

GNG1103 - Team 10

Deliverable E – Project Plan And Cost Estimate.

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Team Members

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ABSTRACT

In the previous deliverable, four different design were made, the top three conceptual designs were chosen at the end and the details, pros and cons for each concept were discussed. Later on, the different concepts were discussed separately, and one final updated concept was chosen. Then we researched the final concept and planned tasks to each member until the end of the project duration; we also outlined possible risks on the project progress. We decided an estimated cost of 96 for out bill of materials.

Contents

ABSTRACT	2
1. Introduction	4
2. Project Plan and Schedule	4
3. Risk Assessment and Contingency Plans	9
4. Bill of materials	10
5. Final concept	11
6. Conclusion	14

List of figures

Figure 1	7
Figure 2	8
Figure 3	11
Figure 4	12
Figure 5	13

1. Introduction

In the previous deliverable, the purpose of this deliverable is to create a project detailed schedule and plan for the three prototypes, as well as establish the project costs and required components. This deliverable will also put in place risk assessment and contingency plans.

2. Project Plan and Schedule

We made sure each time is allocated more time than needed to finish to makeup for any issues obstacles or problem that might arise; Dependencies of tasks on other tasks was mentioned and outlined clearly to know which tasks need to be finished first and thus allocate enough times for each after the depended-on tasks are finished. Each task was given an owner who is responsible of making sure it is done properly and on time. And then the due date for each task is clearly stated. The team should work hard to avoid late submissions as it harms the project progress. Also, the Wrike was updates and proper documentation was attached.

Number	Task	Dependencies	Assignee	Duration of task	Due date
1.	Refine ideas from deliverable D and determine final design of the project.	❖ /	Al-Waleed Al-Hamedi	1 days	February 22
2.	Create project schedule and guideline	❖ /	Eric Wan	2 days	February 24
3.	Estimate cost of project and its components.	❖ /	Ahmad Hammad	2 days	February26

4.	Finalize Deliverable E "project plan and cost estimate"	❖ task #1, ❖ task #2 ❖ task #3			February 28
5.	Create prototyping test plan	❖ /	Ahmad Hammad	2 days	March 2
6.	: Develop prototype I	❖ task #5	All team members	5 days	March 5
7.	Get client feedback on prototype I	❖ task #5 ❖ task #6	All team members	1 day	March 6
8.	Finalize Deliverable F "Prototype I and Customer Feedback"	❖ task #5 ❖ task #6 ❖ task #7	All team members	1 day	March 7
9.	Development plans for improvement for prototype II based on issues with prototype I	❖ /	Al-Waleed Al-Hamedi	1 days	March 8
10.	Create prototyping test plan for prototype II	❖ task #9	Eric Wan	1 day	March 9
11.	Develop prototype II	❖ task #10	All team members	3 days	March 12
12.	Get client feedback on prototype II	❖ task #11	Ahmad Hammad	1 day	March 13
13.	Finalize Deliverable G " Prototype II	❖ task #12	Chelse Rose Vadakkeveettilan Hilariyos	1 day	March 14

	and Customer Feedback”				
14.	Development plans for improvement for prototype III based on issues with prototype I and II	❖ /	Chelse Rose Vadakeveettilan Hilariyos	1 day	March 15
15.	Create prototyping test plan for prototype III	❖ task #14	Al-Waleed Al-Hamedi	2 day	March 17
16.	Develop prototype III	❖ task #15	All team members	9 days	March 26
17.	Get client feedback on prototype III	❖ task #16	Eric Wan	1 day	March 27
18.	Finalize Deliverable H “ Prototype III and Customer Feedback”	❖ task #17	Ahmad Hammad	1 day	March 28
19.	Deliverable I - Prepare and present a 2 min pitch	❖ /	All team members	5 days	April 2
20.	Deliverable J - create and give the final presentation	❖ /	All team members	3 days	TBD
21.	Deliverable K - Create a user guide which includes documentation of the project	❖ All previous deliverables	All team members	3 days	April 9

