Process

Team Organization.

The team was organized into clearly defined roles to ensure efficiency and accountability throughout the project.

- **Noah Csaky-Schwede: Product Manager & Software Engineer** Responsible for keeping the project aligned with its main objectives. This role oversees product development, **task coordination**, timeline planning, and meeting organization. The Product Manager also ensures that all components integrate correctly and that the final product meets the intended goals.
- **Colton Graham: Technical Director & Software Engineer**
  Acts as the technical leader of the team. This role is responsible for defining the technical architecture, **distributing technical tasks** among engineers, and ensuring overall code quality and system reliability.
- **Franco Ortiz –Data Scientist & Software Engineer** Responsible for database **infrastructure and data managemen**t. This role designs efficient data models, collects user input data, and analyzes and presents useful aggregated information.
- **Emerson Han: UI/UX Director & Software Engineer**
  In charge of frontend design and user experience. This role designs the visual layout of the application, creates mockups, and ensures the interface is intuitive and user-friendly.
- **Stephan Scileny – Backend Engineer & Software Engineer**
  Responsible for backend development, including data flow,, and system logic. This role ensures proper integration between the database and frontend, and also handles testing .

Documentation: All team members are software engineers and are expected to stay informed about all aspects of the project. Team members are required to report progress regularly and communicate updates clearly on Discord. Documentation uploaded to MarkUs will be built together compiling and formatting the updates presented before.

Platform for Communication: The main platform for communication is Discord. it will be used for updates with specified channels and for meetings.

Platform for Version Control: while GitHub is used for version control.

Every GitHub push must be announced on Discord and follow a standardized commit naming format, for example: Franco_FixedRelationshipConstraint.

Decision Making

Decisions are mainly taken through **team consensus.** When a decision is required, each team member presents their opinion, and the group discusses the advantages and disadvantages of each option before agreeing on the best solution.

If consensus cannot be reached after discussion, a **voting system** is used. Each team member has one vote, and the option with the majority of votes is selected. This approach ensures fairness, efficiency, and team involvement in key project decisions.

Planning and Prioritization

User stories are prioritized based on user demand, impact on student convenience, and technical dependencies.

Development is planned in the following order:

- **Week 4**
    - UI/UX conceptual design to visualize the application structure
    - Backend architecture and data flow design
- **Week 5**
    - Frontend–backend connection and UI mockups
    - Database integration
- **Weeks 6–9**
    - Core feature implementation, starting with:
        - Gym occupancy estimation (primary feature)
        - Food court wait time estimation (Week 10 to 11)
        - Study room and library availability (Week 11 to 12)

The gym occupancy feature is prioritized first because it addresses the most frequent and time-sensitive student need and serves as the foundation for the main UI/UX structure. Food wait times follow, enabling students to make informed choices. Library availability is implemented later, as some availability information is already partially provided by existing systems.

Secondary features, such as interactive dashboards for student activities or study group organization, are scheduled for later iterations if time allows it.

Meetings

The team holds weekly meetings to review progress, discuss challenges, and plan upcoming tasks. These meetings are used to track milestones, adjust priorities, and ensure alignment across roles. Additional meetings are scheduled when important technical issues or major decisions arise.

Next Phase