

# Main Report 1

**From: Priyankar Kumar**  
**Addressed To: Mrs. Srishti**

Input: Given the code of Aakash, Saumya and Rachana

Output:

1. Make a GUI and link Aakash and Saumya's work
2. Given the final shape files from the above process, generate a cross sectional view to visualize the plans of the various floors (dependent upon Ananth's work too)
3. Use Google Maps API and overlay the output of the above, linking it to actual co-ordinate system (latitude and longitude)
4. Have an orientation system with the compass (like in Google Maps)

Skills Required:

- For the GUI: PyQt and qgis
- Google Maps: python and the docs
- Visualization: need to figure it out
- Learn to work with ogr

Work done so far (for week ending 22<sup>nd</sup> June)

- Built a simple GUI using PyQt that allows user to select a dxf files and visualizes the output shapefile of Aakash's work.

Work to be done

- Move beyond a simple GUI and build GUI as per Srishti ma'am's specification. Add button for selecting image file as well.
- Link Aakash's and Saumya's code in the above process and get final shapefiles
- Convert Shapefiles to Image files
- Find a way to get the image files one top of another and be able to visualize it as a cross sectional plan front view.
- Overlay and link the above output to actual coordinates using Google Maps API.
- Get the orientation system to be able to view the cross section from different directions