**Donkey Kong Game**

**Overview:**

DonkeyKong is a simple Java retro game inspired by the classic arcade game. The player controls Mario, navigating platforms and ladders to rescue the princess while avoiding barrels thrown by Donkey Kong.

**Features**

- Mario: Controlled by the player, can move left, right, jump, and climb ladders.

- Donkey Kong: Stays stationary but periodically throws barrels.

- Barrel: Fall and roll towards Mario, creating obstacles.

- Platforms and Ladders: Provide a path for Mario to reach the princess.

- Princess: The goal is to reach the princess to win the game.

**Installation**

1. Ensure you have Java installed on your machine.

2. Clone the repository:

```bash

git clone https://github.com/relinxx/DonkeyKong.git

```

3. Navigate to the project directory:

bash

cd DonkeyKong

4. Compile the Java files:

javac DonkeyKong.java

5. Run the game:

java DonkeyKong

**How to Play**

- Move Left: Press the left arrow key.

- Move Right: Press the right arrow key.

- Jump: Press the up arrow key (when not climbing).

- Climb: Press the up arrow key (when on a ladder).

- Restart Game: Press the space bar when the game is over or won.

The objective is to navigate Mario to the princess while avoiding barrels. The score increases when Mario climbs ladders and reaches the princess.

**Game Components**

**Mario**

Mario can move horizontally, jump, and climb ladders. His movement is controlled by keyboard inputs.

**Donkey Kong**

Donkey Kong is stationary but throws barrels periodically, which roll down the platforms.

**Barrels**

Barrels are obstacles that Mario must avoid. They roll down platforms and fall off if there's no platform to support them.

**Platforms**

Platforms provide a path for Mario and support barrels. They are placed at different heights.

**Ladders**

Ladders allow Mario to climb between platforms. They provide vertical movement.

**Princess**

The princess is the goal of the game. Reaching her wins the game.

**Code Structure**

- DonkeyKong.java: Main class containing game logic, initialization, and rendering.

- Mario: Class representing Mario, handles movement and interactions.

- Barrel: Class representing barrels, handles movement and collision.

- DonkeyKongCharacter: Class representing Donkey Kong, handles behavior (currently stationary).

- Platform: Class representing platforms.

- Ladder: Class representing ladders.

- Banana: Class representing the princess.

**Images**

The game uses several images for the characters and objects. Make sure the images (`mario.png`, `donkey\_kong.png`, `barrel.png`, `platform.png`, `ladder.png`, `princess.png`) are placed in the same directory as `DonkeyKong.java`.

**Future Improvements**

- Adding more levels with increasing difficulty.

- Implementing more complex behaviors for Donkey Kong and barrels.

- Adding sound effects and background music.

- Enhancing graphics and animations.

**Contribution**

Contributions are welcome! Feel free to fork the repository and submit pull requests. For major changes, please open an issue first to discuss what you would like to change.