



DOR-15

Final Design Project Progress Report

GROUP 1

AUTHORS

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MEEG-112 Engineering Graphics and CAD
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1 Project Schedule

1.1 Timeline Status Report

So far in our project, we have completed the modeling for all parts in our project and estimate we are at 60% completion. Next week, following Exam #2, we will begin the assembly and drawings of DOR-15 and submit for final approval. Each team member will contribute to the final assembly and drawing creation of our drone.

1.2 Upcoming Tasks and Milestones

Some upcoming tasks we have planned are our assembly of our drone on Solidworks as well as drawing creation. We plan to achieve this following the thanksgiving break on 11/28. We want to make sure all our drone parts are done and completed prior to the final deadline to give our team plenty of time to resolve an issues ahead of finals. All main components have been completed and modeled.

Task Name	Start	End	Duration	Status	Dependent Tasks	Assigned
Concept Sketch	10/30/24	10/30/24	00:02:00	Complete	N/A	Grant/Huy
Components Design	11/07/24	11/21/24	14:00:00	Complete	N/A	All Members
Assembly	11/21/24	11/28/24	07:00:00	In Progress	Pending	Grant/Huy/Devin
Detailed Drawings	11/07/24	11/21/24	14:00:00	In Progress	Pending	All Members
Assembly Drawings	11/21/24	11/28/24	07:00:00	In Progress	Pending	Grant/Huy/Devin
Motion Analysis	12/05/24	12/5/24	00:05:00	Pending	Pending	Grant
Report	11/07/24	12/05/24	14:00:00	Pending	Write Documentation	All Members
Video	12/05/24	12/05/24	00:05:00	Pending	N/A	Devin

Table 1: Project Schedule as of 2024-11-30

1.3 Action Items

Our current action items are assembling all parts together and creating drawings for each part. We plan to work on this prior to the presentation on 12/5. Huy, Grant, and Devin will each do the detailed drawings for each part that was made, and then a final assembled drawing will also be made. We expect this to take approx 2 hours but have budgeted for much longer. We then will do the motion analysis and video for the project, explaining DOR-15 and how it would succeed as a potential holiday gift for children. We expect the recording of this video to take approximately 1 hour. Lastly, we will compile a finalized report of our findings and any future improvements that can be made in terms of manufacturing.

1.4 Project Risks, issues, etc.

Potential issues that we are going to run into is the clearance of the propellers on the hat as well as realistically connecting the motors to a central system that would not interfere with a consumer's head being in the way. We plan to resolve this issue during the assembly and make changes to parts as necessary as we are trying to stay as close to the reference model as possible. We believe that this drone is capable of being entertaining as well as multifunctional for children and parents.