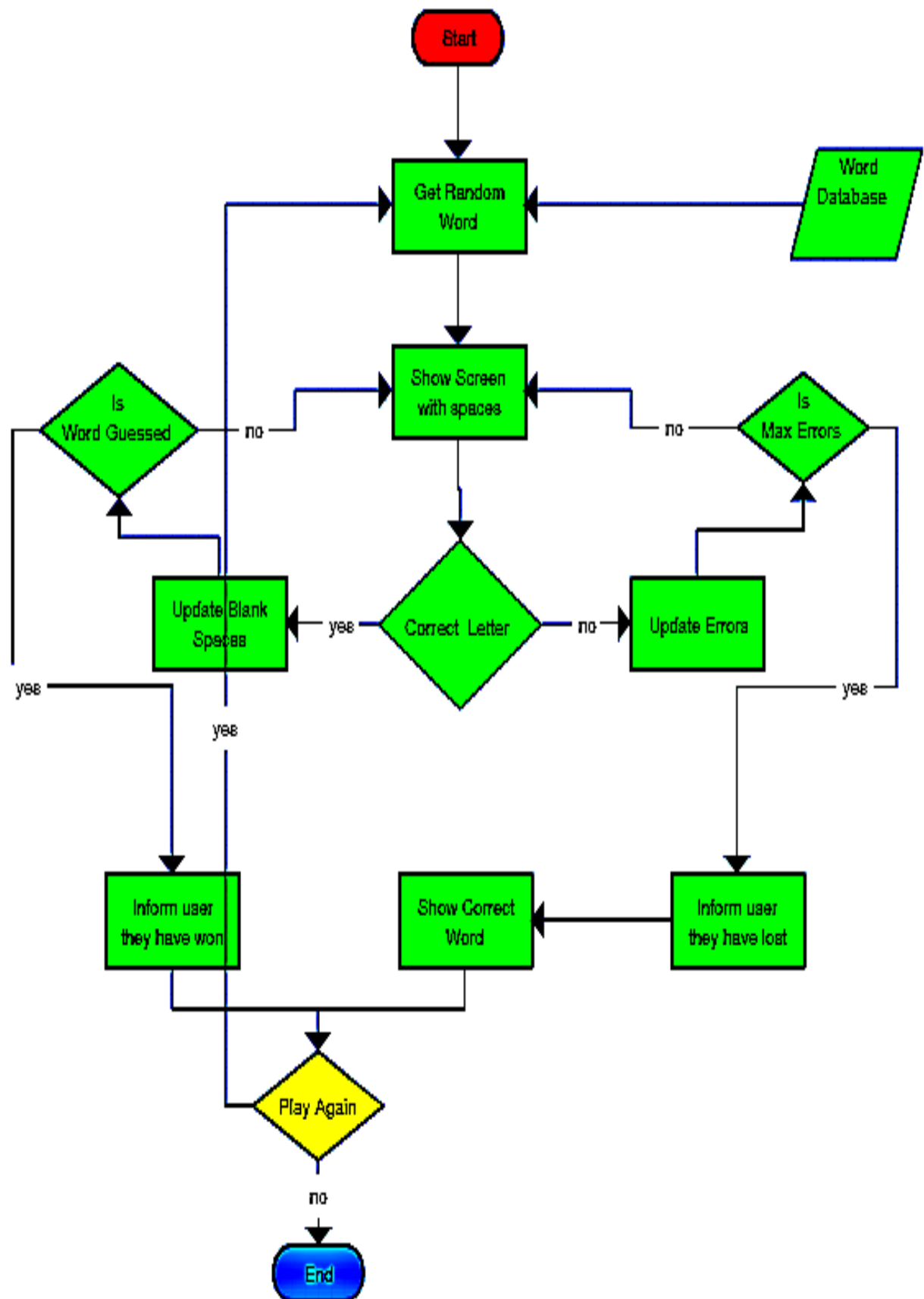
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The gaming code will mainly contain the class Hangman, which will provide the list of correct letters as well as the no. of chances given to a user. We planning to use tkinter toolkit for GUI. Incorporation of widgets will enhance user experience and the user can proceed in the game with no confusion. The overall game can be thought of having four main parts, which consist of the following functionalities:-

