

# CM Game Proposal: Burden

By: Cullen Bertram, Daniel Otaigbe, Landon Tubesing, and Ethan Yu

## The Game Concept:

Our game is called **Burden**. The premise of the game revolves around “the more you have, the harder it gets.” Much like Pac-Man, the player will control one character in a top-down isometric view, moving them around a select area of the screen. The object of the game is to collect scattered “items” to increase their total score while avoiding certain moving obstacles that gradually appear on screen. **Burden**’s fundamental mechanic revolves around the player picking up continuously spawning items while becoming increasingly slower until gathering a “special item” that restores their movement. Once hit by an obstacle the game will end and the player will restart at zero score. The player can earn a higher score the faster they pick up items, rewarding the player for working fast with their heavy burden.

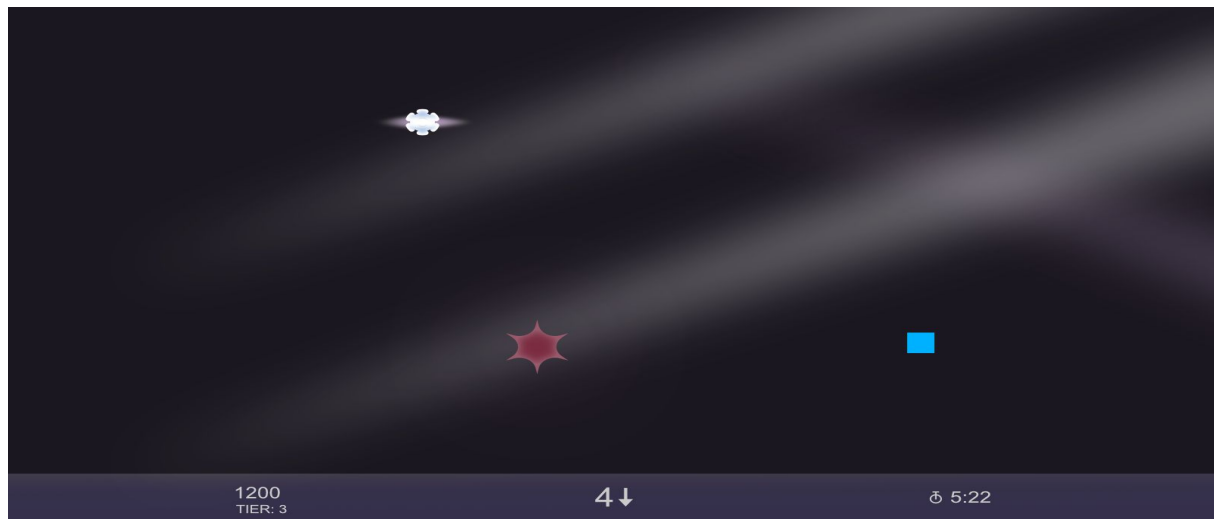
## Instructions:

First, it might help to define a few terms that will be referenced: “**Items**” (the orange circles), “**Obstacles**” (the red circles) and “**Special item**” (the white circle). The game is relatively simple: pick up the most items without dying to achieve the highest possible score. Use the arrow keys to move around the map and run into the items to “pick them up.” The player’s goal is only to gather as many items as possible without getting hit by the red obstacles.

