Activity diagram

Start Node ●

Enter the length and width of world

◇

Check if the length and width are positive

◇ — No → Modify length and width

Yes

Enter the world state

Enter the robot pose

◇

Check if the robot pose within world boundaries & outside obstacle space

◇ — No → Modify robot pose

Yes

Enter the goal pose

◇

Check if the goal pose within world boundaries & outside obstacle space

◇ — No → Modify goal pose

Yes

Select planner

Random planner ← ◇ → Optimal planner

Enter max number of steps

Run Random planner

Run Optimal planner

◇

Path found?

◇ — No

Yes

Display the trajectory on the map

Save the trajectory in a text file

◇

End Node ◉