

# DESIGN DOCUMENT (VERSION 1)

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## I. Introduction

Project Name: WORLD'S HARDEST GAME

Group Name: World's Hardest Group

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Period: I

## II. Description

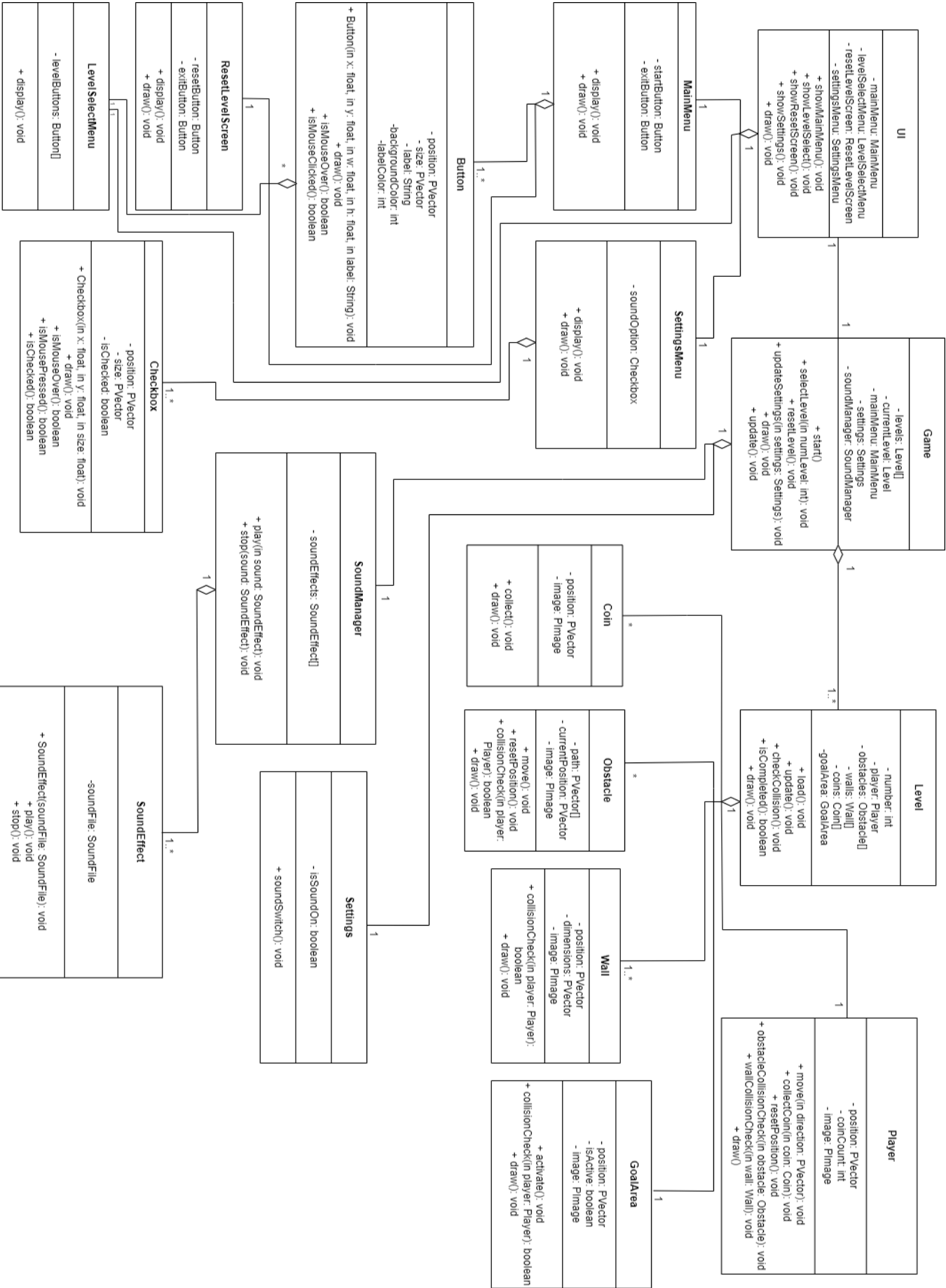
This project replicates the game “The World’s Hardest Game” ([link](#)). The objective of this game is to get to the green area from the spawn area. On some levels, it is required to collect coins before the green goal area is activated and accessible.

### A. FUNCTIONALITIES

1. Player Movement: Control Red Square using WASD or arrow keys (goal is smooth and responsive movement)
2. Levels: Each level has various amounts of coins and unique obstacles → up to 25
3. Goal Area: Green square areas that the player needs to reach to complete the level
4. Obstacles: Blue obstacles have predetermined paths and move, touching them will return the player to spawn (obstacles stay in their current position and continue moving)
5. Walls: The player can collide with them, but can't go past
6. Coins: Yellow coins, when touched by a player, disappear and add to a coin count at the top of the screen (required to collect all for levels that have them)
7. User Interface: Main menu, interactable buttons, level selection, reset level screen, settings menu (for sound, graphics, square color, etc)
8. Sound effects (if extra time)

### B. Required Libraries

1. Processing Core Library: Preinstalled, to code the bulk of the features
2. Sound Library: Sound effects for player movement, collision, etc
3. ControllIP5: For creating the GUI (buttons, sliders, text fields)
4. Collision Detection Library: Basic collision detection, used for more efficiency/optimization



### III. UML