Title: Splash!
Authors: Diego Spielmann, Benton Stalcup, Luke Bowen

Introductions:
What is the game about? And why did you choose this?
- The game is a 2D swimming game, where you, the main character, are a former Olympian who is coming out of retirement to win one more Olympic medal for your country. The reason we chose this game is that we really enjoy 2D sports games, but there was not one of swimming. Diego, one of the authors, is a swimmer, so he suggested it and we all agreed upon it.

Target Users
- The target users for this game are anyone above 5 years old who enjoys competitive games where they can compare their times against their friends

Context/Game world
- The game takes place at an Olympic-sized pool where the user has been training. The user is from an Eastern European country. The theme of the world is of course, sports.
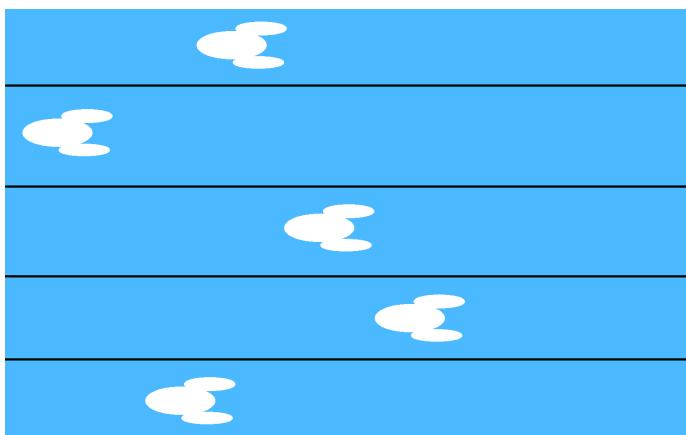
Game Rule
- The player is able to dive off the blocks, perform a 2 second dash after the blocks, swim using rhythmic timing, and dive under the obstacles.
- They are unable to spam buttons to swim faster, and cannot just press nothing to move forward slowly, they will come to a complete stop
- Winning - having the fastest time / Losing - having a slow time

Controls
- Dive - Right Arrow / Dash - Space / Swim - Left and Right Arrow / Avoid - Down Arrow

Rough Sketch

Tasks:
- Diego: Coding / Story Design
- Benton: Coding / Audio
- Luke: Coding / Artist

Game Development:

The first tasks we established were to code the basic movements of the game. This included the diving mechanic, the dashing mechanic, the swimming rhythmic movement mechanic, and the avoiding obstacles mechanics. These were all coded and put together by Diego, using very basic sprites such as squares. The finish line was added afterwards, so that the user did not endlessly swim. Diego also added the ability for the camera to always be locked in on the player, no matter where they were in the pool. Along with this, a time and speed tracker was added to the game, and a bar that filled up was used to help users with their rhythmic timing. This is what the base game sat in until the day Splash! playtested with the class.

When Splash! officially game tested with their classmates, many issues arose. The users were stumped by the many controls and how they were confusing, and the little UI made the game very unenjoyable. We discovered that the bar was also a very confusing gimmick when it came to helping the users with timing their rhythmic movements.

The next changes that came to the game were about how we can make it easier to learn how to play the game. This was a team effort from everyone, but we broke down every mechanic of the game (excluding avoiding obstacles) and made them their own separate tutorial levels so that the user can learn each mechanic more easily before moving on to the actual levels. From here, it became quite simple - Benton added the audio, and Luke added the UI/Art, and the game was complete. A last-second change was switching the bar to a circle that turns green to tell you when to press, as the bar continued to receive negative backlash. And that's it! Finished game.

Gameplay:
https://www.youtube.com/watch?v=wyh1-0uPF_I

Discuss & Future Work:
-   We are all very proud of the work we were able to put together. In a sense, Splash! is our child, and we are going to take care of it. It was very difficult at times, but that is what makes something like this rewarding. We couldn't be happier to have taken a class like this at our school. Some of the hardest challenges we ran into were figuring out how to break apart our large code into the tutorial levels, but with help from outside sources like YouTube, we were able to fix it. People overall said they enjoyed our game and think it has a very good potential. They enjoyed the competitive nature it brings and how it can make them want to beat their best friend in the game. Things we would like to add in the future are different level designs and character selection, along with a place to store all of your times and a level selector.