

**Date**

15-10-2020

**Start time**

16:00:00

**End time**

17:00:00

**Meeting type**

Alone work time

**Attendance**

- Ratthamnoon Prakitpong

**Notes**

- After supervisor meeting, wrote new draft of evaluation criteria section of proposal
- Categorize criterias by component of final project, not evaluate project as a whole
- Waiting to discuss with team

**Date**

15-10-2020

**Start time**

15:00:00

**End time**

16:00:00

**Meeting type**

Supervisor meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Talked to supervisor about proposal draft
- Recommended clarifying evaluation criteria
- Recommended taking out value equation
- I think that given sponsor meeting, it makes more sense to not evaluate final product but individual components of final product
- Team will revise that section of proposal in the upcoming week

## Date

22-10-2020

## Start time

17:54:44

## End time

18:26:37

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Populating Github repo with to-dos so other members can see what technical tasks are to be done
- Asked Gianni to put his expected tasks on there as well

## Date

23-10-2020

## Start time

14:00:00

## End time

14:47:11

## Meeting type

Team meeting

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Impromptu meeting to talk about software system
- Discussed this system design over UML diagram
- Came up with classes relevant to each function in system
- Decided that using events to communicate between classes will be good for now
- Created issue tickets for new todos from this meeting

**Date**

26-10-2020

**Start time**

22:30:00

**End time**

23:00:00

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Team meeting about technical work progress
- Talked about Github issues, project, and pull request
- Most of progress has been on project management side, setting up the repo for easier future work
- Gianni can help Hassan and Kevin catch up to speed on how to use Github later

## Date

26-10-2020

## Start time

22:03:57

## End time

22:24:51

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Code review of Gianni's controls code

**Date**

27-10-2020

**Start time**

11:22:36

**End time**

13:17:29

**Meeting type**

Alone work time

**Attendance**

- Ratthamnoon Prakitpong

**Notes**

- Work on #9, setting up event system to decouple classes
- Fixed #7 and #14 along the way
- Just set up a PR, waiting for review and merge

**Date**

27-10-2020

**Start time**

10:55:18

**End time**

11:22:16

**Meeting type**

Alone work time

**Attendance**

- Ratthamnoon Prakitpong

**Notes**

- Continue code review
- Pulling Gianni's code to run
- Fixed a minor bug and approved code to merge



## **Date**

28-10-2020

## **Start time**

16:06:48

## **End time**

18:08:51

## **Meeting type**

Team meeting

## **Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## **Notes**

- Prepare for concepts presentation tomorrow
- Practiced presenting the slides by myself
- Will practice as a team tomorrow morning

## Date

29-10-2020

## Start time

14:00:42

## End time

14:57:51

## Meeting type

Team meeting

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Team meeting to practice concepts presentation
- Presented to stakeholders at 2:30pm
- Answered questions from stakeholders, they really like the python stuff
- Went well

## Date

10-11-2020

## Start time

14:02:02

## End time

14:49:26

## Meeting type

Team meeting

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Gianni and I will continue working on assigned issues on issue page
- Kevin and Hassan will get started on mech design, keeping work Google Drive
- Selected paper for review (class assignment)

## Date

12-11-2020

## Start time

15:00:08

## End time

15:32:39

## Meeting type

Supervisor meeting

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Meeting with Vlad
- Talked about critical function prototype
- Talked about log book
- Talked about reimbursement
- Talked about presentation on Nov 19th (next week, this time)

## Date

17-11-2020

## Start time

20:59:53

## End time

23:41:30

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Tried connecting motor MCU to laptop, and it works like a serial device
- Now considering how to run it from python
- Also tried getting Raspberry Pi running, need to continue in next session

## Date

18-11-2020

## Start time

19:41:27

## End time

22:28:54

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Just configuring Raspberry Pi with stuff

**Date**

19-11-2020

**Start time**

14:00:12

**End time**

14:31:11

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Practice for design paper review presentation
- Talked to Gianni a bit about error when running code on Raspberry Pi

## Date

20-11-2020

## Start time

14:30:00

## End time

18:41:23

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Got Raspberry Pi set up
- Wrote SerialDevice class for serial connection to board
- Works, waiting for Gianni review PR



## Date

26-11-2020

## Start time

21:33:06

## End time

22:06:06

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Installing Solidworks 2020

## **Date**

28-11-2020

## **Start time**

19:03:43

## **End time**

21:39:45

## **Meeting type**

Alone work time

## **Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## **Notes**

- Work on critical function prototype slides
- Will present motors movement calculation software
- Will review slides tomorrow

**Date**

01-12-2020

**Start time**

14:00:46

**End time**

15:32:44

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Team practice of critical function prototype presentation
- Present critical function prototype to class, went well
- Had a quick debriefing on the presentation

## Date

11-01-2021

## Start time

14:20:22

## End time

23:22:07

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Worked on CAD of 3D printed prototype
- Set up assembly and workflow
- Finished arm A
- Arm B and C are repeat process of arm A, so it's not that hard
- Still have to do motor mount and platform
- Put up a design review, now waiting for team members to review progress

## Date

12-01-2021

## Start time

12:00:58

## End time

12:24:06

## Meeting type

Team meeting

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Quick meeting to see where everyone is at with the project and their personal lives, gauge commitment
- For mech design: 80% certain for success [issues: unexpected travel plan (ex border), computer issues]
- For manufacturing: 20% certain [issues: lost time and can't catch up]
- For software: 90% certain, since current sw fairly developed [limitations: not checking edge cases (ex singularities)]
- Team can still get class deliverables done, but the project scope has to be reduced
-