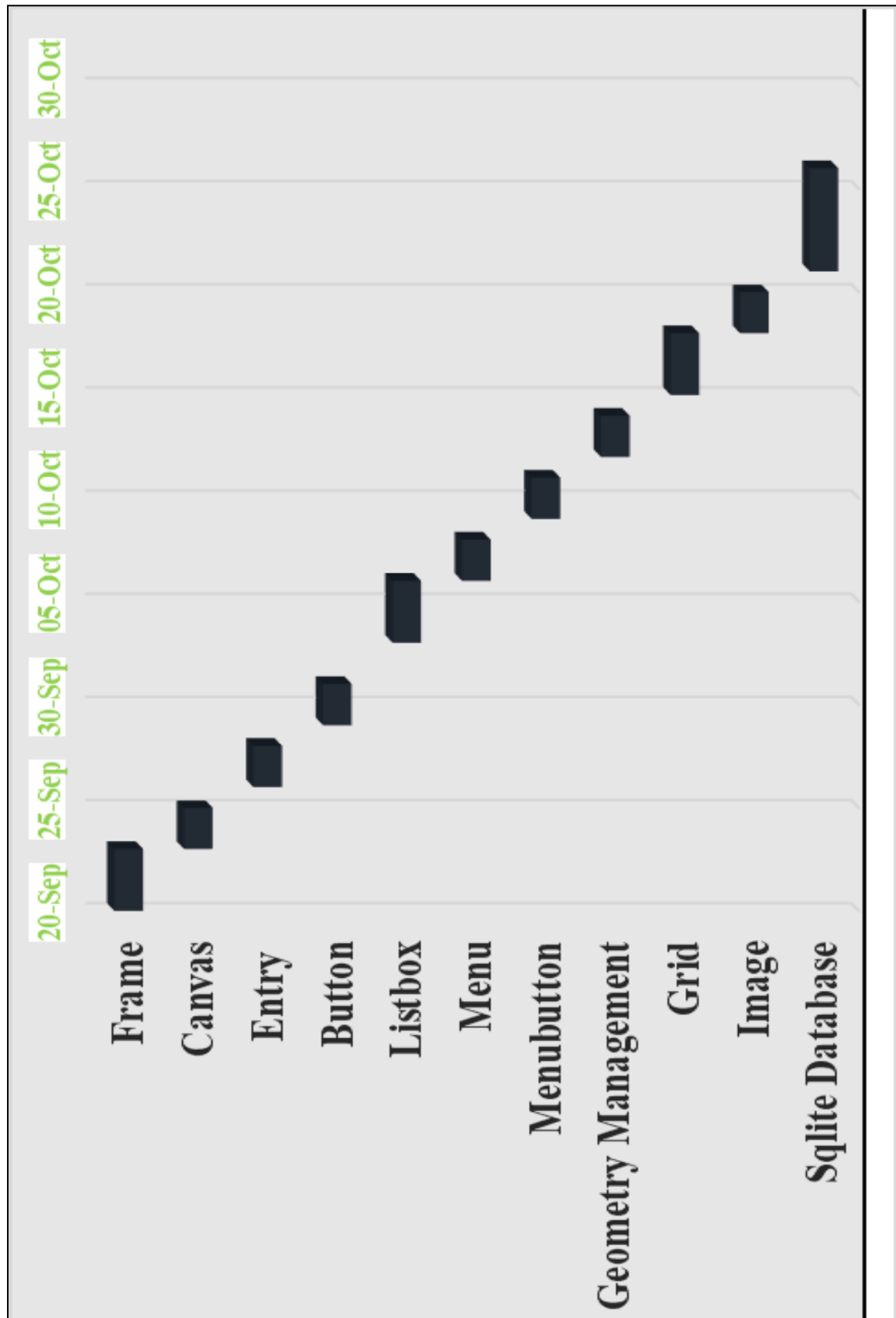
- 1) Formulation of a list of word and store them in a database with the list of all 26 alphabets of English Language. The correct names corresponding to each image and the hints are to be stored in an external database.
- 2) The actual method which does the logical reasoning, whether the letter exists or not, if yes, write it down at all the places else strike off a lifeline. This forms the main part of the code.
- 3) Final word to be displayed if guessed wrongly else, interactive message saying, "The Player is the winner"
- 4) Finally, the GUI coding, user interactive screen, which will mainly prevail during the code output.

The following pages contain the flow chart and Gantt chart of the entire project.

