Barrel Bash - Game Report

# 1. Game Overview

Barrel Bash is a 2D arcade-style game developed using Python and the Pygame library. The player navigates a rectangular character across a screen while avoiding falling barrels and vertical-moving enemies. The objective is to survive as long as possible, destroy enemies using a hammer, and accumulate points.

# 2. Gameplay Features

- Randomly spawning barrels fall from the top of the screen.

- Vertical-moving enemies that shoot fireballs.

- Player can throw a hammer in both directions to destroy enemies and barrels.

- Scoring system: +1 point for dodging barrels, +5 points for defeating enemies.

- Game over if the player is hit by a barrel, enemy, or fireball.

# 3. Controls

- Left Arrow: Move left

- Right Arrow: Move right

- Spacebar: Jump / Start Game

- F: Throw hammer

- R: Restart after game over

# 4. Technical Details

The game runs at 75 frames per second. It uses Pygame's timer events to spawn enemies and barrels at regular intervals. The player and enemy actions are updated in a real-time game loop. Basic collision detection is implemented using `pygame.Rect`. Hammers have a cooldown and can be fired based on player facing direction.

# 5. Code Structure Summary

- Global game setup and color definitions

- Initialization of game elements: player, barrels, hammers, enemies

- Event-based enemy and barrel spawning using `pygame.time.set\_timer`

- Main game loop handles inputs, drawing, collision detection, and score updates

- `reset\_game()` function resets the game state

# Appendix: Full Game Code

The full code is provided in the accompanying script file 'barrel\_bash.py'.