

OPERIS

The "Operis" project aims to simplify project management for businesses and individuals through a web application for workload management. This solution will allow for breaking down projects into tasks, distributing them among team members, and tracking their progress, all while offering a comprehensive overview of the overall advancement.

Operis's business model is based on the Freemium model, offering free basic features such as the creation, modification, and deletion of projects, as well as the management of members and tasks, among others. Advanced features, such as the CSV export of project tasks, will be available with a paid subscription.

In addition to its functionalities, Operis offers user account management and a mechanism to switch from free to premium mode, and vice versa. This approach will allow users to benefit from the features necessary for their needs while having the possibility to upgrade to more advanced features according to their requirements and budget.

Free Features

1. Account Creation:

- With an email that will serve as the login and a password.
- The password must be at least 6 characters long.
- The API will return an error in the following cases:
 - The email address does not follow the correct format.
 - The account already exists.

2. User Profile Update:

- The profile consists of a first name, last name, email, and date of birth.
- The email cannot be modified, unlike the other fields.
- The first and last name are mandatory for the update.

3. Project Listing.

4. Project Management:

- A project consists of an owner, a name, a description, a list of members, and a list of tasks.
- **Creation:**
 - With only the name and description fields.
 - The name and owner are mandatory.
 - The owner is the one who is logged in at the time of project creation.
- **Modification:**
 - All fields are individually modifiable.
 - The owner of a project cannot be modified.
 - In this section, one can add, modify, and delete members and tasks from a project.
- **Deletion:**
 - This operation only consists of archiving the project.
 - The project must be deleted only by the person who created it.
 - An error will be returned if the project does not exist.

- If there is at least one unfinished task, an error will be returned.
 - Note: In this case, to delete the project, all tasks must be completed.
- **Adding members to projects:**
 - For a member to be added to a project, they must have already created their user account.
 - Each member will be an admin on the project.
- **Adding, modifying, and deleting tasks from projects:**
 - Tasks must have a title, a description, an owner, a status, a history, and to whom it is assigned.
 - The history reflects the complete journey of the tasks, offering a detailed chronology of their evolution from their creation to their current state. It allows for precisely tracing the moment a task was initiated as well as all modifications made to its status afterwards.
 - The title and the owner are mandatory.
 - The owner is the one who is logged in at the time of task creation.
 - The task statuses are to do, in progress, and completed.
- **Tracking the status of each task.**
- **Updating the state of tasks.**
- **Retrieving a project with its members and tasks.**

Paid Features

1. CSV Export of Project Tasks:

- An export can be requested based on two parameters: the status and a period (start date and end date).
- These two parameters are mandatory.
- For example, a user can request the export:
 - of all tasks that were completed in January 2024.
 - or all tasks that are in progress for the year 2024.
- Each row must contain:
 - Name, description, creation date, owner, the date of the last action performed on the task, the identity of the person who performed this last action, as well as the most recent status of the task.