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Deliverables:

- Mapping, Lead: Kieran, Deadline: 4/30
 - Implement manual mapping (copy from lab 5)
 - Implement autonomous mapping algorithm
- Localization, Lead: Andrew, Deadline: 4/9
 - Implement Odometry using Webots GPS
- Vision, Lead: Andrew, Deadline: 4/23
 - Implement Color blob detection
- Manipulation, Lead: Mateo, Deadline: 4/30
 - Implement trajectory algorithm for arm using hard coded points
 - Implement IK algorithm for teleoperation in cartesian space
 - Implement teleoperation in cartesian space
- Navigation, Lead: Kieran, Deadline: 4/23
 - Implement manual driving (teleop) (copy from lab 5)
 - Implement A* (copy from hw or lab?)
 - Implement RRT (copy from hw)

In order to show that we completed these deliverables we will create a video demonstrating them. For the manual and autonomous mapping we will show the robot driving around the map and a semi real time update of the map that is created. For localization we will print out the robot coordinates using odometry and the WeBots GPS. For vision we will show how the robot can correctly identify the proper color blocks to pick up. For manipulation we will show the robot picking up the blocks using hard coded points and the IK algorithm. For navigation we will show the robot moving around the map and the path created by each algorithm to get it to those points. For all of these we will also show the relevant code snippets/algorithms