Figure showing tasks outlined in writke

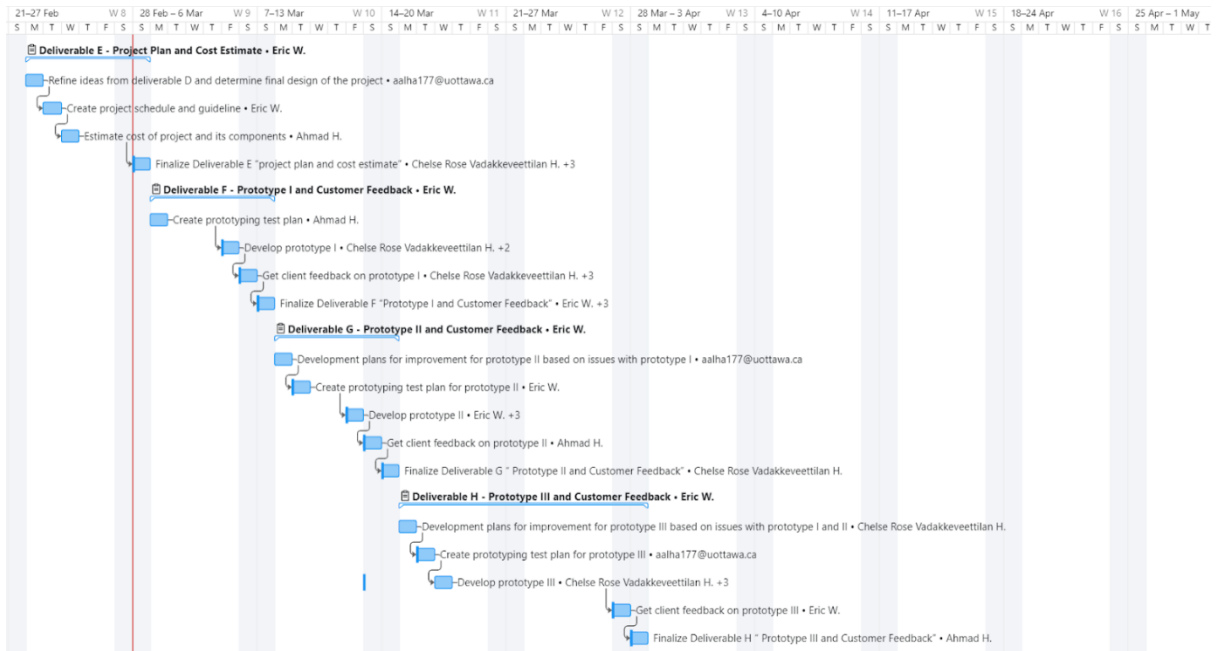


Figure 1

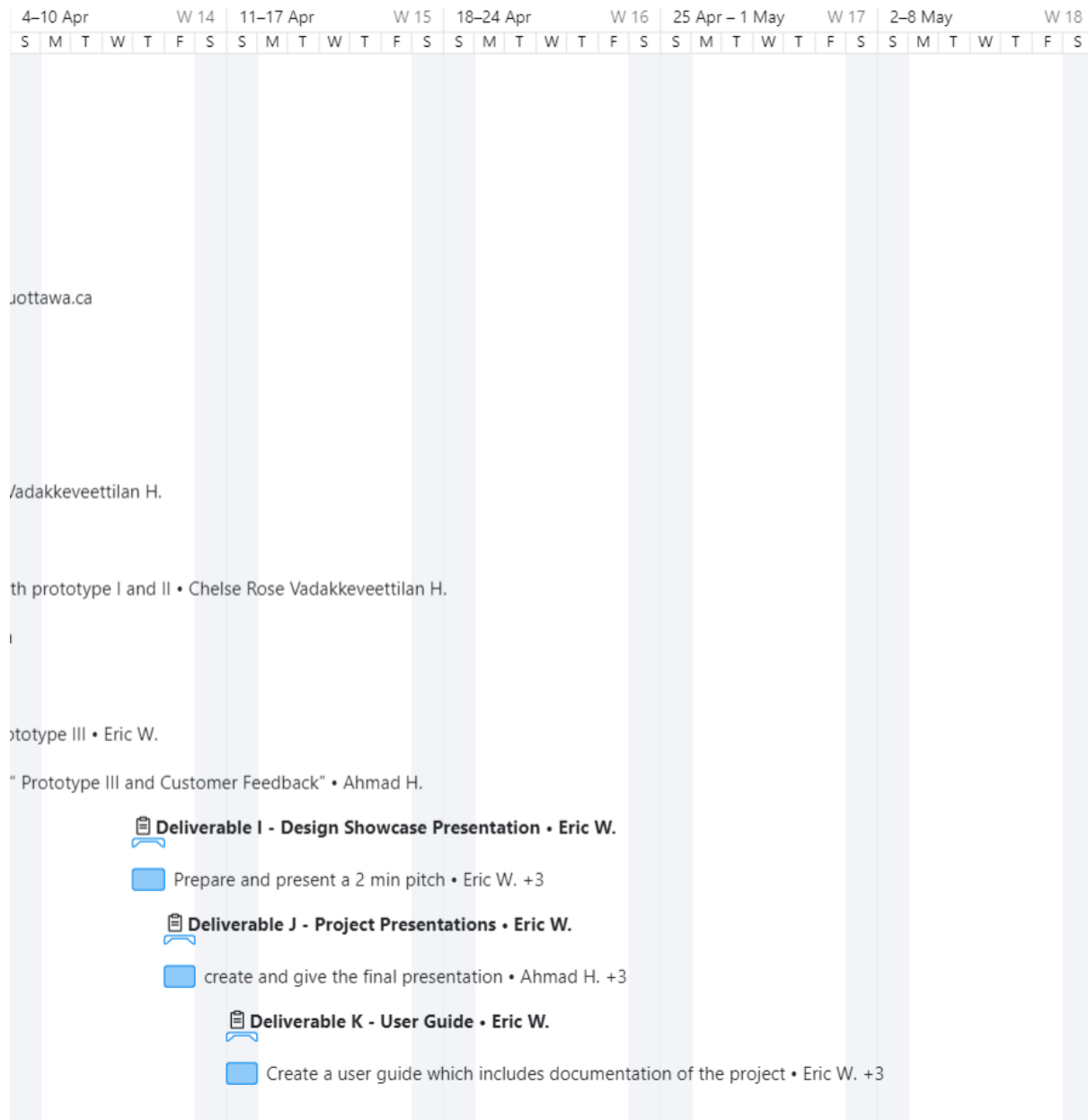


Figure 2

3. Risk Assessment and Contingency Plans

This section to outline and assess possible risk and rate their importance on the project, also to outline the contingency plans in case the risk occurs. The possible risks vary from risks associated to team members to other associated with possible technical problems. The aim of this section is to be aware of possible risks and prevent them or plan ahead for them.

Risk	Probability	Impact	Contingency
Members failing to complete tasks	Moderate/low	High	Keeping communication lines with all the team members, also a member who will not be able to finish their task on time should always inform the member ahead of time.
Group conflicts	Extremely low	V. high	Work together as a team, be respectful and respect differences of ideas.
Technical design failure	Moderate	Moderate	Make more research about the design and how it runs and possible failures
Issues preventing work on prototype due to Covid-19 restriction	Moderate	High	<ul style="list-style-type: none"> - Plan ahead of time for prototypes building. - Members at Ottawa city agree on a time to meet to build the actual design. - Discuss all steps via virtual meetings.
Underestimation in price	Moderate	High	Check the cost of materials carefully while counting for delivery and taxes, double check all the values and keep the team updated in case of cost change.
Losing Save data and files	Low	High	Keep backup files for all the work.

