

# CubeSat

## Team Members:

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**Faculty Advisor:** Dr. Silaghi ([msilaghi@fit.edu](mailto:msilaghi@fit.edu))

**Client:** Kennedy Space Center

Task	Completion %	To do
1. Design Document	100%	n/a
2. Implement test application	99%	Recover lost work
3. Simulation	30%	Finish setting up environment in Unity and begin adding assets
4. Final Application Development	30%	Finish framework and begin implementation

## **Discussion:**

1. The design document was fully completed and includes an overview of the system design implementation as well as pseudo code for a test application created in OpenSatKit.
2. After an unforeseen crash of the virtual machine that I have been developing the test application on, I lost several hours of work. Thankfully I had backed up the machine earlier in the day so all of my work was not lost, only the changes from that day. I am currently in the process of recreating what I had for the test application so that I can easily adapt it for the final application.
3. I have been learning more about Unity and attempting to recreate the eventual CubeSat in Unity but have had some trouble understanding some of the aspects of the program. I am currently trying to import assets in and get them to interact correctly with one another.
4. For the development of the final application, I am currently working on a framework that I can expand out to accommodate every type of sensor we plan on using in the future, as due to learning new information on interactions of different systems in space, as well as slight modifications and changes to the design of the science aspect of the mission, different sensors will be needed. I almost have it functional for a temperature sensor that I have implemented just by generating a random number to feed into the program.

**Plan for next milestone:**

<b>Task</b>
1. Recover test application
2. Work on Simulation
3. Final Application Development

**Client Meetings:**

<b>Date</b>	<b>Purpose</b>
11/2/2020	Discussed current project status with Dr. Demoret and client
11/10/2020	Discussed science payload ideas and potential
11/13/2020	Meeting with small satellite professional and other university teams building CubeSats
11/19/2020	Shared updated CubeSat design with client and went over lighting requirements for microgreens

**Faculty Advisor Meeting:**

11/20/2020 -

Faculty Advisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_