

ADMIN DOCUMENTATION



CALICO
Spawn

Introduction

'Spawn' is a captivating two-dimensional game designed to challenge players of all ages that combines the experience of two classic games like Snake and Pacman. The game combines elements of strategy with reflex challenges, making it a unique addition to the gaming landscape. Developed by CALICO, this game not only serves as an educational project but also offers genuine entertainment. It is intended to foster competitive play, drawing on classic gaming mechanics while introducing innovative features. This manual provides detailed guidance on how to play, manage, and troubleshoot 'Spawn', a game with dynamic gameplay elements.

Installation and Setup

Before installing 'Spawn', ensure your system meets the minimum requirements, including having Python and necessary dependencies installed. Begin the installation by downloading the latest version from our repository. If you encounter errors, ensure that all Python dependencies are correctly installed, and your network settings are configured to allow for server communication.

To install and set up the game, follow these steps:

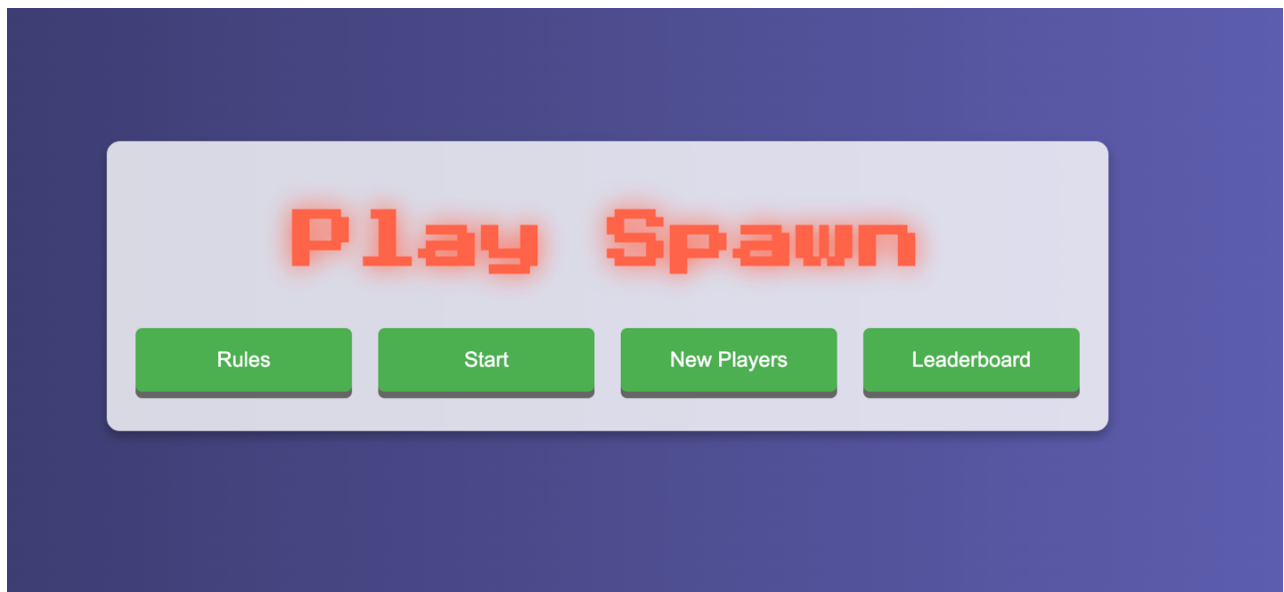
- Ensure Python is installed on your system.
- Install necessary Python libraries: Flask, bcrypt, pandas, and sqlite using `pip install [library_name]`.
- Run 'reinint.py' to initialize the game database.
- Start the game server by running 'Game.py', which hosts the game at '127.0.0.1:5000'.

