For our project, we designed a slalom ski racing simulator. This game was designed to roughly outline the physical consequences of movement on a skier as they move down the slopes. As the game progresses, the speed of the skier increases until it reaches a terminal speed. Furthermore, as the skier moves to the sides, the speed will decrease as it would in real life. To mimic real life, the physics were designed in a way so that the skier turns sharper than the ode normally allows, meaning that the lateral movement changes directions quickly without losing all the momentum. The skier is designed in a way to emphasize the importance of peripheral vision and using the position of the skier to help gain proper sightlines.

To give the user feedback, we have a stopwatch that measures the time it takes for the user to clear a set number of gates. This is the main metric for a user to compare their past runs and to track their improvement. During the run, we have a speedometer to help give the user more helpful real time data. At the end, we show a graph of velocity vs time to help the user see how their run went, and to see points in the run they can optimize in the future.