

Project Meeting Minutes

MTRX2700 Major Project

11am – 2pm 4th May 2021 (MTRX Lab)

1. Attendance:

- Matthew
- James
- Shigita

2. Purpose:

- Read through assignment sheet.
- Create GitHub Repo.
- Decide on means of communication.
- Decide on assistive technology.
- Design how technology can be modularised.
- Allocate modules/tasks to each group member.
- Schedule next meeting.

3. Previous actions:

- None.

4. Regular items:

- **Team updates:**
 - Matthew: began designing servo controller module.
 - James: began designing lidar measurement module.
 - Shigita: began designing matlab lidar data processing module.
- **Encountered issues:**
 - None.

5. New items for discussion:

- How are we going to design module so that they can interface with each other seamlessly and intuitively?
- Review lectures from weeks 6-8 to help with designing modular systems.
- Read up on PWM and lidar/servo datasheets.

6. Next Meeting: 11am – 2pm 11th May (MTRX Lab).

Project Meeting Minutes

MTRX2700 Major Project

11am – 2pm 11th May 2021 (MTRX Lab)

1. Attendance:

- Matthew
- James
- Shigita

2. Purpose:

- Finalise servo controller code design.
- Test servo controller code worked on during the week.
- Oral progress report from each member.
- Schedule next meeting.

3. Previous actions:

- Created repository.
- Created Facebook Messenger group chat for communication.
- Determined assistive technologies to use.
- Delegated modules for each member.

4. Regular items:

- **Team updates:**
 - Matthew: continued work on servo controller module.
 - James: continued lidar measurement module.
 - Shigita: continued matlab lidar data processing module.
- **Encountered issues:**
 - Issues in initialising PWM registers for servo controller.

5. New items for discussion:

- What type of functions are we going to need to control the lidar positioning?
- Review week 10 lecture to design test functions.
- How are we going to format lidar code for matlab processing module?

6. Next Meeting: 11am – 2pm 18th May (MTRX Lab).

Project Meeting Minutes

MTRX2700 Major Project

11am – 2pm 25th May 2021 (MTRX Lab)

1. Attendance:

- Matthew
- James
- Shigita

2. Purpose:

- Test and finalise servo controller module.
- Make solid progress on lidar module.
- Test lidar/pwm code.
- Finish matlab module design.
- Oral progress report from each member.

3. Previous actions:

- Finished servo controller module design.
- Tested servo controller and lidar code.

4. Regular items:

- **Team updates:**
 - Matthew: putting final touches on servo code.
 - James: made good progress on lidar module.
 - Shigita: also made good progress on matlab module.
- **Encountered issues:**
 - Issues with initialising and test pwm and lidar signals.
 - Was unable to go through with scheduled meeting due to group member personal matters.

5. New items for discussion:

- How will we be implementing testing procedures into our code?
- How are we going to integrate individually-worked modules into one codewarrior project?

6. Next Meeting: 12pm – 4pm 30th May (online).

Project Meeting Minutes

MTRX2700 Major Project

12pm – 5pm 30th May 2021 (online)

1. Attendance:

- Matthew
- James
- Shigita

2. Purpose:

- Push complete servo controller module onto repository.
- Build functions for lidar code.
- Debug lidar code.
- Continue writing matlab code.
- Progress report over text.

3. Previous actions:

- Test and finalise servo controller code.
- Tested lidar/pwm.
- Matlab module design complete.

4. Regular items:

- **Team updates:**
 - Matthew: pushed servo controller module onto repository.
 - James: progressing through lidar code. Ensuring it all works correctly
 - Shigita: continued work on matlab code.
- **Encountered issues:**
 - Issues with overflow interrupt and capturing rising/falling edge using polling method.

5. New items for discussion:

- Preparing project documentation (minutes, README.md).
- Prepare presentation.
- How are we going to integrate individually-worked modules into one codewarrior project?

6. Next Meeting: sporadic throughout day 31th May.

Project Meeting Minutes

MTRX2700 Major Project

12pm – 2pm 31th May 2021 (online)

7. Attendance:

- Matthew
- James
- Shigita

8. Purpose:

- Finalise lidar code
- Finalise matlab code
- Push both modules onto repository
- write presentation
- report on progress

9. Previous actions:

- Test and finalise servo controller code.
- Built functions for lidar code.
- Test/debug of lidar code.
- Pushed servo controller module onto repository.

10. Regular items:

- **Team updates:**
 - Matthew: work on documentation.
 - James: finalising lidar code and integrating modules.
 - Shigita: finalising matlab code. Work on presentation.
- **Encountered issues:**
 - Minor hiccups when integration code into one project.

11. New items for discussion:

- How are we going to demonstrate the technology within 10-minute presentation?
- Is code fully-functional, demonstrates proof-of-concept, etc.
- Check through code comments and documentation for errors (both logical and spelling).

12. Next Meeting: 11am-2pm 1st June (MTRX2700 Lab demo/presentation).