User Interface

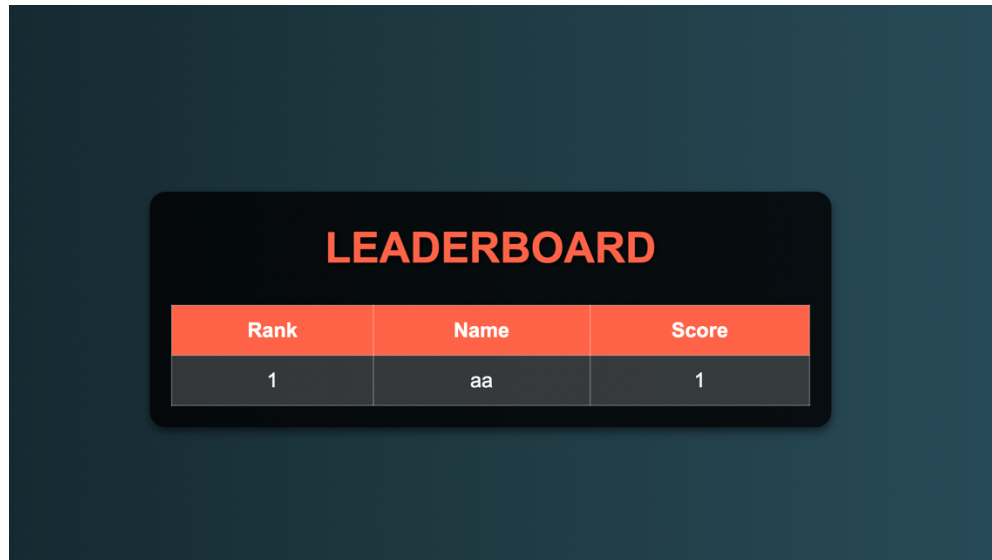
The user interface of 'Spawn' is designed for simplicity and ease of use. The main screen provides quick navigation to all game features. 'Start' initiates a new game, 'Levels' allows selection of the game difficulty, 'New Players' enables account creation, and 'High Scores' displays the leaderboard. Each section is accompanied by visual icons and tooltips to guide new users. Adjusting settings can be done through an accessible menu, offering customizations like control sensitivity and audio preferences.

The game interface includes several key screens:

- Main Screen: Allows players to start a new game, access levels, manage player settings, and view high scores.

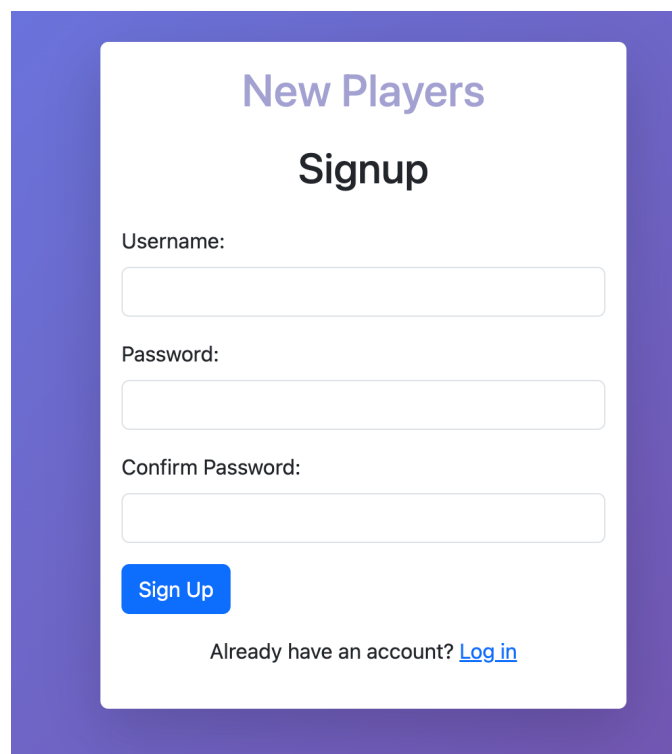


-Leaderboard page :

A screenshot of a leaderboard page. It features a dark blue background with a central black rounded rectangle. Inside this rectangle, the word "LEADERBOARD" is written in bold, orange, uppercase letters. Below the title is a table with three columns: "Rank", "Name", and "Score". The table has a red header row and a single data row with a dark grey background. The data row shows "1" for Rank, "aa" for Name, and "1" for Score.

LEADERBOARD		
Rank	Name	Score
1	aa	1

- Signup and Login Screens: For new and returning players to create accounts and access the game.

A screenshot of a "New Players Signup" screen. The screen has a purple gradient background. In the center is a white rounded rectangle containing the text "New Players" in a light purple font and "Signup" in a bold black font. Below the title are three input fields: "Username:", "Password:", and "Confirm Password:". Each field has a light grey border. Below the input fields is a blue button with the text "Sign Up" in white. At the bottom of the white rectangle, there is a link that says "Already have an account? [Log in](#)".

