My extensions:

- Implemented p5.sound for background music and action sounds
- Created jumpable platforms
- Created enemies that shoot projectiles (tennis balls)
- Added multiple difficulties
- Added custom jump code that allows smooth jumping
- Implemented 5 levels of increasing difficulty
- Created a final boss on the 5th level that shoots homing tennis balls
- Added a pause screen with some options for the user to change settings, which include toggling the background music, and game sounds, as well as resetting the game.
- Added multiple levels with increasing difficulty
- Made it difficult to collect all collectables in the entirety of the game
- Added a high-score after the player finishes level 5, to give them a goal to try and beat
- Trees that naturally generate between canyons with some randomness
- Clouds and mountains that generate randomly
- Created different seasons for different levels
- Every level has a unique theme song
- All theme songs for the game were created originally by me, via https://www.beepbox.co/
- Created a snowing effect for the winter season
- Created a leaves falling effect for the fall season
- Implemented thunder and lightning in the final level

Things i found difficult

- Dealing with bugs in a big file proved difficult at times, especially when there were no error messages in the console.
- At times, I over complicated some ES6 code which could have been written much simpler. This caused me confusion when I was refining my code later on.
- Workflow was a big challenge. I found that i would not set good tasks to complete, and would therefore get distracted easily, missing the big picture or the task that should be prioritized
- One of the biggest bugs I had to deal with was a p5.sound.js memory issue regarding the theme music of the game which took me days to figure out. Once the player reached level 4 the sound would start to break up. After days of struggling I decided to break the theme music into 5 separate songs, which fixed the memory issue.

The skills I learned/practiced in completing the game project

- Got a more advanced understanding of ES6 syntax
- Commenting. I tend to not comment my code much, but this assignment i wanted all my code to be very readable for anyone reading it, therefore i practiced my commenting skills a lot
- Refined my JavaScript OOP skills
- Learned advanced ways to incorporate ES6 syntax with p5.js
- Learned how to apply Cos and Sin to p5.js to make some nice animations
- Learned that the shortest code is not always the best, readability is also very important.

- Learned how to debug complicated issues in a calm manner