CubeSat Project Logbook

Team B

Claudio Vestini

# Common part

## Team members

Claudio Vestini

Alex Berresford

Fizza Naqvi

Hani Moussa

## Code of Conduct

This Code of Conduct establishes guidelines for behaviour and collaboration among members of the [Project Name] group. We aim to create a respectful, inclusive, and productive environment for all participants.

Please continue from here.

## Summary of the project and objectives

This project…

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# 2024-21-10 First meeting

Present: Claudio Vestini, Hani Moussa, Alex Berresford, Fizza Naqvi

Apologies: None

Location and time: RSL Study Room 4 at 14:00

Author of minutes: Claudio Vestini

* Discussion of project organisation:
  + File system (GitHub repository, GitHub Projects roadmap (Gantt chart))
  + Google Drive folder
  + Report LaTeX file
  + References (.bib master file)
  + Meetings and WhatsApp group for communications
* Allocation of tasks (initial draft):
  + Claudio:
    - Aerothermal
    - Instrumentation
  + Hani:
    - Electronics
    - Interfaces
  + Fizza:
    - Trajectory
    - Internal heat generation
  + Alex:
    - Mechanical
    - Launch service provider
    - Launch environment
* Discussion of scientific goals:
  + CubeSat constraints dictated by launch service provider (size, weight, center of mass, electronics, stress response) - Alex
  + Ionospheric disruption due to re-entry impact - Fizza
  + Consideration of Magnus Effect during hypersonic re-entry – Alex
  + Budget analysis - everyone
  + Model Predictive Control for maintaining trajectory attitude (both in orbit and during re-entry). Use of cold gas thrusters as actuators - Claudio
  + Black box (GPS-tracked, ablative-protected) for retaining re-entry data – Alex
  + Materials testing for re-entry – Hani
  + Communications: information transfer during blackout – Claudio
  + Modelling the aerothermal environment in different re-entry stages - Claudio

### References

### Actions

* Discuss scientific goals with supervisors

### Deadlines

# 2024-10-05 Second meeting

Present: Name1, Name2, Name3

Apologies: Name4

Location and time: … at …

Author of minutes: Name 2

Content goes here

### References

### Actions

### Deadlines

# 2024-10-05 Third meeting

Present: Name1, Name2, Name3

Apologies: Name4

Location and time: … at …

Author of minutes: Name 2

Content goes here

### References

### Actions

### Deadlines

# 2024-10-05 Fourth meeting

Present: Name1, Name2, Name3

Apologies: Name4

Location and time: … at …

Author of minutes: Name 2

Content goes here

### References

### Actions

### Deadlines

# 2024-10-05 Fifth meeting

Present: Name1, Name2, Name3

Apologies: Name4

Location and time: … at …

Author of minutes: Name 2

Content goes here

### References

### Actions

### Deadlines