Team Charter

Team Charter:

Team Name
The team name is "21-S2-2-C IO Energy"

Team Mission and Objectives or Goals
Energy industry in Australia is undergoing a fundamental transformation from fossil fuel to renewable power. While solar and wind generated energy has lowered the cost significantly in South Australia, there are challenges of using them as they are unstable sources.

Our client IO Energy is a South Australia (SA) based energy company with a vision of providing cheaper, cleaner and smarter energy to local consumers. With the help of widely promoted renewable energy in SA, they have come up with plans that give customers an 80% discount for electricity consumption between 10am to 3pm. Nevertheless, they have developed a smart meter and are using data analysis tools combined with machine learning to help customers better understand how their electricity is being used and where it can be saved.

The goal of this project is to generate a more comprehensive and accurate analysis of customers' electricity usage pattern by utilizing machine learning algorithms and data analysis tools, and present the result to customers by constructing an interactive and user-friendly interface in the form of a Web Application. For the benefit of customers, by adding these features, IO Energy can match customers' patterns with most appropriate plans and advise them on saving, so that they can access cheaper and greener energy. For the benefit of IO Energy, by adding these features, they will be able to expand their service scope and improve user experience, and eventually acquire more new customers.

Team Member Skill Inventory
Xi Chen is a professional designer and front-end developer, who has strong experience in App design and development, as well as end-to-end execution, HCI design, Figma, responsive design across multiple platforms, user's vision and cognition, UI/UX design and web design.
Qixuan Ren has rich experience dealing with structured documents, frontend development (HTML/CSS/JavaScript), backend development and is good at Java, Python and algorithms. She also possesses background knowledge of Artificial Intelligence.
Yifei Tao has the experience of project management with a PMP certificate, and also has the experience to use python for data visualization.
Yifei Tao has 4 year working experience as a professional consultant, leading groups and has the project management professional certificate. Also, she has background knowledge and experience in Machine Learning and Deep Learning and is familiar with Python.
Yuexin Chen has professional working experience as a development engineer. He is familiar with cloud development, React.JS and full-stack development.

Role Identification

Leader & spokesperson & Front-end developer: Xi Chen
Deputy leader & spokesperson & product manager: Jingyi Wang
Machine learning & data analysis: Yifei Tao
Back-end developer: Qixuan Ren
Back-end developer: Yuexin Chen

Ground Rules

1. Work tasks
    - Assigning responsibilities:
      Resolutely follow the basic rules of agile development and team charter;
      Finish and continuously update team chart sharing with each member;
      Hold effective meetings and keep records to track work processes;
      Based on members' technique, interests to assign tasks or subtasks in meetings;
      Actively communicate and share ideas with members or report any problems in time;
      Preparatory works, suggestions or questions before meetings;
      Changes about timetable and workflow in a timely and effective manner;
      Effectively finish assigned works in time;
    - Satisfaction of requirements of works and members
    - Reasonably and kindly cooperate with members
    - Setting deadlines
    - Meeting deadlines:
      Deadline before Sunday at 11:59PM (Canberra time)
    - Quality of work:
      Based on requirements of the project and discussions in meetings, to finish work with high quality.

2. Meetings
    - Attendance Expectations:
      Each member is expected to attend weekly meetings.
    - Schedules/times:
      Client meeting: Friday 2:30PM-3:30PM (Canberra time) every week
      Team meeting: Saturday 11:00AM-12:00PM (Canberra time) every week
    - Coming Prepared:
      Each member is expected to express his or her ideas, suggestions, requirements and tasks processes to participate and discuss during meetings. Complete weekly tasks or assignments before weekly meetings.
    - Protocol:
      Each member shared the workload;
      Focus on discussion points;
      Showing basic mutual respect to members;
      Comprehend, consult and exchange ideas or resources with members;
      Avoid to rudely interrupt with other speaking or meeting process;
    - Agendas:
      Based on each member's schedule, and work process to decide extra meeting time and content of the meeting.
    - Notifications:

Meeting Messages about brief content and locations will be sent to members in 20 minutes before the weekly meeting.
- Record keeping:
Scribe records the meeting and organizes,keeps the records following digital information process criteria.

3. Attitude:
Each member should actively attend meeting in time;
If there is time conflict, member should tell scribe absence as soon as possible;
If there exists any conflict in a meeting, members should follow mutual understanding to solve conflict.

4.Contacting:
- Method: Outlook, Wechat, Zoom, Slack
- Limits: Lack of in person communication, tough management conditions, devices or technical issues

5. What will serve as acceptable excuses:
Members with illness can apply a rescheduled timetable or to decrease workload;
when device problems or technical issues occur, members can apply for work or tasks delayed.

6.Penalties:
Penalty will be established to anyone who violates the team charter more than one time. If any member missed a meeting or delayed the work affecting the teamwork process without reasons, the member will get more workload or reduce the percentage of contribution in teamwork. If any member didn't have good relationships within the team and seriously affected other members, the member will be removed from the team.

7.How will we maintain configuration control over our work:
Our team use Gitlab as configuration control tool over work;
Paperwork will be on online Google documents for collaboration purposes.

8.How will decisions be made within the group:
All the final decisions will be made in weekly meetings or workshops. We will choose the decision that most of the members approved. Otherwise, we will look into more research and reference related projects to address the hard issues.

9.Conflict Resolution Mechanisms:
When serious conflict occurs, other members should stop discussing and selecting sides, then joining to adjust conflicts. All team members should seek common ground while reserving differences. If conflict is hard to adjust, other members should find an approach to make mutual concessions. Team members should actively try to release conflict by communication and understanding.

Preliminary Project Plans
• identification of tasks or processes
• member assignments

•   due dates

Performance Criteria

•   Interpersonal relationship: Each member should support and help each other. Using some kind words to communicate with others.

•   Team regulation: Each team member should actively join the works and activities. Team members should avoid conflicts and try to make consideration to others. Team member must finish tasks in time, if there is no any special cases

•   Team efficiency: Team has effective communication and meetings. Each member issues good questions or suggestions and solves it in time.

•   Team creativity: Each member is encouraged to show their ideas for this project. Each member can show their opinions to disagree or agree with someone's suggestions, but no disrespect to others. Members should not give any pressure to others in meetings for discussing and thinking.

•   Team enthusiasm:Each team member needs to show how much they like this project and the reason why they would like to join this team and project. Members should provide enough enthusiasm and positivity to do or join any team tasks and activity.