



S.A.T.I.R.E. Milestone 4

Software Team

Faculty Sponsor

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Client

Dr. Stephen Wood



Milestone 4 Task Matrix

Task	Complete %	Taylor	Sean	Robert	Clayton	To do
1. Arduino Code	25%	5%	10%	5%	5%	Finish code that connects arduino with MOOSDB
2. Hardware Install	20%	5%	5%	5%	5%	Waiting on meeting with Dr. Wood
3. Mission Planner	50%	10%	10%	10%	20%	Interfacing with gui and adding more behaviors/config blocks.

Milestone 4 Discussion

- Basic arduino code is done but have to be modified
- No access to hardware so have worked on simulations
- Interface sensor controller MOOS Apps with the arduino code.
- Mission planner will generate MOOS missions based on user input (GPS coords, etc.)

Arduino Code

- Need to finish code for use with MOOSDB
- Receiving Arduino Mega from client

Hardware Install

- Meet with client this week
- Get materials needed to continue

Mission Planner

- Main form presents options to add behaviors or configuration blocks.
- Dialog boxes for each behavior and config block for user input of behavior specific variables.
- select mission type for emergency system to determine response in event of system damage.
- Tables on gui to display both behaviors and configs already added to the mission.
- Generate the .moos and .bhv files for transfer to the device.

Mission Planner Forms

MOOS Mission Planner - [Preview] - Qt Designer

MissionTitle

Mission Type

Covert
 Open

Behaviors

Configuration Blocks

Dialog - [Preview] - Qt Designer

Waypoint Behavior Points

Name

PWT

Capture Radius

Repeat

Speed

Slip Radius

Point

Order

Deploy
 Return
 Cycle

Milestone 5 Task Matrix

Task	Taylor	Sean	Robert	Clayton	To Do
1. Create Poster for Showcase	25%	25%	25%	25%	Design Poster
2. Implement, test, and demo sonar obstacle detection	30%	30%	20%	10%	Implement object recognition and decision process.
3. Implement, test, and demo Emergency System	20%	20%	30%	30%	Continue work on emergency system, focus on sensor data

Milestone 5 Discussion

- Add more sensors to the controller and arduino. Test sensor to MOOSDB communications. Test MOOSDB to client app communication on the sensor channels.
- Implement polygon generation from sonar input.
- Continue work on the emergency system. Implement responses. Implement disk wipe and interface with comms system.
- Finish adding the Config blocks and Behaviors to the planner and implement the GUI. Make adjustments post meeting with Dr. Wood.

Questions?

