In my maze generation software, there are some limitations that I would like to address that I won’t be able to fix just due to the scope of the project.

Limitations

**Limitation #1**: There is no cloud storage. Because it would be very expensive and complex to set up, my program doesn’t support cloud storage. So users would not be able to access their mazes across devices sadly, nor could I store user data such as login information online.

**Limitation #2**: The project may be very resource intensive on low end computers. I am using several libraries in my code such as tkinter, bcrypt and I have over 500 lines of code written which could impact performance on less powerful computers. Additionally since I am using algorithms with recursion such as A\* algorithm, recursive backtracker and prim’s, they may also heavily increase the load on low-end computers.

**Limitation #3**: My code is limited to just the algorithms implemented, so for example the A\*, Prim’s, Recursive Backtracker. I wouldn’t be able to have the program search for fastest path using BTS (breadth-first search) for example or any other algorithm for maze generation which limits variety in my program

Requirements

**Requirement #1**: Because my program may be resource heavy due to the recursive algorithms, a moderate processor and RAM are required to handle high computational demands, especially for large mazes. My program supports a maze of max 75 x 75 size which has 5,625 cells, and for example the A\* algorithm performs multiple actions on each cell when it tries to find the path, like adding and removing them from lists, which could slow down devices

**Requirement #2**: A display is required to run my program, however a high-end GPU is not required as my program does not have any fancy graphics and has a very simple user interface

**Requirement #3**: Users won’t be able to run my program without a python environment, because I have not compiled by code so all my code is stored in a python file and not in binary.

**Requirement #4**: If someone wanted to run my code even if they had a python environment and copy-pasted my code they might still not be able to run it because my code uses several libraries such as tkinter, bcrypt and random. Thankfully most libraries my code uses are standard and already installed on most people’s computers.