## Flow chart of the Hangman Game project



## Gantt chart of the Hangman Game project





## CHAPTER 3

### TECHNOLOGIES USED

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**The technologies used in completion of the project are as follows:**

- 1. Python:** Python is an interpreted high-level programming language for general-purpose programming. Created by Guido van Rossum and first released in 1991, Python has a design philosophy that emphasizes code readability, notably using significant whitespaces.
- 2. Tkinter:** Tkinter is the standard GUI library for Python. Python when combined with Tkinter provides a fast and easy way to create GUI applications. Tkinter provides a powerful object-oriented interface to the Tk GUI toolkit.
- 3. SQLite3:** SQLite is a C library that provides a lightweight disk-based database that doesn't require a separate server process and allows accessing the database using a nonstandard variant of the SQL query language. Some applications can use SQLite for internal data storage.

## CHAPTER 4

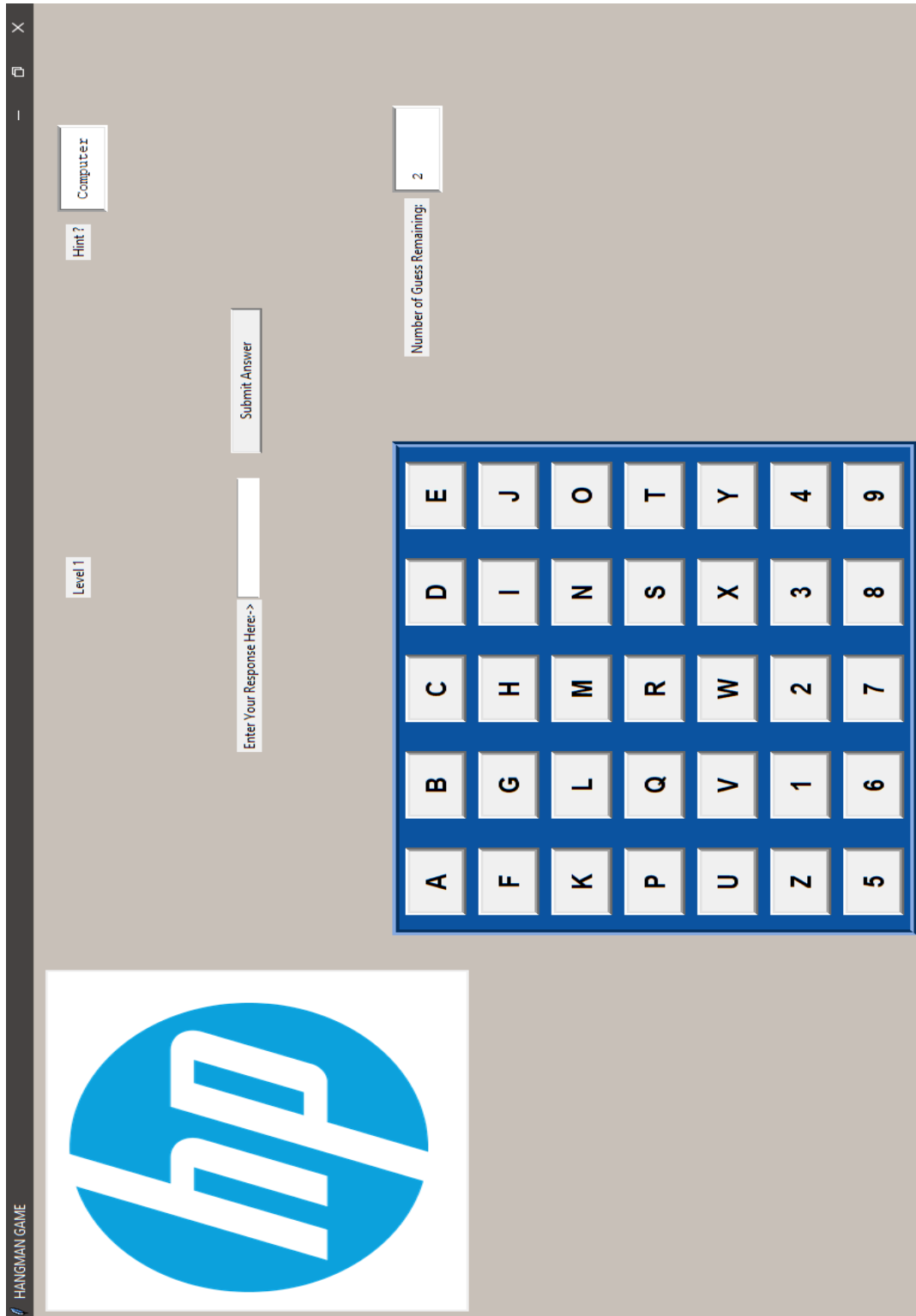
### WORK DIVISION

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**The work division of the project are as follows:**

