CPSC 481 – Project 1 Report

- Bot's tile count = 125
- The project is built using Jathp-Lisp along with P5, JavaScript and HTML. The algorithm we used is BestFS. We implemented the algorithm in JavaScript first and implemented in Lisp afterwards. The algorithm can be found in sketch.js. We made custom objects and variables to determine the number of rows and columns on the grid, the start/goal position of the bot, lists based on visited and non-visited cells. The data structures used in the algorithm include lists. We pushed and popped cells into and out of the lists based on the position of the bot. Inside the BestFS function, we have an implementation of traversable path based on the cell, if that cell has not been visited, it would get pushed onto the open list. Then, whichever cell has the lowest value is given a priority and those cells are visited.
- Image of final board picture: