



# End of Studies

Design & Development of a Fullstack Web-Based platform for resource management to handle online appointments and reservations within different facilities

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# Introduction



Most of service providers need to manage their resources and reservations within time slots in order to fulfill their customer needs.

In this context, we are planning to develop a resource management platform that can be used in various fields, including medical offices, cosmetic saloons etc...

This platform will be accessible via a Web application. (*for now*)



# Context model

## *Actors*



**Customer** [*Visitor*]

...



**Worker**

...



**Manager**

...



**Owner**

...





*Dive into*

# User Authorities & Usecases

# Use cases

## Visitor service

Visitor is authorized to consult :

**01** Branches

**02** Facilities/Saloons



# Use cases

## Customer service

After being authenticated, a customer should be authorized to manage :

**01** Favourites

**02** Reservations

**03** Ratings



# Use cases

## Owner service

After being authenticated, an owner should be authorized to manage :

### 01 Facilities





# Use cases

## Manager service

After being authenticated, a manager should be authorized to manage :

- 01 Categories
- 02 Service details
- 03 Workers
- 04 Appointments



# Use cases

## Worker service

After being authenticated, a worker should be authorized to manage :

**01** Timetable

**02** Tasks/Todos





# Product Backlog

# Backlog & Releases

...

## 01

### App Configurations

#### Sprint 1:

- Setup Backend & Frontend apps

#### Sprint 2:

- Infrastructure as a Service (IaaS)
- Configs (env vars, secrets...)
- CI / CD pipeline conf
- Deploy Poc(s) as Images

## 02

### Auth Security process

#### Sprint 1:

- Authentication & Authorization

#### Sprint 2:

- Registration

## 03

### Customer service

#### Sprint 1:

- Consult Facilities & Locations
- Consult Topics & tags

#### Sprint 2:

- Manage Favourites & Reservations

#### Sprint 3:

- Rate a worker

## 04

### Worker service

#### Sprint 1:

- Checkout timetable
- Manage Todos

## 05

### Manager service

#### Sprint 1:

- Manage facility categories & services

#### Sprint 2:

- Manage Workers & Reservations

## 06

### Owner service

#### Sprint 1:

- Manage facilities



# Design

### Usecase diagram :

*[https://github.com/SelimHorri/atic-backend-app/blob/master/docs/doc/atic/atic\\_usecase\\_diag.drawio.pdf](https://github.com/SelimHorri/atic-backend-app/blob/master/docs/doc/atic/atic_usecase_diag.drawio.pdf)*

### Entity Relationship Diagram (ERD) :

*[https://github.com/SelimHorri/atic-backend-app/blob/master/docs/doc/atic/atic\\_erd\\_diag.drawio.pdf](https://github.com/SelimHorri/atic-backend-app/blob/master/docs/doc/atic/atic_erd_diag.drawio.pdf)*

### Class diagram :

*[https://github.com/SelimHorri/atic-backend-app/blob/master/docs/doc/atic/atic\\_erd\\_diag.drawio.pdf](https://github.com/SelimHorri/atic-backend-app/blob/master/docs/doc/atic/atic_erd_diag.drawio.pdf)*

### App Architecture :

*[https://github.com/SelimHorri/atic-backend-app/blob/master/docs/doc/atic/atic\\_component\\_complexity.drawio.pdf](https://github.com/SelimHorri/atic-backend-app/blob/master/docs/doc/atic/atic_component_complexity.drawio.pdf)*



# Implementation Stack

# Datastores





# Backend develop



# Frontend develop



# Code Quality Measurement





# Version Control



Azure DevOps



git

# CI/CD pipelines

Continuous Integration – Continuous Delivery



GitHub Actions



Azure Pipelines



**Jenkins**

# Container Runtime



kubernetes



docker®



# Cloud Provider

...



# Monitoring

...





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# THANK YOU

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