New Players

Signup

Username:

Password:

Confirm Password:

Sign Up

Already have an account? [Log in](#)

Returning Players

Login

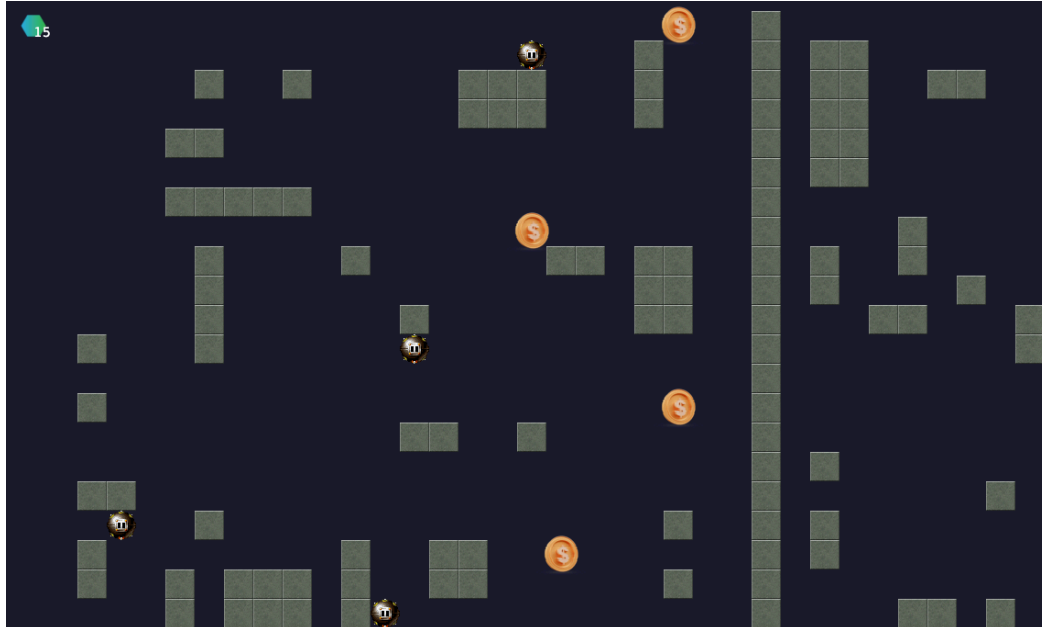
Username:

Password:

Log In

Don't have an account? [Sign Up](#)

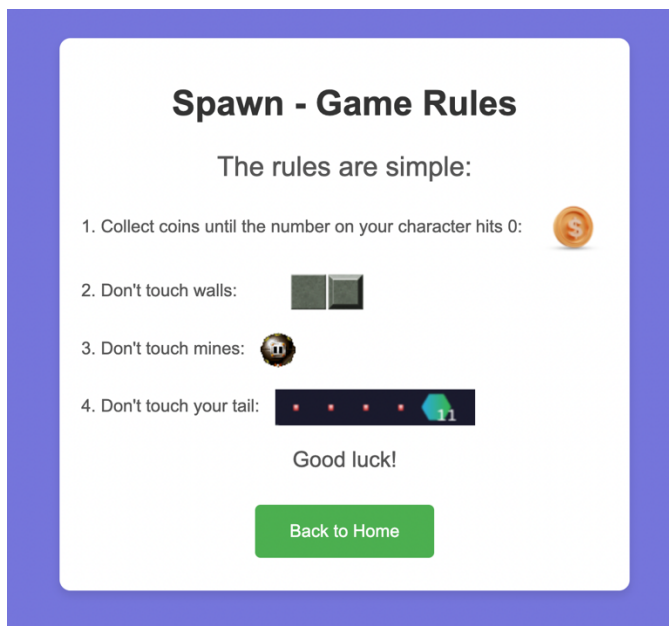
-Game Screen: The squares in greyish color are the obstacles, the yellow object with '\$' is the coin and the black object is the enemy. The character is in blue with the score in it.



-Four different levels on each quadrants:

