

Vaccination Institut Pasteur API

Web Services Project

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January 2026

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Motivation

In Tunisia, access to vaccination remains a key public health challenge, partly due to limited awareness and the absence of centralized digital solutions. Institutions like the Institut Pasteur play a crucial role in vaccination and disease prevention, yet citizens often face difficulties in booking appointments, tracking vaccination records, and accessing accurate information. This project is motivated by the need to provide a secure, automated, and user-friendly platform to support public health initiatives.

Problem Statement

The absence of a centralized system for appointment booking, vaccination tracking, digital certification, and health education reduces accessibility for citizens and increases management complexity for healthcare staff at the Institut Pasteur in Tunisia.

Objectives

- Develop a secure and intelligent RESTful API for vaccination management at the Institut Pasteur in Tunisia.
- Provide automated appointment scheduling, vaccination record tracking, digital certificates, and educational content.
- Support administrators and healthcare staff to improve vaccine accessibility, reduce workload, and enhance public health monitoring.

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Use Case Diagram

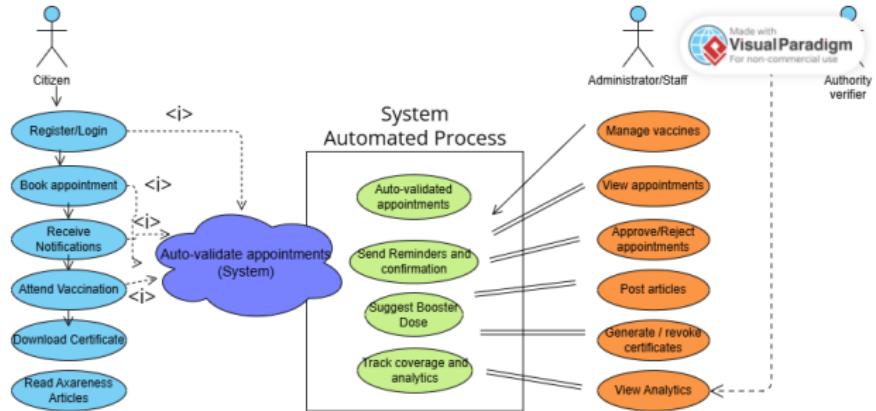


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Class Diagram

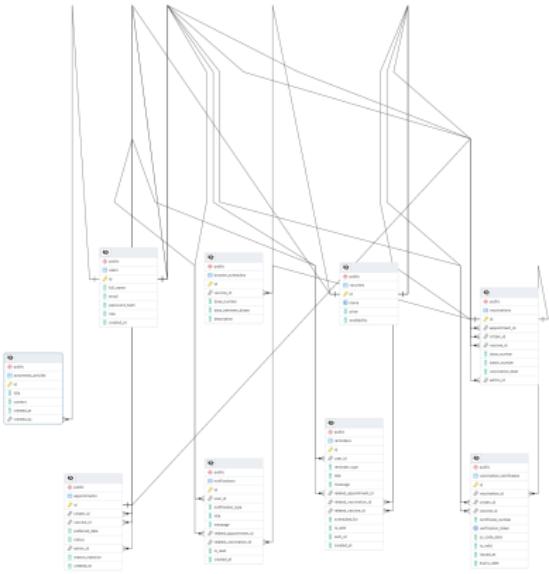


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Technical Aspects

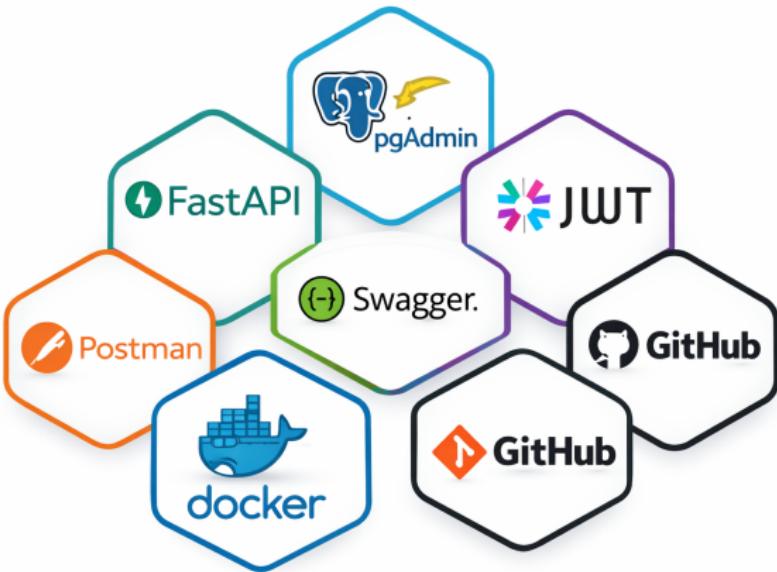


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Swagger Documentation

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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