| <b>S.No.</b> | <b>Module Name</b>         | <b>Module Description</b>   | <b>Team Member Responsible</b> |
|--------------|----------------------------|---|--------------------------------|
| <b>1.</b>    | <b>Frame</b>               | Widget that is used to design and implement other widgets.                  | <b>Ankit Kumar</b>             |
| <b>2.</b>    | <b>Canvas</b>              | Widget helps us to draw shapes in our application.                          | <b>Sonali</b>                  |
| <b>3.</b>    | <b>Entry</b>               | Widget is useful for adding text fields in our application.                 | <b>Sonali</b>                  |
| <b>4.</b>    | <b>Button</b>              | Widget is used to add buttons in our application.                           | <b>Sonali</b>                  |
| <b>5.</b>    | <b>List box</b>            | This is used for providing a list of options to the user.                   | <b>Ankit Kumar</b>             |
| <b>6.</b>    | <b>Geometry Management</b> | Tkinter geometry manager classes: pack, grid, and place.                    | <b>Ankit Kumar</b>             |
| <b>7.</b>    | <b>Grid</b>                | To place every widget in arrangement of a grid.                             | <b>Utkarsh Sinha</b>           |
| <b>8.</b>    | <b>Image</b>               | To add and retrieve images to and from the database.                        | <b>Utkarsh Sinha</b>           |
| <b>9.</b>    | <b>SQLite Database</b>     | This will contain all the images, hint and correct answer word of the game. | <b>Utkarsh Sinha</b>           |
|              |                            |   |                                |

## CHAPTER 5 IMPLEMENTATION





Level 1

Hint?

Computer

Enter Your Response Here:->

Number of Guess Remaining:

ⓧ Next LEVEL

?

Do yo want to go to the next LEVEL

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|



Level 1

Hint ?

Computer

Submit Answer

Enter Your Response Here:->

Number of Guess Remaining: 1

|   |   |   |   |   |
|---|---|---|---|---|
| A | B | C | D | E |
| F | G | H | I | J |
| K | L | M | N | O |
| P | Q | R | S | T |
| U | V | W | X | Y |
| Z | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 |



Level 2

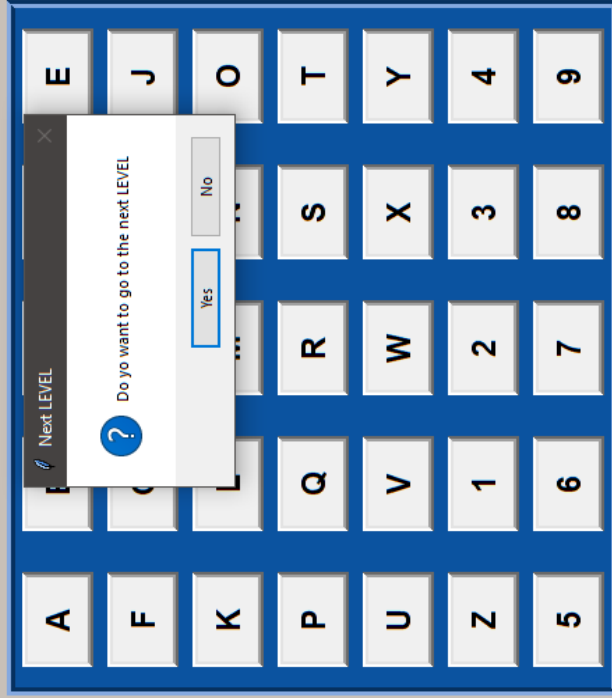
Hint ?

Phone

Submit Answer

Enter Your Response Here-> MOTOROLA

Number of Guess Remaining: 2



Level 3

Hint?

