# Project 1 – requirements

A user and a machinery management module. The main purpose of these modules is to allow AROL employees to create and modify machinery configurations and to provide AROL employees the possibility to manage the application user specifications. The module must allow its users to assign machineries to a client/customer company and implement a permission system. The security feature must allow to individually assign permissions to each user and also enforce an access restriction mechanism, which must ensure that only users with the proper permissions can access protected system resources.

## Technological stack (mandatory):

- FE: React.js (with hooks)
    - FE UI Design Library: Chakra UI
    - FE Dashboard Library: React Grid Layout + existing custom dashboard work
- BE: Express.js
- DBMS: PostgreSQL

## Implementation constraints:

- Work must be carried over the existing web application, by enhancing its existing features
- Unified login and permissions system
- Minimal DB schema changes to accommodate new features

## Required features:

- New user roles for the AROL superusers: this will define what the user will be able to access
- User management features (user must be part of a company):
    - Create new user account
    - Update existing user account
    - Delete and disabled existing user account
    - Modify user account permissions
    - Password reset + random password generator option
    - User filtering and search
- Machinery management features (machinery must be assigned to a company):
    - Create/update/delete machinery with all its specifications (including sensors)
    - Machinery templates support (e.g., a certain machinery model)

- Create/update/delete machinery dashboard templates
- Manage machinery access permissions
- Machinery filtering and search