

Vaccination Institut Pasteur API

Web Services Project

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Motivation

In Tunisia, vaccination remains a critical public health concern, mainly due to limited awareness and the lack of digital solutions that facilitate access to reliable information. Institutions such as the Institut Pasteur play a key role in vaccination and prevention, yet citizens often face difficulties in understanding vaccine requirements and accessing services. This project was motivated by the need to support public health efforts through a secure and user-friendly digital platform.

Problem Statement

Absence of a centralized system that allows citizens to easily access vaccination information, book appointments, and interact securely with vaccination services.

Objectives

- Build a secure RESTful API for vaccination services in Tunisia.
- Provide awareness content, manage appointments, and secure user access.
- Support institutional workflows to improve vaccine access and digital health.

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Use Case Diagram

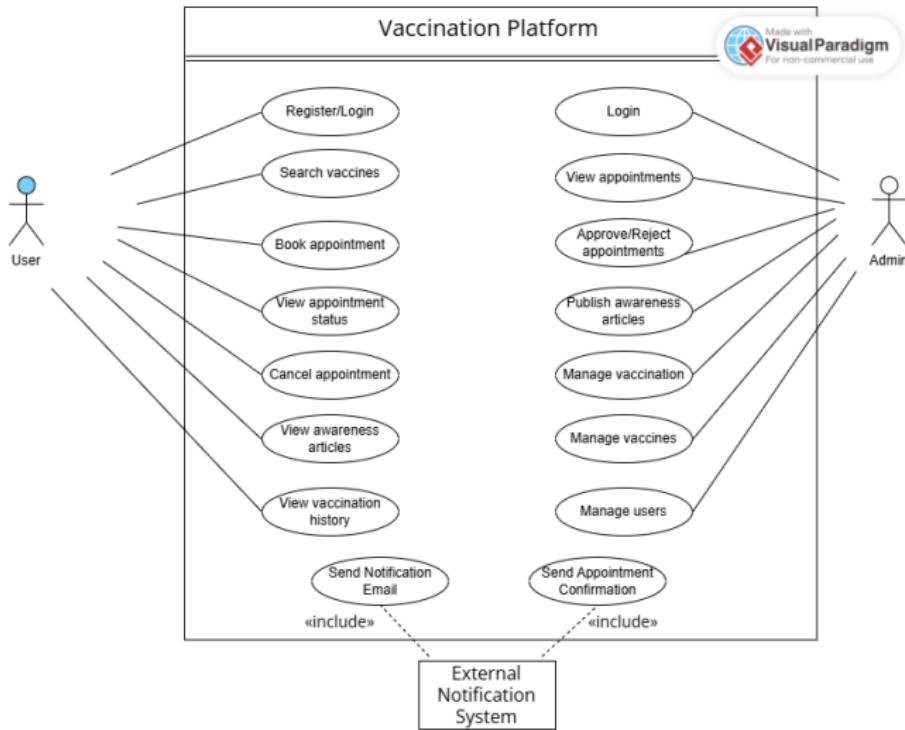


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Technical Aspects

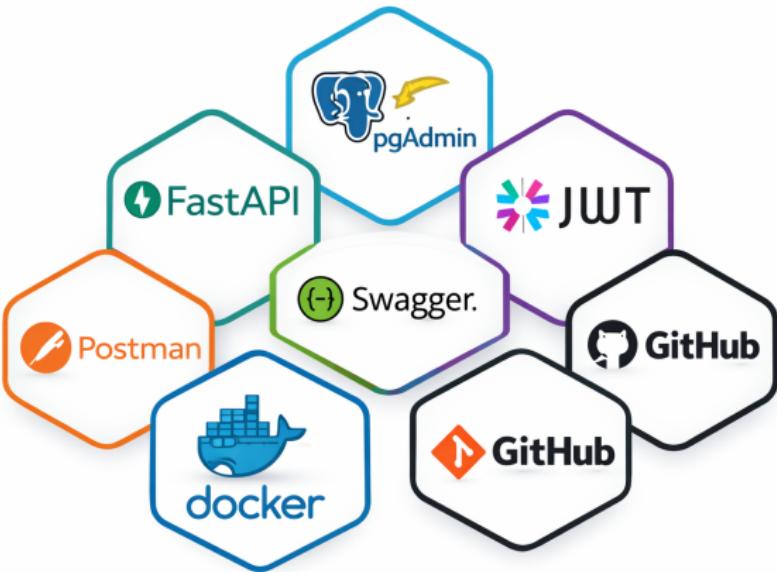


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Future Enhancements

- Automated Appointment Validation
- Smart Notification System
- Improved User Experience
- Integration with Health Institutions
- Mobile Access
- Health Data Insights

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Swagger Documentation

FastAPI 1.8.1 | 1.8.2

[openapi.json](#)
[Authorize](#)

Users

POST /users/register Register

GET /users/ Get Users

Authentication

POST /auth/login Login

Vaccines

GET /vaccines/ Get Vaccines

POST /vaccines/ Create Vaccine

HEAD /vaccines/{vaccine_id} Head Vaccine

GET /vaccines/{vaccine_id} Get Vaccine

PATCH /vaccines/{vaccine_id} Update Vaccine

DELETE /vaccines/{vaccine_id} Delete Vaccine

Appointments

GET /appointments/ Get Appointments

POST /appointments/ Create Appointment

HEAD /appointments/{appointment_id} Head Appointment

GET /appointments/{appointment_id} Get Appointment

DELETE /appointments/{appointment_id} Delete Appointment

WATCH /appointments/{appointment_id}/status Update Appointment Status

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Thank you!

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