Team 20

Lab number 4

Testing Client Functionality

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By signing below, each group member approves of this document and contributed fairly to its completion.

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On our honors, as students of the University of Virginia, we have neither given nor received unauthorized aid on this assignment.

*Raymond Tang, Andrew McMillion, Archit Rupakhetee, Tyler Lenig*

# Contents

## Test Client Functionality

This control-station testing platform simulates communications with a mobile robot by choosing random operations from a hard-coded table of legal operations and then sending it to the robot. The robot tries to interpret the command, which may have been subjected to interference; if the message cannot be interpreted, the robot requests a resend. The robot gives up on an order after a set number of retries. If the message is successfully decoded, the robot returns the English description of the command and then readies to receive another one after sending its current telemetry data to the base station.