4. Bill of materials

Part	Name	Description	Quantity	Cost \$ (CAD)
1	Heating wire	Wires that can heat up when exposed to electricity.	1	26
2	Temperature and humidity sensor	Sensor that accurately measure temperature and humidity.	1	25
3	Thermoplastic sheets	It will make the exterior part of the design	2	20
4	Male and female connectors	Will connect different tiles of heated sidewalk together	1	11
5	Resistor kit		1	14
Total				96

5. Final concept

The drawing the detailed of the final design the team have agreed upon mentioned and outlined in this section. The sketches show different layers of the concept the team have agreed on. And shows different components to be used.

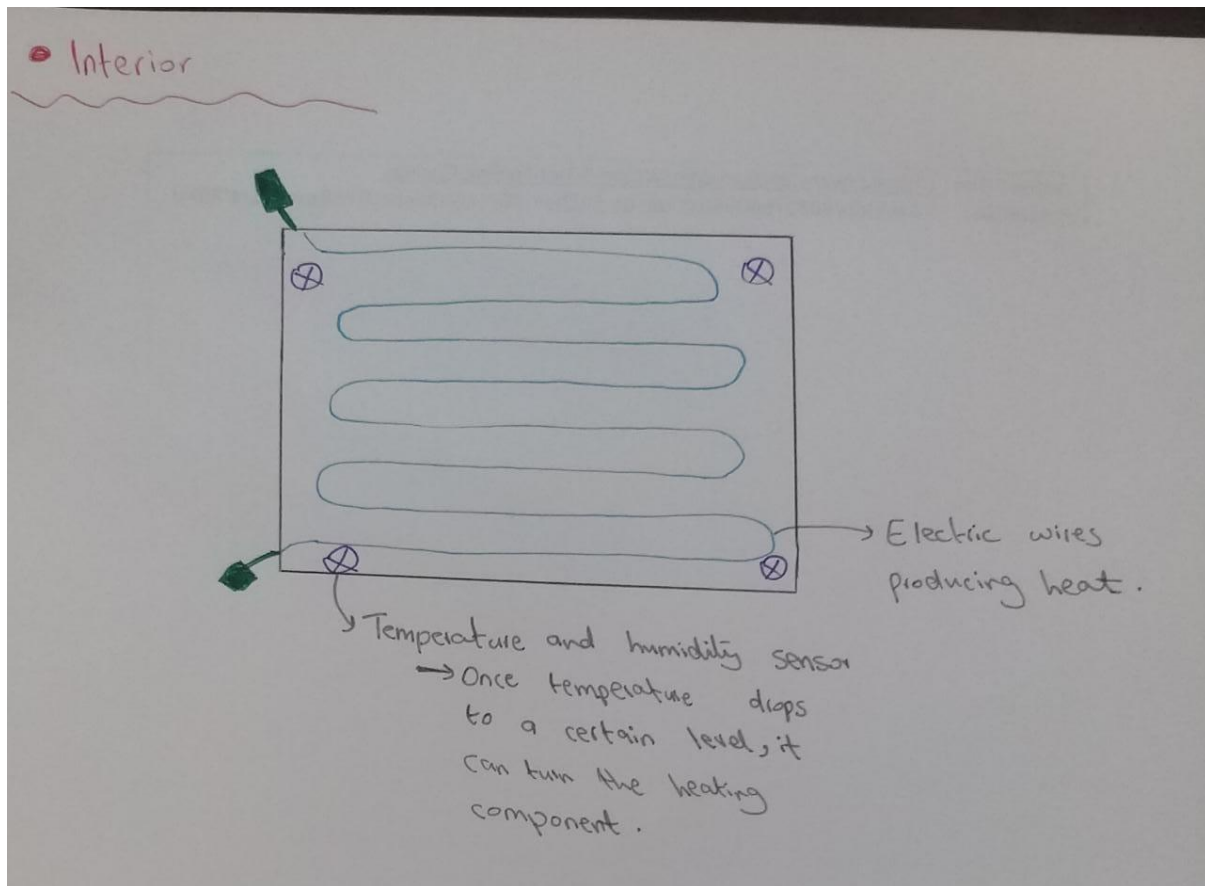


Figure 3

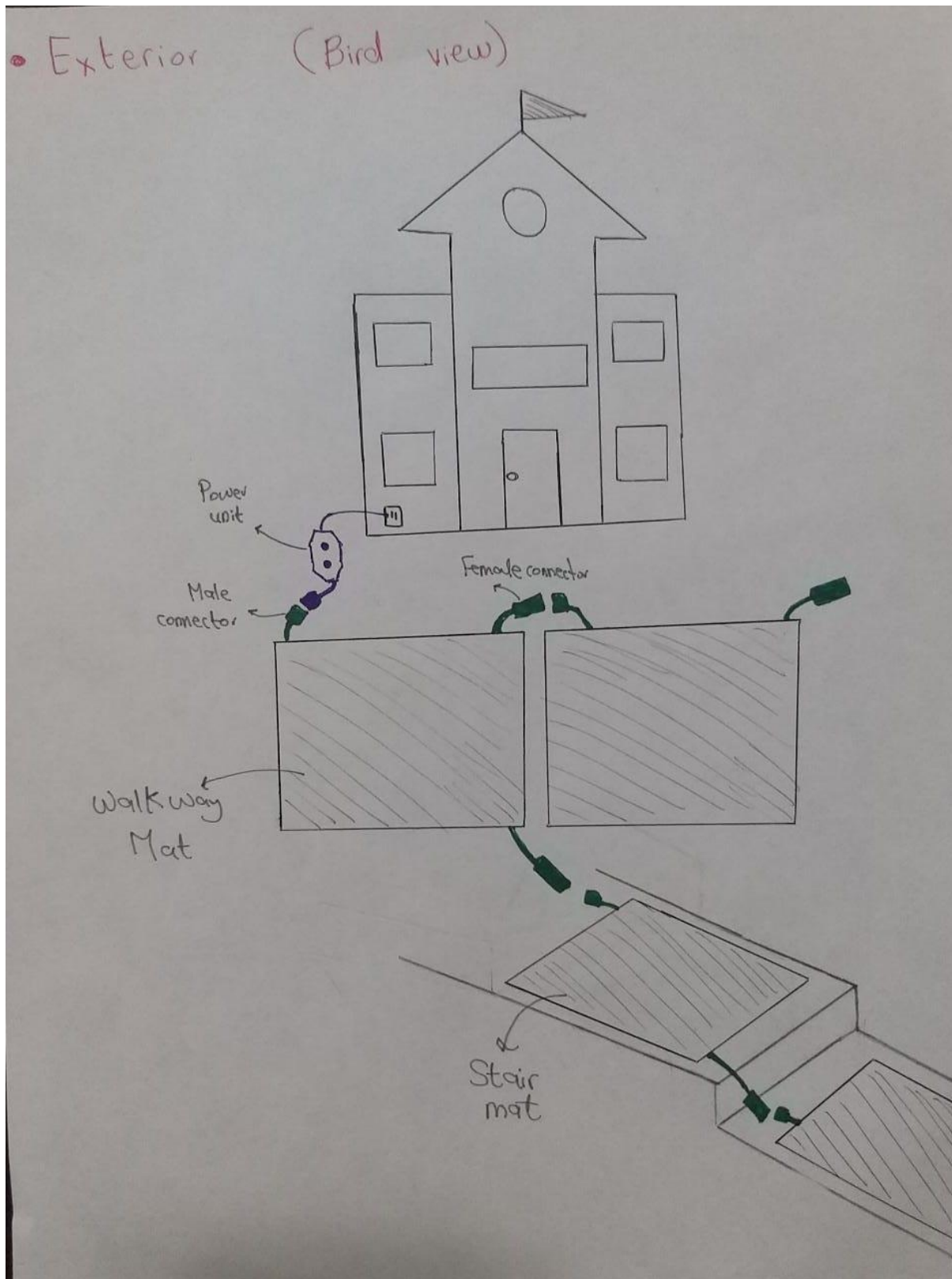


Figure 4

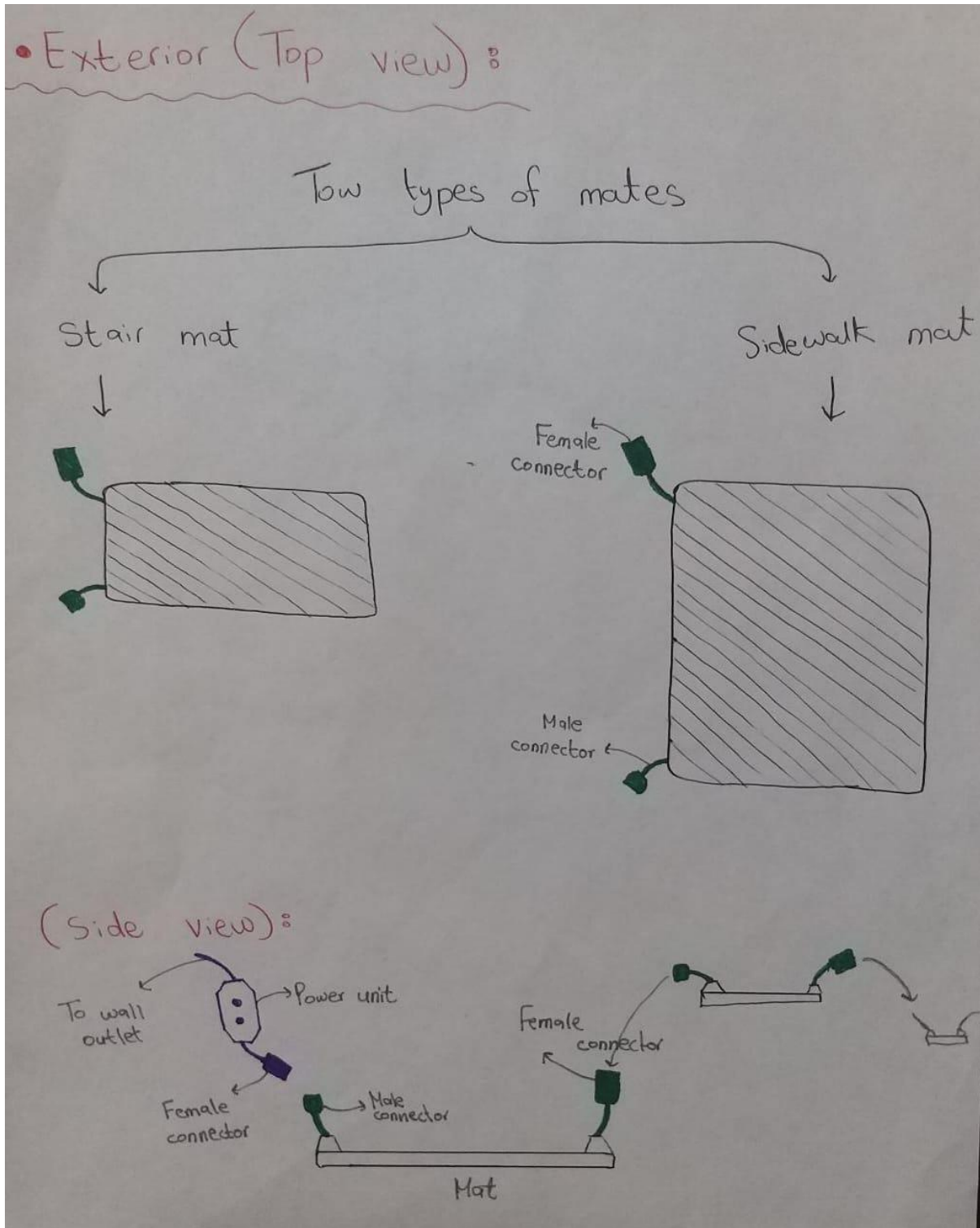


Figure 5

6. Conclusion

In this deliverable, the project plan and schedule were specifically organized and discussed for each step, the final concept was sketched and detailed and agreed upon. Risk analysis and contingency planning table was constructed to mentioned possible risks and be able to avoid them. Also, a bill of estimated costs was created, and it showed a Total of 96\$.