# Estimation of resources and risks

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#### Effort estimation

Based on our initial project plan and the scope of work that we have outlined, I estimate that we will need to allocate between two to three hours per day, on average, to complete all the necessary tasks related to the Blue Skies project. This includes documenting our progress, holding team meetings to discuss our findings and share insights, and developing the software required for the project.

Of course, the amount of time we spend on these tasks may vary depending on the specific requirements of each task and the progress we make. Some days we may need to spend more time on documentation, while other days we may need to focus on coding and software development. However, I am confident that by dedicating at least two to three hours each day to these activities, we will be able to make steady progress towards achieving our project goals and delivering a successful final product.

### Project planning and scheduling.

For the Blue Skies project, we have come up with the following project plan:

- 1. Develop the solar calculator
- 2. Develop the initial web application that uses the solar calculator with dummy data
- 3. Setup the database and API systems
- 4. Integrate the backend with the front end
- 5. Develop test for applications
- 6. Setup and train the AI model
- 7. Integrate the AI model into our solar calculator
- 8. Tweak and finalize the solar calculator
- 9. Finalize the web application

#### Resource allocation.

In terms of team resource allocation, we propose the following breakdown for this project:

- 20% AI model development and implementation
- 20% Front-end development, including design and user interface
- 10% Solar calculator development and testing
- 10% Back-end development, including server configuration and database management
- 10% Testing, including automated and manual testing processes
- 10% Integration of all components and modules
- 10% Team discussions and administrative tasks, including project management and coordination
- 10% Bug fixes and performance optimization, including resolving errors and improving system efficiency.

## Risk management

One of the major risks in a project like this is the potential unavailability of a key team member due to sickness or other reasons. To mitigate this risk, we have implemented a structured approach that divides the project into key parts, such as backend, frontend, and AI development, with each part assigned to a specific team member. This ensures that each part can continue to progress independently of the others and without the involvement of the team leader.

To facilitate this approach, the team leader will ensure that each part of the project is assigned work for an extended period, and it is the responsibility of the team member assigned to that task to complete it and delegate further work to other team members. The team leader will have a broad understanding of each part of the system and be involved in all aspects to ensure they can step in to cover for any absent team member if needed.

This approach means that the system does not rely on any single team member, and if the team leader is unavailable, each part can continue to progress independently. Even if a team member is absent, the team leader can step in to cover for them until they return.