SCR Communications Protocol

Modes:

Normal Operation

Broken Connection

Events:

Send Message

Receive Message

Await Message

Check Format

Macros (variables):

Message – character array following specified format

Format Correct – boolean, message passes format check

Message Sent

Message Received

RISKS:

How to deal with sequence of messages?

What if message is not received? How do you make sure it is sent again?

How does it know how long button was pressed?

Functional Specification for Base Computer

Modes:

Laura: Awaiting Connection (connection lost)

Steven and David: Normal Operation (connected and capable of communication with robot)

Jireh: No connection (user ends connection, not trying to get connection)

Events:

keyPressed

Macros (Variables):

Connection

RISKS:

Dealing with autopilot

How smart to make the robot?

Follow line – set line before or after clicking button

**Mode:**

**Awaiting Connection**

Events:

Connection Received: Base computer connected to robot computer

Condition: @T(connection\_received)

-change from Awaiting Connection Mode to Normal Mode

Connection Lost: Base computer does not receive connection to robot computer (turned off or timed out)

Condition: @F(connection\_received)

-change from Awaiting Connection Mode to No Connection Mode

Macros:  
Connection