

# ANALYSIS

## Abstract

The project entails using Visual Studio Code's development and execution capabilities to create a Python Hangman game. Python is a flexible programming language that can be used for both small and large-scale applications because of its object-oriented design and readability.

The purpose of The Hangman Game is to give players a fun and interesting experience. Word selection, processing user input, recording of failed attempts, word display, and feedback systems are among the main features. The player's ability to guess the word within a predetermined number of attempts determines the game's outcome.

The project seeks to support development objectives that place a high priority on producing a fun yet difficult word-guessing game. It is thought that a variety of features, such as scoring, graphic improvements, and difficulty levels, will appeal to a wide range of users.

Budget concerns centre on the effective use of development resources, with a particular focus on minimizing external dependencies by making use of Visual Studio Code's built-in features. Ensuring simplicity in gameplay and UI design is the aim, making use of Visual Studio Code's tools to create a user-friendly interface.

To enhance the overall quality of the game, features like customizable difficulty levels, clear policies for user interactions, and thorough documentation are included. Although there may not be much in the way of customer service, depending on the documentation and community support provided by Visual Studio Code guarantees that extra help is available when needed.

## DIRECTIONS FOR GAME PLAY

**Organizing Your Space:** Make sure Python is installed on your computer and that your integrated development environment (IDE) is Visual Studio Code before you begin playing.

**Managing the Match:** Launch the Visual Studio Code.

Make a new Python file (hangman.py)

The Hangman game code, words text (words.txt) and hangman images (Hangmanpics.png) is supplied; copy and paste it into the file.

Using Ctrl + S, save the file.

Copy and paste it all to one folder in your system (python scripts-for example)

For example -how to save images as it is core part in the game to run!

Make sure to copy path of images in your system and paste it in the code.

```
Pygame.image.load(r'C:\\Users\\NINITHA\\OneDrive\\Documents\\Python  
Scripts\\hangman1.png'),
```

Save

**Gameplay Instructions:** Guess a letter. Press Enter after entering a single letter.

Guess the letters again until you can either: Guess the word correctly, or

Run out of ways to try.

**Game Outcome:** The game will applaud you if you properly guess the word.

When your tries are exhausted, the game will disclose the right word.

**Tailoring the Game:** You are welcome to alter the game to suit your tastes:

To add variation, add more words to the list of words.

Modify the code's maximum attempts or degree of difficulty.

Improve graphic components, such as the hangman figure's ASCII artwork.

**Have Fun with the Game!**

The purpose of the Hangman game is to provide you with fun and challenge. Enjoy yourself while honing your word guessing abilities!

## Logic in Games:

**Word Choice:** Establish a strong word selection process, taking into account external API connectivity or pre-made lists for a varied word bank.

**Player Data:** Provide an input mechanism that accepts single-letter estimates and includes extensive validation to guarantee accuracy

**Incorrect attempts:** Provide a tracking system for failed tries that can be adjusted to find the hangman figure in its entirety.

**Word Display:** Create a function that shows the current word state, revealing correctly predicted letters and suppressing others.

**Real-time feedback:** on predictions should be implemented to show correctness. Experience is improved by visual signals such as a developing hangman figure.

**Result of the Game:** Specify the parameters for winning and losing. If the player guesses the word correctly in the allotted time, they win.

## User Interface:

**Console Interaction:** Utilize Visual Studio Code's integrated terminal for simplicity.

Design an intuitive console-based interface displaying the game state and receiving user input.

**Visual Enhancements:** Integrate ASCII art for the hangman figure, enhancing the visual appeal in the Visual Studio Code output.

Consider color-coding or other visual cues for a more engaging experience.

## Determine Your Needs and Wants

### Fundamental prerequisites:

Logic of word choice and presentation.

Handling and validating user input.

An incorrect hangman figure display and tracking attempt.

determining the result of a game.

### Improved Qualities:

Different word categories and difficulty levels.

improvements to the image, such as the hangman figure's ASCII artwork.

Establish a score system to keep track of victories and defeats.

## Match Your Objectives with the Hangman Game Requirements

**Development Objectives:** Make a word-guessing game that is both interesting and fun.

To keep gamers engaged, make sure the experience is both fun and difficult.

**Take into Account Your Budget:** Ensure that development resources are allocated effectively in terms of both time and experience.

Reduce the number of external dependencies by making use of Visual Studio Code's built-in functionality.

## Is it straightforward and simple to use?

Put a focus on UI and gameplay simplicity. Make use of Visual Studio Code's capabilities to improve comprehension and interactivity.

## Can Our Policy Be Configured?

Clearly define the rules governing user interactions, including the validation of input and the feedback systems. Have a policy for adjusting the difficulty level that can be adjusted for a flexible gaming experience.

## **How Simple Is It to Integrate the Software into Your Website?**

The main focus might not be on integration for a stand-alone Python Hangman game.

For easy development and testing, rely on Visual Studio Code's integrated terminal.

## **What Concerns the Customer Support Quality?**

Even while a hangman game might not require a lot of customer service, it should include clear in-game instructions.

For more help, rely on the documentation provided by Visual Studio Code and the community.

## **Final Thoughts**

To Make a feature-rich, well-designed Hangman game that fits with your development objectives your top priority.

Libraries and Modules Employed:

Using core Python modules to handle user input and manipulate strings.

Using the integrated support of Visual Studio Code for a more seamless development process.