Music

Enter Your Response Here:->

SPOTIFY

Submit Answer

Number of Guess Remaining:

2

Next LEVEL

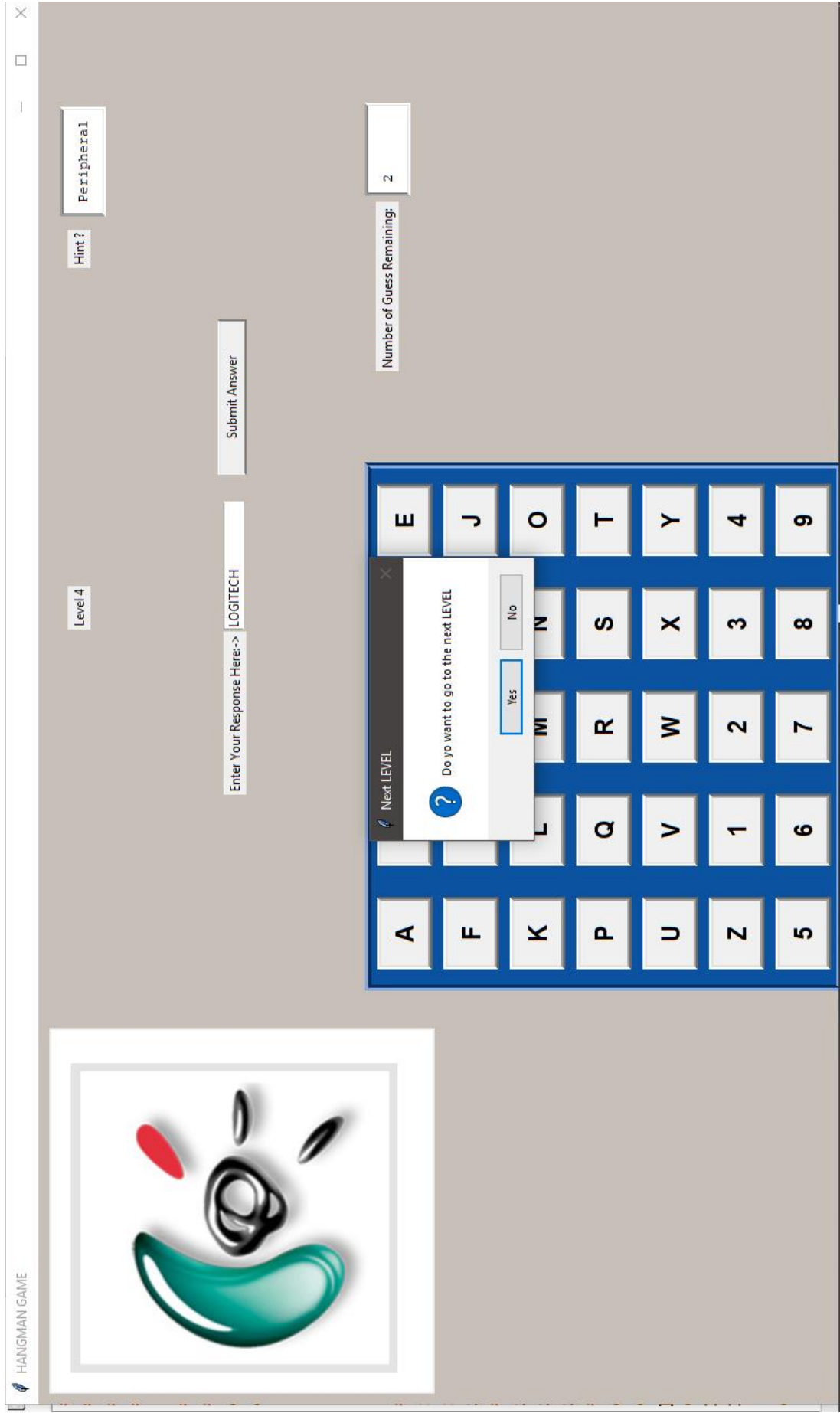
?

