

WEEKLY STATUS REPORT

To: Mrs. Srishti Srivastava
From: Aakash
Subject: Weekly Status Report
Period Ending: Week 19/12 – 24/12

ACTIVITIES COMPLETED THIS WEEK

Background Work

- Search for the Python Library that could facilitate the mathematical computation including those related to geometry like , intersection of lines, distance between lines and point and so on.
- Library found “SymPy”.
- Spent time on trying the features of the library and testing if all the operations needed for the implementation of the algorithm are available

Implementation Of Extraction Of Center-Line

- Started the Implementation of the extraction of the center line
- Wrote Utility Line Geometry functions : finding perpendicular distance between 2 line , finding the overlapping length between 2 line.
- Wrote Test-cases for the Line Geometry functions coded.
- Testing of the Utility functions on a small dxf drawing.
- Wrote for extraction of center line, given 2 line segments.
- Testing of the phase 1 on small dxf drawings.

Implementation Of Extension of Center-Line

- Wrote code for the extension of center-line based on the algorithm .
- Testing of the code on small dxf drawings.

Writing Into Shape Files

- Search for Library to write into shape file .
- Library found : osgeo.ogr , understanding the library .
- Writing a code to represent lines into a shape file.
- Debugging the Extraction Code for the errors discovered

after printing lines into a shape file.

ACTIVITIES IN PROCESS	NEXT ACTION
➤ Improvements in the algorithm.	

ACTIVITIES TO BE DONE IN NEXT WEEK
➤ Extension of the algorithm to cover the cases left due to our assumption “1 wall line can be associated with only 1 Center-Line” .

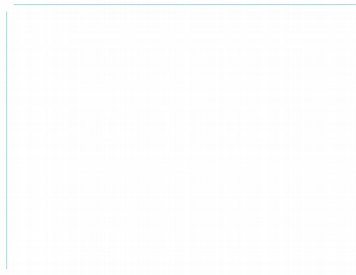
ISSUES FOR IMMEDIATE ATTENTION
➤ --None--

KEY TEAM INTERDEPENDENCIES
➤ --None--

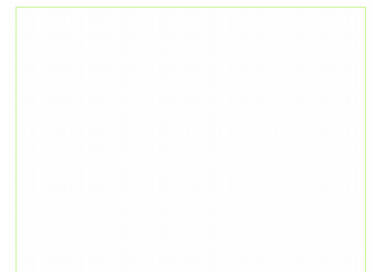
Results achieved so far :



Original Drawing



Normal Center-Line Extraction



New Algorithm Center-Line Extraction



Original Drawing



Normal Center-Line Extraction



New Algorithm Center-Line Extraction