

Project Deliverable E: Project Schedule and Cost

GNG 1103 – Engineering Design

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Introduction

This deliverable focuses on the development of our project plan and a schedule for prototyping and testing the solution to our customer's needs. Furthermore, we will show our agenda by using a Gantt diagram, which will include the importance of a project's highlight and need from now until the end of the semester. There will be three prototyping deliverables. The prototype will be a simple concept of how a greenhouse will assemble, and it should be built using materials that cost very little. The second prototype should be of an analytical subsystem to confirm whether our design will work or not. Lastly, the third prototype will be a completely functional description of our solution to the client. This report will also specify an estimation of the costs and the modules that will be essential for the three various prototyping deliverables. In other words, it will focus on effective cost management to ensure that a project is completed on budget and based on how it was planned. Proper Cost management is a prime determinant of project outcomes, which will enable us to make optimal use of our resources, make data-driven decisions about the project and the dangers and measure financial performance.

Cost management activities are conducted throughout the project life cycle and below as follows.



(Marker)

Project Plan

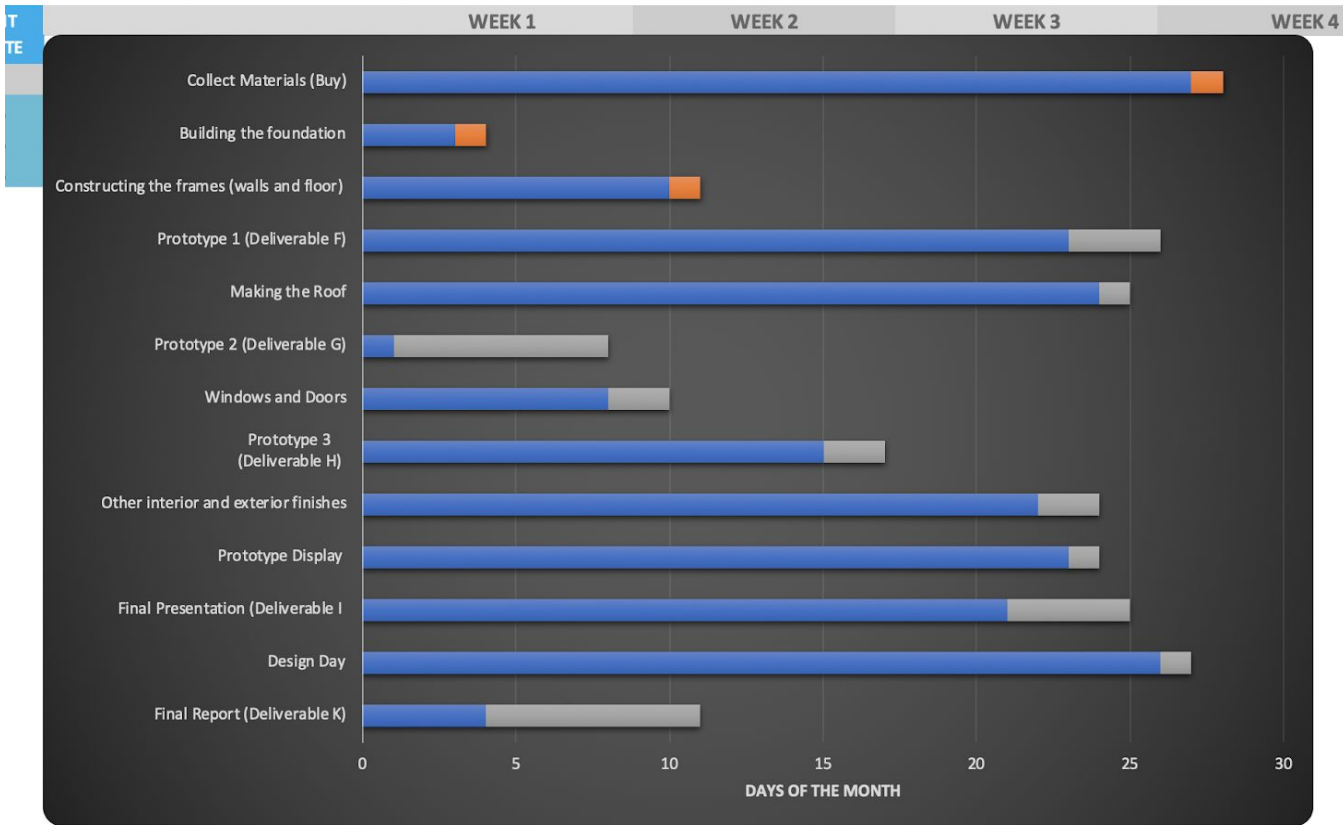
#	Task	Estimated Duration	Who is Responsible
1	Collect Materials (Buy)	1 day	Divine Ciroma, John Zhou Saad Rana
2	Building the foundation	1 day	Divine Ciroma John Zhou Omolola Omowa
3	Constructing the frames (walls) and floor	2 days	Magd Abdelmelek Saad Rana Brian Zhau
4	Prototype 1 (Deliverable F)	3 days	Omolola Omowa Magd Abdelmelek Saad Rana
5	Making the Roof	1 day	Divine Ciroma John Zhou Brian Zhau
6	Prototype 2 (Deliverable G)	7 days	Divine Ciroma John Zhou Omolola Omowa Magd Abdelmelek
7	Windows and Doors	2 days	Omolola Omowa Magd Abdelmelek Saad Rana Brian Zhau
8	Prototype 3 (Deliverable H)	2 days	All
9	Other interior and exterior finishes	2 days	All

