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RMC - CSE Milestone 3

Liam Sapper



Contact & Meeting Information

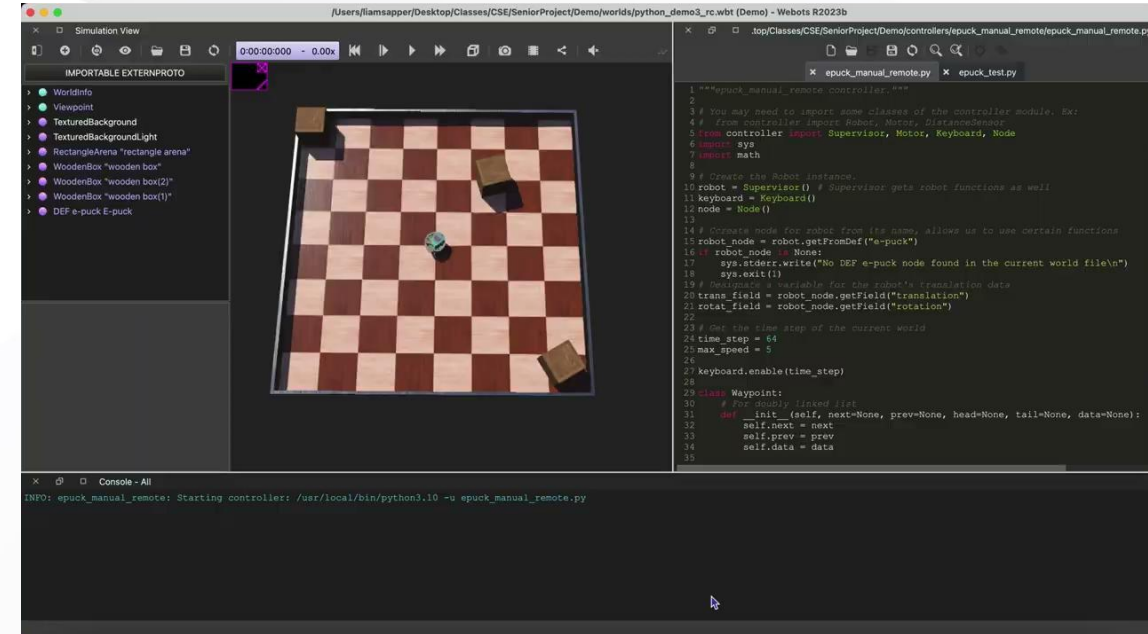
- CSE Project Member: Liam Sapper - lsapper2020@my.fit.edu
- Faculty Advisor: Dr. Marius Silaghi - msilaghi@fit.edu
- Client: FIT's Robotic Mining Competition team (RMC), and by extension, NASA (the host of the Robotic Mining Competition).
- Head of RMC project:
 - Sidney Causey (scausey2021@my.fit.edu) - Aerospace Engineering
- Meeting Times: Wed. 4pm-5pm; Fri. 3pm-3:30pm

Progress Matrix

TASK	COMPLETION %	TO DO
1. Implement code in simulator that passes test vectors	50%	Get automatic movement working, have robot send correct signals at each waypoint
2. Implement unit tests for verifying simulated code	50%	Get automatic movement working, have robot send correct signals at each waypoint
3. Continue researching algorithms for autonomous tasks, look up libraries for selected algorithms	50%	Halted, as this may not be relevant anymore without needed sensors
4. Implement/adjust any missing/existing techniques and tasks.	70%	Finish development of nav system

Task 1 + 2

- Test vectors finalized
- Waypoint data structure created
- Waypoints saved correctly
- Angle towards each waypoint calculated
 - Robot still won't turn



Task 3

- Team has urged me to pause research
 - Initial research relied on proximity sensors- not being used on robot
 - New direction: image analysis?

Task 4

- As stated before, test vectors finalized
- More familiarized with hardware
- Actual software development
- Additionally
 - Assisted RMC with their PDR document and presentation

Lessons Learned

- Good communication is essential
- Better abstraction
- Keep focus on own tasks
- Setbacks happen
- Don't get in my own head



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Thank you