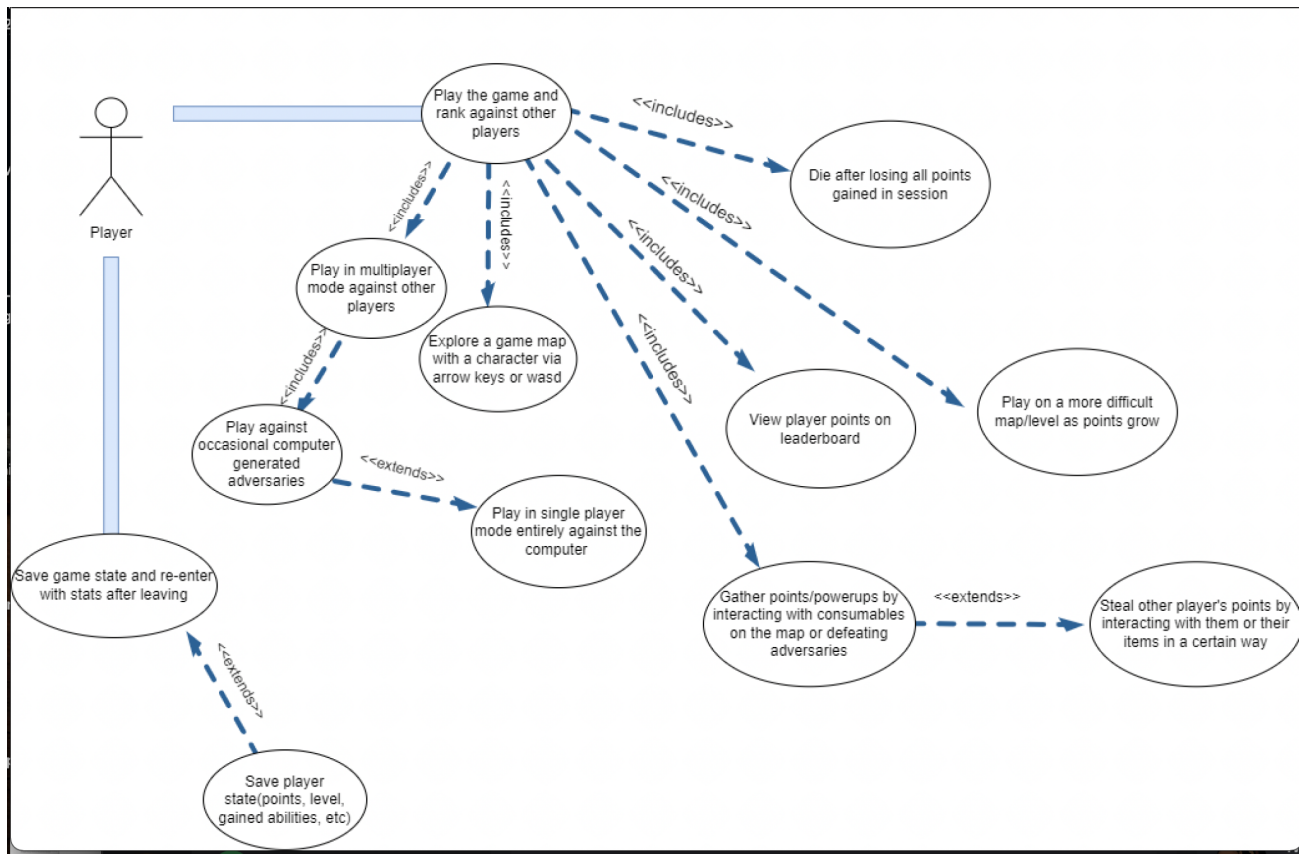


-Rules page explaining all the rules:



Gameplay

In 'Spawn', gameplay is designed to be intuitive yet challenging. Players control their characters using the arrow keys. The up-arrow key moves the player in upward direction, down arrow key in downward direction, left arrow key in left and right arrow key in right direction. The game features a large, randomly generated map divided into four quadrants. Players navigate this map to collect coins, which extend the length of their character, while avoiding enemies. Successfully collecting enough points unlocks additional quadrants, each with increasing difficulty due to more frequent enemy appearances. The game features engaging sound effects that enhance the gaming experience, adding an extra layer of immersion to each level. Each level increases in difficulty, requiring more strategic planning and quicker reactions. The 'Blue Coin' grants extra points, while 'Fast Guy' and 'Slow Guy' power-ups alter the speed of the character, adding a layer of tactical depth. Increase in the character size and more enemies in higher levels introduce unpredictable challenges, demanding adaptability from players. Our first extra feature to the game was adding power-ups that have effects such as slowing the user player or speeding the player up, or randomizing the movement whenever a direction key is clicked for a short period of time. The second extra feature we added is constant character movement, which increases the difficulty, once the character progresses to the second level.



Security and Privacy

The game stores user data locally for the duration of the project. Data is not shared externally and is deleted upon project completion or system change, ensuring privacy and security for student projects.

Support and Troubleshooting

For support or to report issues, players can contact CALICO Support Team. Common issues like login problems or game lags can often be resolved by checking the connection or restarting the game.

Frequently Asked Questions

1. What to do if the game doesn't start?

- Ensure all required libraries are installed and the server script is running.

2. How can I reset my password?

- Currently, password resets need to be handled by contacting support