# Design Document

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- Game Title: Slime Arena
- Backstory: In the magical land of Fateslandia, killing slimes in the arena is a popular form of entertainment. The creatures are weak and plentiful, almost to the point of being considered pests.
- Characters:
    - Basic attributes: Character movement speeds (player and enemies) are in pixels per frame, and player damage is also measured on a per frame basis while the space key is being pressed. The game runs at 60 frames per second.
    - Playable characters:
        - Yorec the Brave, warrior who fights with a sword. 4 move speed and 5 damage.
        - Eirika the Graceful, a beautiful lady who's quick on her feet. 5 move speed and 3 damage.
        - Jorge the Strong, a slow heavy hitter. 3 move speed and 10 damage, bigger hitbox for hitting enemies.
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    - Enemy NPCs (values may differ in final product):
        - Slime: 50 HP, 1 move speed, 50 points
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        - Blue slime: 125 HP, 3 move speed, 100 points
        - Gold slime: 250 HP, 5 move speed, 500 points
        - All enemies move in a single cardinal direction (up, down, left or right) chosen at random. Enemies will pick a random new direction to move in every 2 seconds, or if they hit the edge of the screen (as to make sure they do not move out of the playable area).
- Gameplay:
    - Top-down perspective with enemies roaming the arena. Players can defeat enemies to gain points.
    - Items (must be touched by player character to get the effects):
        - Double points: Doubles all points gained from defeating enemies for 10 seconds
        - Double damage: Doubles damage done to enemies for 10 seconds
        - Swift boots: Doubles player speed for 10 seconds
        - Magic orb: Gives 300 points
    - Controls: Arrow keys to move around, Space to use sword. When space is pressed the player will do damage to any enemies they are currently touching. Space can be held down for continuous attacking. As stated above, damage is checked every frame for if the player is touching an enemy and space is held down.
    - Flow: Players will have a set amount of time (60 seconds) to kill as many slimes as they can to rack up points. Bonus items may spawn randomly in the map at set intervals (40 and 20 seconds remaining).

- o Rules: Slimes will not deal damage to the player but will move around randomly and can be defeated to earn points. Players will have a set amount of time to earn as many points as they can.
  - o Victory conditions: Once the time runs up the game will end. Go for a high score!
- Sample level
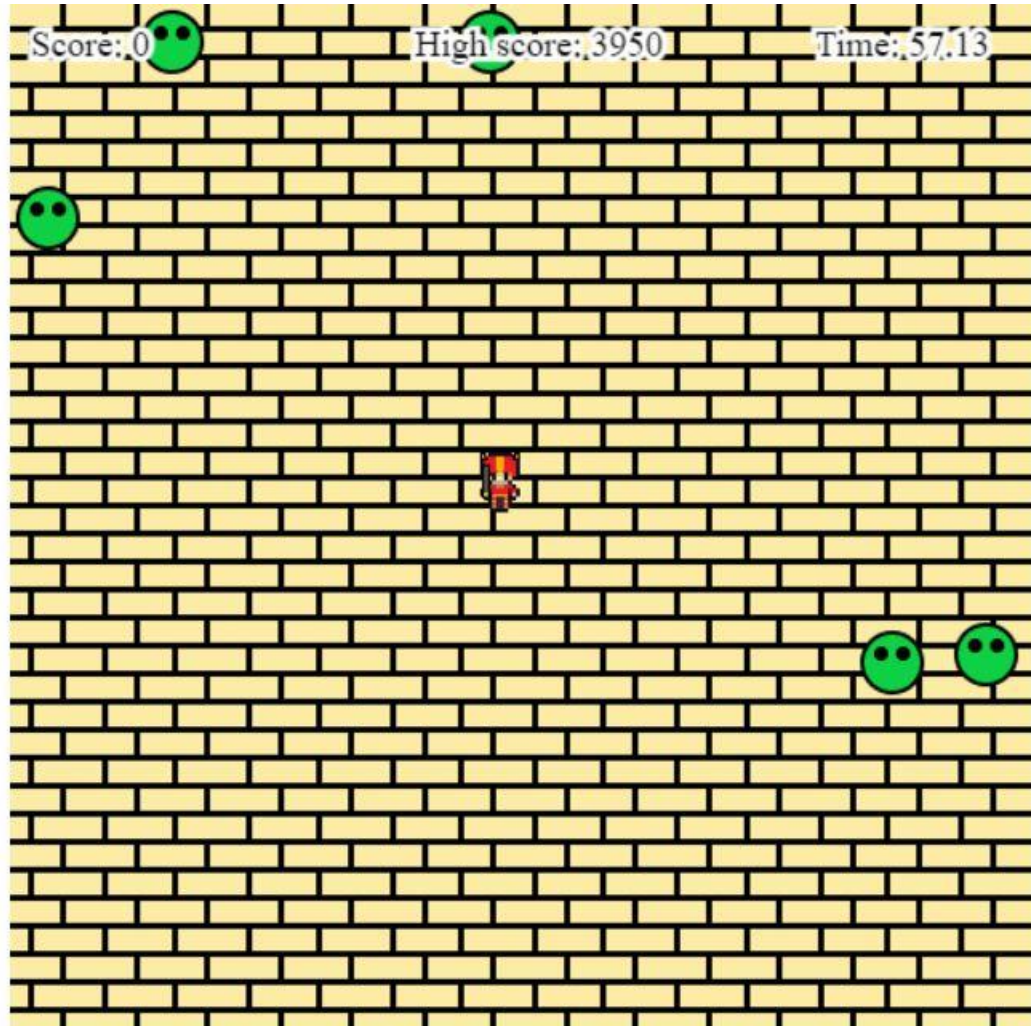
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- Game world: Medieval fantasy world with magic and monsters.
- Bonus material: Multiple playable characters that have different stats. Random nature of enemy movement and power-up spawns encourage replaying for higher scores.