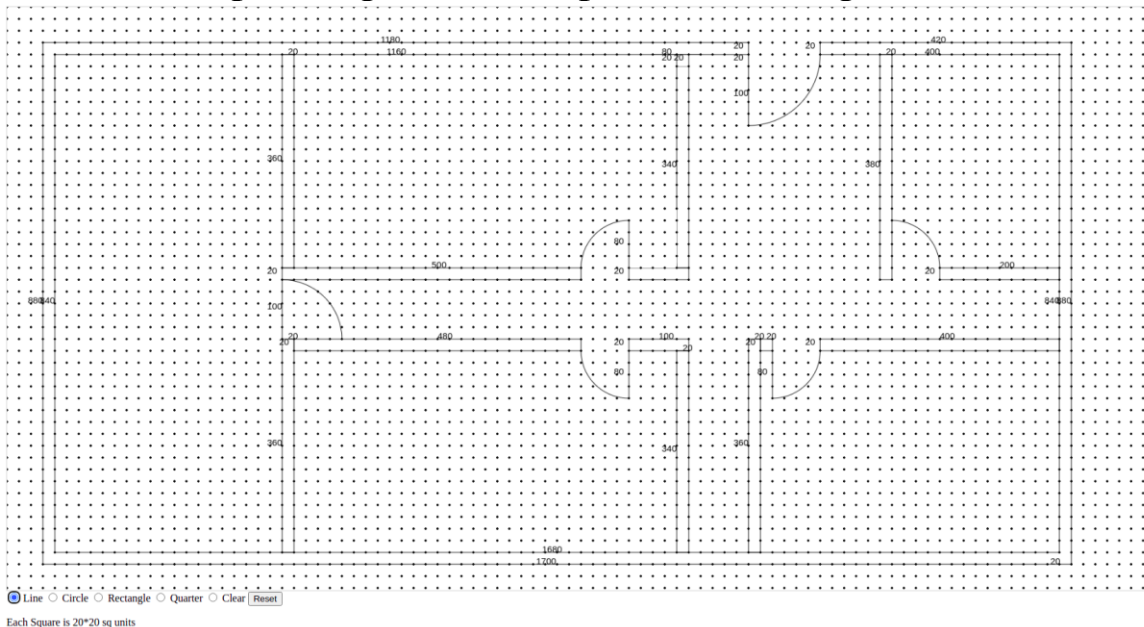# Project Report - LocalPotatoes

Idea

This project is based on JavaScript which uses Canvas Tool and some HTML to run it over a website (local host). Our project is named 'AutoCHAD', and is primarily used for architecture drawing purposes. Though it is just a beginning, it has the most important tools required for creating floor plans, and graphs of some basic mathematical functions, or just to create geometrical designs.

Here is a sample image of a floor plan made using this tool.

Implementation

We added the functionalities to render different figures which are necessary for architecture drawings. These figures are rendered according to the option chosen by the user and the two points they select from the grid displayed on the screen.

We also added the functionality to erase a particular area in the grid according to the user's requirements.

We added a feature which displays the dimensions of a line or a rectangle when it is rendered as it is helpful in making architectural drawings.

Lastly, we added a functionality to reset the screen back to its original state (empty).

Instructions

Press ENTER to start the drawing board.

All the figures can be made using the radio buttons at the bottom of the screen. To create a specific shape, choose the appropriate figure from the radio buttons. To render it on the grid, while hovering over the grid points select the initial and the final points by pressing A and D respectively.

Specific instructions for each figure are given on the start up screen.

To clear the screen of all the figures, press the Reset button.

To erase a particular part of the grid, use the clear radio button.

Challenges Faced

- Learning to code on a new language.
- Faced problems on how to take input of two points from the user.
- Tried to create buttons but all buttons executed simultaneously, thus switched to radio buttons.
- Resized the canvas to make space for radio buttons thus faced the difficulties in getting the appropriate coordinates, thus scaled the coordinates appropriately in the original js file.
- As there was no option to clear a specific part of the screen, we had to spend a lot of time to add that functionality.

- Faced problems while displaying the dimensions of the lines and rectangles, solved it by adjusting the coordinates.

Conclusions

- Enjoyed learning a new language.
- We both learned how to collaborate and coordinate while working on a project.
- Learnt how to be persistent inspite of facing many challenges.

References

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