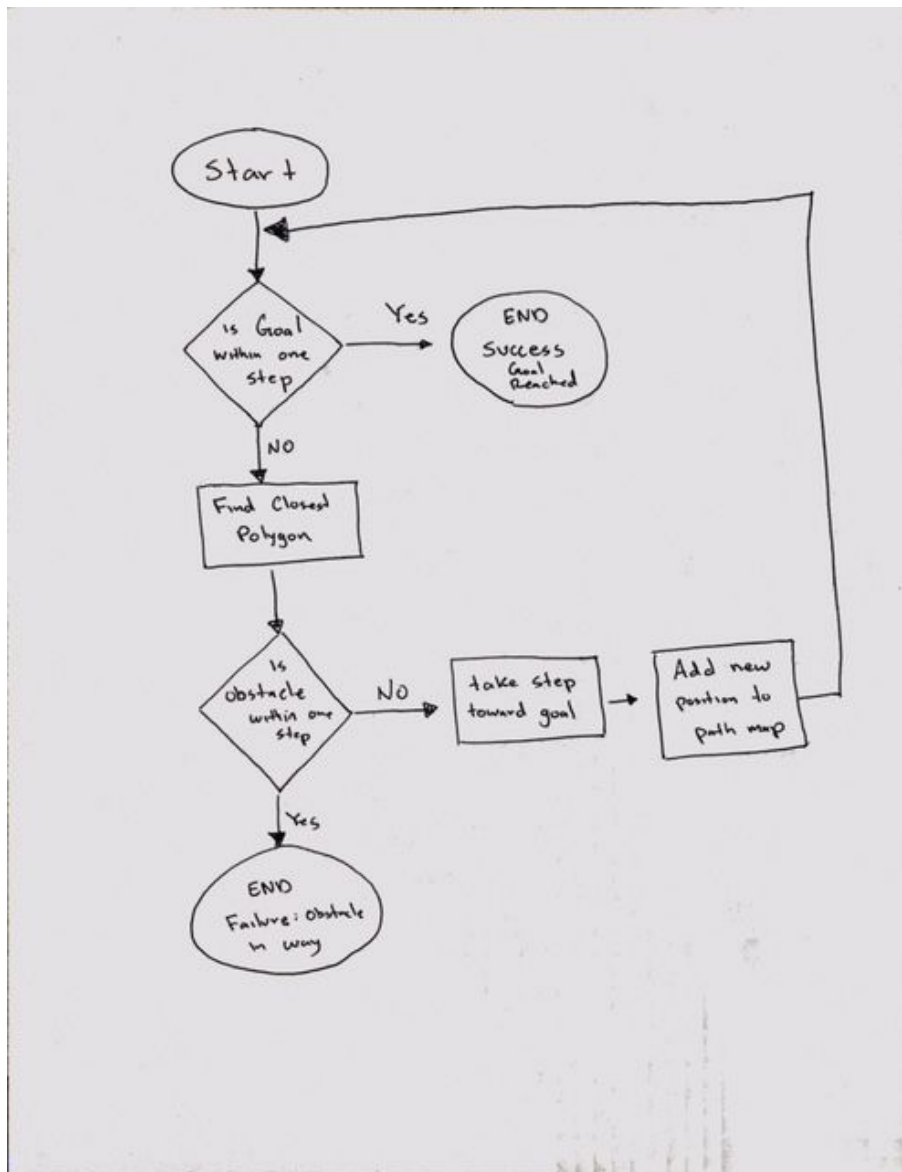


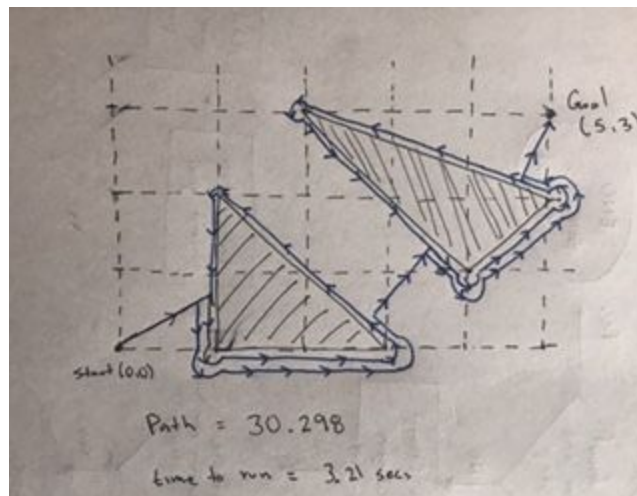
Jesus Adrian Gutierrez
ME 145 - Robotics Planning
Collaborator- Eric Chin

Lab 2

Flow Chart for BUG BASE ALgorithm



The flaw in the bug base algorithm is that if an obstacle is in proximity of the robot the program will end in failure. In order to make this program complete we need to modify the algorithm to be able to deal with these obstacles. The idea is instead of ending when the robot encounters an obstacle. The robot shall compute the vector tangent to the surface of the obstacle, using a function like `computeTangentVectorToPolygon`. After the robot should take a step in the direction of the tangent vectors. Repeating these two steps over and over until the obstacle is no longer in between the robot and the Goal end point.



Path = 30.298

Runtime = 3.21 s