

Project Team Charter

ME476C: Capstone I

Signature Cover Page

Each team member will copy the following statement in their own handwriting (LEGIBLY) in one of the designated areas below:

I agree to do an equal amount of work in the team. I understand that my grade will reflect my effort in the team.

Print Name: JIALAN Sun

Signature: Jialan Sun

I agree to do an equal amount of work in the team. I understand that my grade will reflect my effort in the team.

Print Name: SIMENG CAI

Signature: Simeng Cai

I agree to do an equal amount of work in the team. I understand that my grade will reflect my effort in the team.

Print Name: ZHENKAI XIA

Signature: Zhenkai Xia

I agree to do an equal amount of work in the team. I understand that my grade will reflect my effort in the team.

Print Name: JIAXIN WANG

Signature: Jiixin Wang

I agree to do an equal amount of work in the team. I understand that my grade will reflect my effort in the team.

Print Name: HAORAN YIN

Signature: Haoran Yin

I agree to do an equal amount of work in the team. I understand that my grade will reflect my effort in the team.

1. Team Purpose:

The reason for this team's formation is that the project client wants to produce a brand new FMC wheelchairs for patients in the hospitals. The team's purpose is to successfully produce this wheelchair at the end of the course.

Project stakeholders are project client, patients in the hospital who become incapacitated, hospital procurement department

The team's expectations are that every team member can do their job efficiently and finally meet the client's requirements.

2. Team Goals:

Our team project is to design a new FMC wheelchair which contains a legal tracking system. Through this tracking system the hospital can manage their device, they can know where these devices go and reduce loss. During the design process the team should follow the quality first as the first principle. Then the device should at least require the

In this course, all members of the team committed to do their best to get an A level. So they will perform A+ during this semester. Our principle for the team project is learning more , asking more and communicating more. Though we have studied several courses in the Engineering field for two years. We still need more knowledge when we try to start actual projects. Meanwhile, asking questions is a fast way to solve some specific problems. Communicating can help team members come up with better solutions.

3. Team Member Personalities/Roles/Responsibilities:

Personality Profiles:

Jialan Sun: Extraverted, observant, helpful. Enjoys managing life and work reasonably. Enjoys playing PC games and riding his bicycle. Has an interest in data statistics, and has basic mechanical knowledge.

Simeng Cai: Outgoing, optimistic and responsible for finishing his job. Like reading and playing computer games. Good at CAD modeling and dealing with information.

Haoran Yin: Helpful, humble and creative. He will try his best to improve the team project. He enjoys reading books, riding bicycles and running. He is good at doing research and creating ideas.

Jiixin Wang: Optimistic, cheerful, don't give up easily when encountering difficulties, and have a spirit of exploration. Like sports and listening to music. I am good at data analysis and Excel. I can make a great contribution to the team's data integration and later analysis.

Zhenkai Xia: Responsible, willing to check all the staff and can do extra work for the team. Good at math, physics and dynamics. Good at calculating and writing reports. Willing to communicate with people and get their needs. Like playing basketball and doing gyms.

Team Responsibilities:

Jialan Sun

Project Manager

I will record the process and achievements of our each meeting and practice in addition to recording everyone's ideas because every team member's ideas should be taken into account. I will also organize and analyze new information and maintain the team's notes and documentation. Besides, as the project manager of our team, I will ensure our team has a safe and welcoming team environment based on our current situation.

Simeng Cai

Website Development

During the whole project, According to the actual progress of the team on the project, I will combine the work results of each team member to make relevant websites and decide the presentation of each work progress. At the same time, I will ensure the rationality and refinement of the website design.

Haoran Yin

Client Contact

The client contact should have good communication ability that can build a solid bridge between the client and team members. However, sometimes they can have some disagreement about the project. This position needs to make a balance between team members and Clients. What he should do is try his best to understand two sides and try his best to make all of the people happy.

Jiixin Wang

Documents Manager

Documents Manager's responsibility is to maintain a repository of all documents, including CAD models, computer code, standards, references, and meeting minutes and agendas. Collect a part of the document and assemble it into the final document and submit the final document.

Zhenkai Xia

Budget Liaison

Budget Liaison should be responsible for all kinds of cost and budget calculations in a team. As an undergraduate student team, the team's expected cost would not be that huge. However, a professional analysis of cost and budget would benefit the whole team. Team will consider all kinds of costs as a small company does. Bill of materials is the most common approach to evaluate how things cost and pick the best materials.

4. Ground Rules:

Each team member will meet on every Wednesday and Friday 3:00PM by the zoom meeting.

As a member of our team, each member will agree to the following norms and ground rules:

1. Each team member will respect other members' ideas and suggestions. Listen carefully when others are speaking.
2. Each team member should be involved in the group discussion actively. Every member should express their own ideas.
3. Each team member should work together to find the best solution they can come up with, rather than complaining to each other.
4. Each team member should not use group time for their individual problems. Suitable excuses should be given when absence is inevitable.

When a team needs to make a decision for the project assignment, each team member should make a point, then every one discusses these ideals and makes a final judgement for every decision. If there are objections between team members, the team leader should try to avoid this becoming a personal contradiction, and try to deal with these objections through communication during the team meeting. Each member performs his own duties, supervises each other, and the team leader conducts a final review of each person's work. Each team member should participate in the group discussion actively. The whole team hopes that each member reasonably promises his work progress according to the difficulty of his assigned work.

5. Potential Barriers and Coping Strategies:

Arrangement conflicts and usability, unequal workload, differences in ideas or designs, incompatible personalities and last-minute complexity are all possible obstacles. For time conflicts, we basically found a time when everyone can meet. We set three days of free time each week. We will hold meetings on any of these three days, and everyone can participate freely. If the schedule is not good, please be sure to convey the content mentioned in the meeting to the missed person.

To deal with uneven workloads, we are determined to use sufficient planning tools and methods, such as Gantt charts, to ensure that everyone knows what we must do and when we

need to do it for each deliverable. These problems can be easily solved through continuous communication and setting clear and specific goals. We will evenly distribute tasks to each team member to maintain the organization and efficiency of the team. If the work has not been completed, we will hold a meeting and discuss with them. In the basic rules, we also set the responsibility to pursue those who violate the rules.

Disagreements about design or ideas are common among teams. Different opinions can inspire better design. To address this obstacle, we will raise differences at the meeting and list the pros and cons of the different ideas that most groups can agree on. When sticking to your own ideas or designs, be sure to respect the ideas of others. Understand the strengths of others to improve the design of the team.

In addition, the personality of teammates may not be compatible. Someone may not get along well with others. But remember one thing, we are all trying to achieve the same goal. Therefore, just focus on the project and task at hand. Establish a correct attitude, show respect and listen to the voices of others. All our efforts are to better design the team. Last but not least, someone may have complications or unexpected situations at the last minute. To overcome this obstacle, be sure to first use effective communication methods to let the team know. Therefore, our team can decide what to do for the individual and how to deal with the loss, which will not leave the team in a defensive state at the end of the due date.