Sequence Diagrams

The following diagrams provide a sequence of actions in order to complete a task. The tasks are broken into 6 components based on the potential states of the robot. Initially there is the startup state which occurs when the robot receives the start signal, which has yet to be determined by the competition. The following state is an ongoing state having to do with navigation around the course. Thus it is named the navigation state. The last four states have to do with each of the games; a Simon state, Etch A Sketch state, Rubik’s cube state, and a playing card state. All of the states require preconditions and post conditions in order to enter and exit the state. The specific conditions have yet to be determined, but in general the main task of each state must be completed before the robot transitions to the following state. IE before the robot can exit the Simon state; it must have completed the task first.

The following figure provides the sequence of general activities for the startup state of the robot.



The following figure provides the sequence of general activities for the navigation state of the robot.



The following figure provides the sequence of general activities for the Etch A Sketch state of the robot.



The following figure provides the sequence of general activities for the playing card state of the robot.



The following figure provides the sequence of general activities for the Rubik’s cube state of the robot.



The following figure provides the sequence of general activities for the Simon state of the robot.