## Execution (The Process):

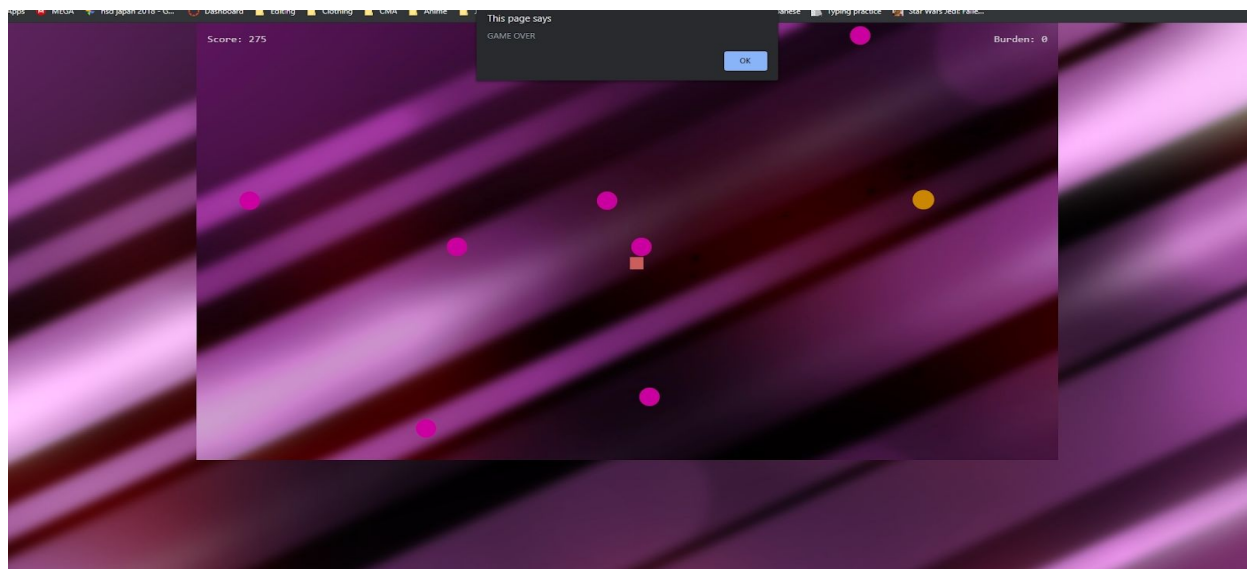
Establishing movement was the obvious baseline as the whole game revolves around moving your character at a defined movement speed that we could gradually reduce. After figuring out base movement, we moved to make obstacles, knowing how to give them movement, the only concern was how to automate this process and tackle the big issue: collision. We then coded how when an item is picked

up it will randomly spawn another based on the random x and y coordinates on the canvas. Same with the spawning special item per 5 items.



(Early Mockup of Burden)

With these base elements of the game finished, we coded to progressively add obstacles as a special item counter increased by tracking the number of items picked up by using a counter in the code. Now came fine-tuning and adding fun elements. Like a scoreboard, sound effects on pick up, and making the objects more aesthetically diverse. The game also has both a counter of your current item, “Burden”, in the top right and your score based on how quickly you pick items up in the top left.



(Our progress a little over halfway)

## Roles:

### **Concept Builder:** Cullen Bertram

Anytime it was necessary to speak on behalf of the group in deciding issues, picking meet-up locations and times, and writing any documents required of the group. The concept builder constantly reviewed the project and pushed to see if the project could be taken new directions with new mechanics.

### **Experience Architect:** Daniel Otaigbe

The Experience Architect worked primarily crafting the overall game experience of the player. Focusing on creating smooth movement and obstacle system, Daniel worked on making a balanced and enjoyable, yet difficult interaction for the player with the automated elements of the game.

### **Game Mechanic:** Landon Tubesing

Landon worked on the core components of establishing collision detection as well as the scoring and spawning mechanics. Landon focused on creating a functioning, playable environment that the user could interact with at a base level. Making various functions of code that allowed for the baseline gameplay.

### **Craft Engineer:** Ethan Yu

The Craft Engineer took to the aesthetic role. He first created a vibrant background to add a more visually pleasing experience as well as designed most of the visuals that the player sees, keeping a fun twist on the geometric look of the game.

## Further Development:

In the future, we would make the special items imbue the player with special powers like being able to dash a certain distance quickly, freeze the obstacles for a brief moment, or even have an extra life. This would give some special variety to the game that lets the players have some sense of improvement as they see direct rewards to their character other than just being able to move back to their original speed. Right now the game runs smoothly with balanced gameplay, so striking an appealing visual and audio experience would make the game show a bit more of its professional side.

(Credits to Shiroyuu for his song "Game Over": we do not own it.)