Do yo want to go to the next LEVEL

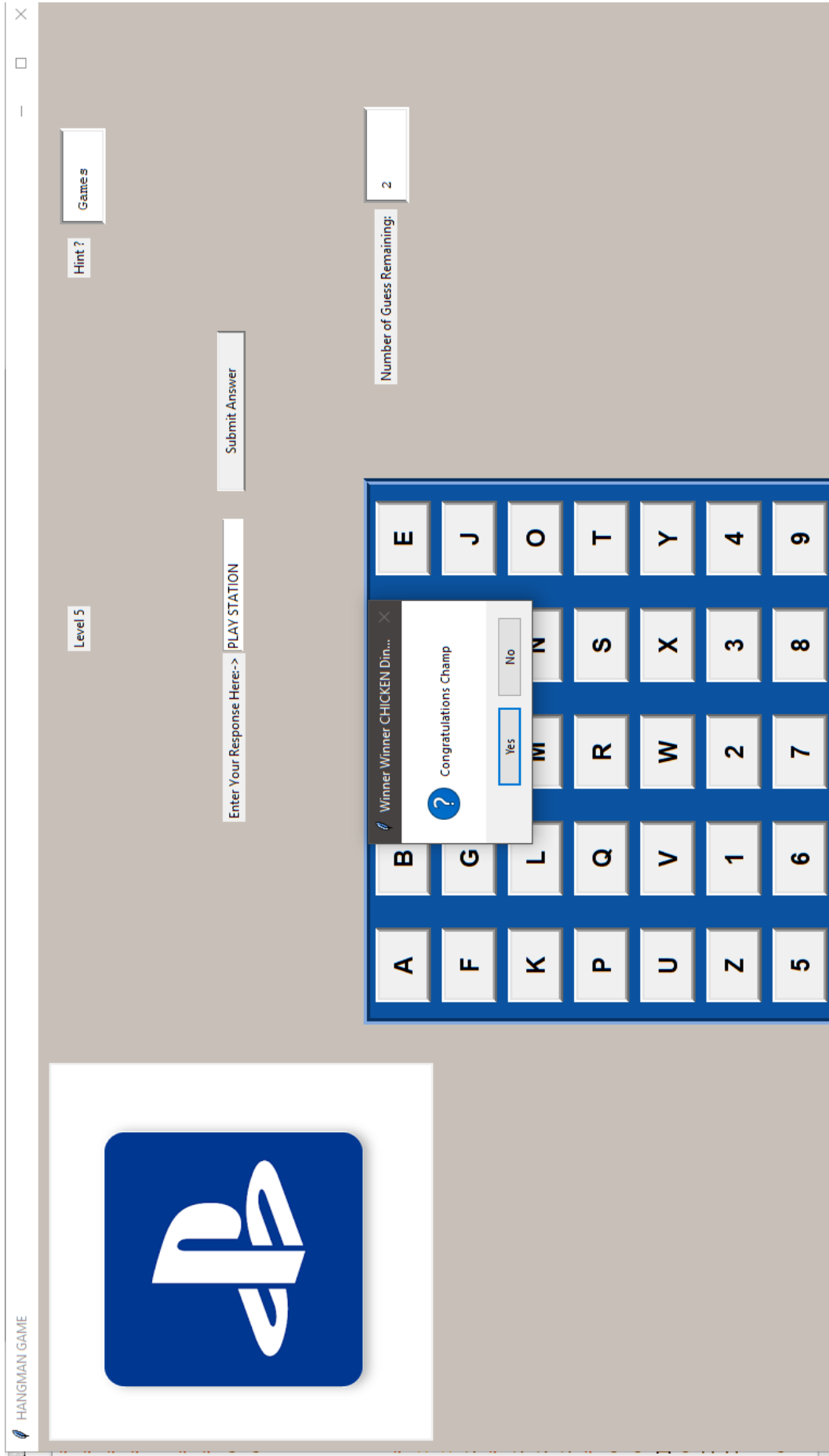
Yes

No

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| A | F | K | P | U | Z | 5 |
| L | Q | V | 1 | 6 |   |   |
| M | R | W | 2 | 7 |   |   |
| N | S | X | 3 | 8 |   |   |
| O | T | Y | 4 | 9 |   |   |
| J | E |   |   |   |   |   |









Level 4

Hint ?

Peripheral

Submit Answer

Enter Your Response Here:->

Number of Guess Remaining: 0

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| A | F | K | P | U | Z | 5 |
| B | G | L | Q | V | 1 | 6 |
| C | H | M | R | W | 2 | 7 |
| D | I | N | S | X | 3 | 8 |
| E | J | O | T | Y | 4 | 9 |



Hint ? Games

Hint?

Submit Answer

Enter Your Response Here:->



|   |   |   |   |   |
|---|---|---|---|---|
| A | B | C | D | E |
| F | G | H | I | J |
| K | L | M | N | O |
| P | Q | R | S | T |
| U | V | W | X | Y |
| Z | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 |

## REFERENCES

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