**Date**

12-01-2021

**Start time**

12:30:40

**End time**

13:03:14

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Design review on 3D print prototype with Gianni
- Conclusion: part looks fine
- I'll work on arm B and C
- Gianni work on base and platform
- Both finish our parts by Friday, do another design review next week

## Date

12-01-2021

## Start time

08:00:01

## End time

09:25:30

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Received significant news from 2/4 team members about personal emergencies
- Their issues aren't likely to go away before term ends, so I drafted an email to ask for reduced project scope
- Once other team members proofread it, I'll send it off

## Date

13-01-2021

## Start time

18:24:03

## End time

21:24:43

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Made arm B and C for 3d printed prototype
- Added Gianni's parts to assembly
- Put up a PR so the designs could be reviewed



**Date**

14-01-2021

**Start time**

15:00:51

**End time**

16:09:22

**Meeting type**

Supervisor meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Talked to Vlad about the things we emailed him about
- He's ok with reduced scope, but make us get final confirmation from Ahmad
- Talked to Gianni after the meeting about 3d printed prototype

## Date

20-01-2021

## Start time

12:00:14

## End time

15:51:32

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Worked on code to send microstep GCode from python software to motor board
- Put it up for review
- Went to get 3D printed parts from Gianni
- Assembling 3D parts so we can test python software
- Review Gianni's sheet metal design of SPM

## Date

25-01-2021

## Start time

14:56:36

## End time

15:57:27

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Review drawings of some parts for steel structure
- Wrote comments on PR #51

**Date**

02-02-2021

**Start time**

14:00:51

**End time**

15:15:04

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Design review with Markus
- Reviewed full size robot design
- Will go back and review designs

**Date**

04-02-2021

**Start time**

17:35:12

**End time**

23:58:39

**Meeting type**

Supervisor meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Update meeting with Vlad

## Date

04-02-2021

## Start time

14:57:09

## End time

23:58:09

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Went out to Lee's electronics to spec and buy bearings for 3DP prototype

## Date

06-02-2021

## Start time

18:05:17

## End time

23:57:05

## Meeting type

Alone work time

## Attendance

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## Notes

- Redesigned 3DP prototype to fit the bearings that I bought
- Put up a PR for other team members to review work

**Date**

08-02-2021

**Start time**

09:00:43

**End time**

09:53:36

**Meeting type**

Sponsor meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Meet with Ahmad to give project updates, keep confidence in team function and project progress
- Recapped 3DP prototype redesign and sheet metal design
- Met internally afterwards to talk about git



**Date**

19-02-2021

**Start time**

14:01:31

**End time**

14:42:46

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Update Hassan on technical work
- Need to match them up to dossier so we have things to submit

**Date**

25-02-2021

**Start time**

17:30:23

**End time**

18:18:48

**Meeting type**

Supervisor meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Update meeting with Vlad, talked about drawings, 3DP prototype, Adams
- Hassan needs to work out how to finish dossiers since project trajectory doesn't fit expected design process

**Date**

14-03-2021

**Start time**

21:30:23

**End time**

23:47:44

**Meeting type**

Alone work time

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Wrote safety assessment, sent it to Vlad
- Wrote draft of Dossier 11 (3D printed prototype), will fill in details tomorrow

**Date**

15-03-2021

**Start time**

12:03:33

**End time**

17:07:26

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Came up with set of movements to experiment on
- Moved 3DP prototype by this set of movements to visually compare with simulation
- Ran into some issues, will start again tomorrow
- Helped out a bit with writing design review slides

**Date**

16-03-2021

**Start time**

14:30:20

**End time**

16:09:07

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Prep for presentation
- Discussed some issues with Gianni regarding test result
- Presented, got some feed back from Markus regarding parts specifying

**Date**

12-04-2021

**Start time**

9:00:00

**End time**

17:00:00

**Meeting type**

Alone work time

**Attendance**

- Ratthamnoon Prakitpong

**Notes**

- Make final fixes to 3DP prototype
- Run experiments on 3DP prototype
- Found that our control software can move platform accurately
- Record findings on google drive

**Date**

13-04-2021

**Start time**

9:00:00

**End time**

17:00:00

**Meeting type**

Alone work time

**Attendance**

- Ratthamnoon Prakitpong

**Notes**

- Worked on loading calculations based on comments received from Dr Noh's consulting
- Found that motors can support static and dynamic load (at low speed) of 10 kg
- Uploaded calculations to google drive and github

## **Date**

14-04-2021

## **Start time**

9:00:00

## **End time**

17:00:00

## **Meeting type**

Team meeting

## **Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

## **Notes**

- Worked on final presentation slides with alone and with team members
- Presented to Markus, Dr Nima, and Dr Vladan
- Went well
- Worked on 12A (video) slides afterwards



**Date**

15-04-2021

**Start time**

9:00:00

**End time**

17:00:00

**Meeting type**

Team meeting

**Attendance**

- Ratthamnoon Prakitpong
- Gianni Co
- Hassan Iqbal
- Kevin Yang

**Notes**

- Worked on 12A (video) submission
- Finished writing video slides, scheduled time with team members, and recorded video
- Spent time editing video, and uploading
- Worked on privacy issues with Dr Vladan

**Date**

16-04-2021

**Start time**

9:00:00

**End time**

17:00:00

**Meeting type**

Alone work time

**Attendance**

- Ratthamnoon Prakitpong

**Notes**

- Finished finished electrical schematic of final prototype, and uploaded it to github
- Finished outstanding software issues
- Cleaned up project repository, and created v1.0 release of project
- Reviewed and added minor changes to final report