

## ECE570: Control Theory

Monsoon 2020

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### Group Project: Minutes of meeting

#### Project#2: Radar control in 3-dimensional space

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### Meeting#1

**Note:** First meeting between the group members; after the Mid Sem presentation

1. **Date & Time:** 14th November, 2020. 2100 hours

2. **Meeting Agenda:**

- To evaluate the project task received, and deciding on the approach to be taken for the solution.

3. **Present:** All members

4. **Meeting Summary:**

The challenge was de-compiled into modules to be worked on.

- The need for modifying the initial model that was only tracking one static input to a model that tracks a dynamic point system.
- Conclusion reached that we also need to create a method to convert the input (points now,) to desired angles.
- Discussion on how to create a 3D model in matlab.

Finally, it was agreed to put the work on pause while the class syllabus progressed.

5. **Conditions for the next meeting date:**

The next meeting was scheduled to be held on 1st of December, 2020.

## Meeting#2

**Note:** None

1. **Date & Time:** 1st December, 2020. 2000 hours
2. **Meeting Agenda:**
  - To evaluate the current understanding of the system of equations to continue the work done and to start working on modeling and other official tasks.
  - Controller from the first part of the project was updated, and integrator introduced.
3. **Present:** All members
4. **Meeting Summary:**
  - The equations desired were reviewed and finalized upon
  - The task of writing the scripts and simulink model was started.

## Meeting#3

**Note:** None

1. **Date & Time:** 8th December, 2020.2000 hours
2. **Meeting Agenda:**
  - To the evaluate the work done on the model and track the current performance of the system.
3. **Present:** All members
4. **Meeting Summary:**
  - The simulink model is found to be working per standards.
  - The 3D model is decided to be updated from a naive model to a realistic model which also accounts for motor dimensions.
5. **Conditions for the next meeting:**

Would be the final meeting.

## Meeting#4

**Note:** Last Meeting

1. **Date & Time:** 16th December, 2020. 2000 hours
2. **Meeting Agenda:**
  - To finalize all the work and prepare the reports & other deliverables.
3. **Present:** All members
4. **Meeting Summary:**
  - The final run of the model was concluded. The model works.
  - Other deliverables prepared.
5. **Conditions for the next meeting:**  
None