

ECE315 – Lab # 5

Test Plan

Test Information:

Trivial Cases That Should Succeed:

- Rotations > 0 and Rotations ≤ 10000 .
- Direction set to clockwise or counter-clockwise.
- Mode set to full or half
- To move motor, rotations, direction, and mode must all be correct.
- Whitespace preceding and/or following a single valid number in the rotations field must be considered valid.
- Motor moves only after Submit Motor Values is clicked
- Motor movement is correct
- LCD string entries from 1-48 in length
- LCD string is written to LCD after pressing submit LCD string button
- Keypad is read after pressing Read Keypad
- Key read should be reflected in image
- Photocell is read after pressing Read Sensor
- 0 segments = dark, 12 segments = very bright
- All 4 table cells change values only after the buttons are clicked

Cases That Should Fail:

All cells:

- Reloading the webpage changes nothing

Rotations text field tests:

- Non-numeric characters in text field anywhere, invalidates the entire submission
- Negative numbers in the text invalidates the entire submission
- Whitespace between two or more valid numbers in the text field invalidates the entire submission
- Zero in the text field invalidates the entire submission
- Floating point numbers invalidates the entire submission
- Very long strings should be rejected and should not cause bizarre server behavior.

- Rotations > 10000
- Empty field invalidates the entire submission

LCD text field tests:

- Very long strings should be rejected and should not cause bizarre server behavior
- Non-printable characters should be rejected HEX 20 – HEX 7F only
- Empty Field
- String length > 48