10	Prototype Display	1 day	Divine Ciroma Magd Abdelmelek Saad Rana Brian Zhou
11	Design Day	1 day	All
12	Final Presentation (Deliverable I)	4 days	All
13	Final Report (Deliverable K)	1 week	All

Gantt Diagram of Project Plan

* = an automatically calculated cell

TASK NAME	START DATE	DAY OF MONTH*	END DATE	DURATION* (WORK DAYS)	DAYS COMPLETE*	DAYS REMAINING*	TEAM MEMBER	PERCENT COMPLETE
Project Task								
Collect Materials (Buy)	1/27	27	1/27	1	1	0	Divine Ciroma, John Zhou, Saad Rana.	100%
Building the foundation	2/3	3	2/3	1	1	0	Divine Ciroma, John Zhou, Omolola Omowa	100%
Constructing the frames (walls and floor)	2/10	10	2/10	1	1	0	Magd Abdelmelek, Saad Rana, Brian Zhou	100%
Prototype 1 (Deliverable F)	2/23	23	3/1	3	0	3	Omolola Omowa, Magd Abdelmelek, Saad Rana	0%
Making the Roof	3/24	24	3/24	1	0	1	Divine Ciroma, John Zhou, Omolola Omowa	0%
Prototype 2 (Deliverable G)	3/1	1	3/8	7	0	7	Divine Ciroma, John Zhou, Omolola Omowa, Brian Zhou	0%
Windows and Doors	3/8	8	3/15	2	0	2	Omolola Omowa, Magd Abdelmelek, Saad Rana, Brian Zhou	0%
Prototype 3 (Deliverable H)	3/15	15	3/22	2	0	2	All	0%
Other interior and exterior finishes	3/22	22	3/23	2	0	2	All	0%
Prototype Display	3/23	23	3/23	1	0	1	Divine Ciroma, Saad Rana, Brian Zhou,, Magd Abdelmelek	0%
Final Presentation (Deliverable I)	3/21	21	3/25	4	0	4	All	0%
Design Day	3/26	26	3/26	1	0	1	All	0%
Final Report (Deliverable K)	4/4	4	4/10	7	0	7	All	0%



Cost Analysis

Item #	Material	Element of Structure	Quantity	Dimensions (ft.)	Unit Cost/\$	Total Cost/\$
1	Wood	Base	6	2x4x8	3.25	19.5
2	Plywood	Flooring	2	(11/32 inches) x4x8	15.53	31.06
3	Wood	Front and Back Frame (Walls)	12	2x4x8	3.25	39
4	Wood	Side Frame (Walls)	14	2x4x8	3.25	45.5
5	Metal	Door lock	1	6 (inches)	25.51	25.51
6	PCV	Roof Panels	3	2x8	15	45
7	Wood	Roof Frame	6	2x4x8	3.25	19.5
8	Vinyl Sheet	Wall coverings	1 roll	4.5x45 (16 mil thickness)	70	70
9	Vinyl	Gutters	4	10 ft	7.62	30.48
10	Vinyl sheet (Also used in 'Wall covering')	Door (interior)	1 roll	4.5x45 (16 mil thickness)	WHATEVER IS LEFT FROM THE MATERIAL	
11	Plywood	Door (exterior)	1	(11/32 inches) x4x6		
Total Cost Estimate					\$ 325.55 + tax	

Conclusion

The cost management plan used above helped us to define how to manage, control, and communicate a project's costs to complete the project on budget. It also enabled us to identify the individuals responsible for each task and also establishes the methodologies by which we will use to control project cost variations. We tried our best to avoid cost variance. A cost variance that is less than five percent might result in a deviation that could force the project to be abandoned; moreover, we did our best not to exceed a variance of 95-percent-or-greater.

Project Schedule and Cost management includes several activities conducted at different phases during the project life cycle. The budget expands on the cost gauge by summing up the expense of executing the task-including possibilities for potential dangers. It also includes an add up designed to cover unexpected dangers or unidentified occasions that may emerge. Assessing opportunity costs is an increasingly encompassing way to deal with dynamic that considers not just all the financial parts of elective approaches, but also, all the impalpable components. In the previous deliverables, we had to decide between three qualities and designs, taking into account using our specified criteria from the customer.

References

1. Marker, A. (n.d.). The Ultimate Guide to Cost Management. Retrieved from <https://www.smartsheet.com/ultimate-guide-to-cost-management-and-templates>