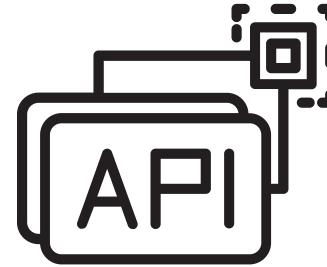




Virtual Tour



Ennejma Ezzahra Palace

A 360° Virtual Tour Experience

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Table of Contents

Problem

Why the need for virtual tours

Introduction

Overview of the API project

System Architecture

Overview of the API Architecture

UML

Visual Representation of API Components

API Design

How every API Component works

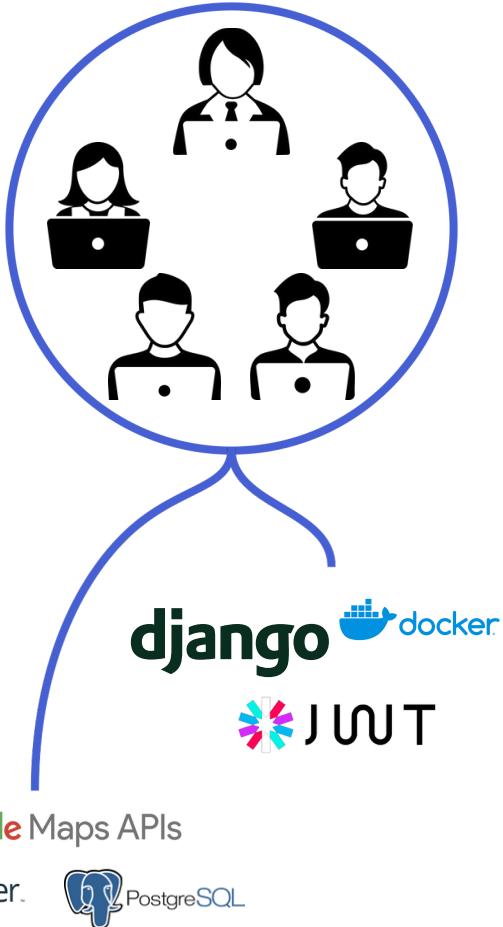
Security measures

How the user experience is secured

800 Million \$

lost annually by Tourists in Tunisia due to
mismatched expectations from social
media content

Solution: The Virtual Tour API, powered by a mapping service and a robust backend framework, enables users to explore Ennejma Ezzahra Palace through an interactive 360° experience.



API architecture

Frontend

displays

- The 360° virtual tour
- User login pop-up
- Feedback section

Backend

handle API requests

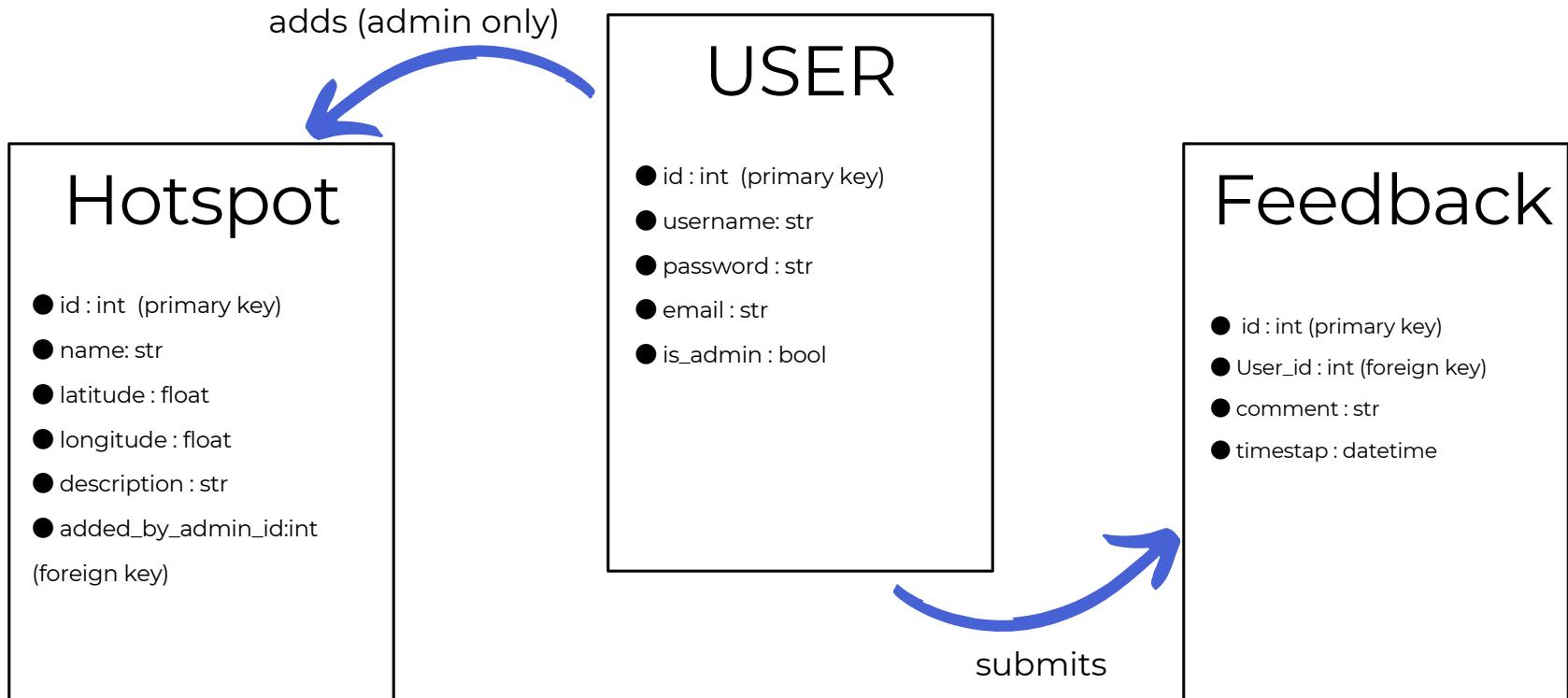
- Authentication
- Tour data
- Feedback

Database

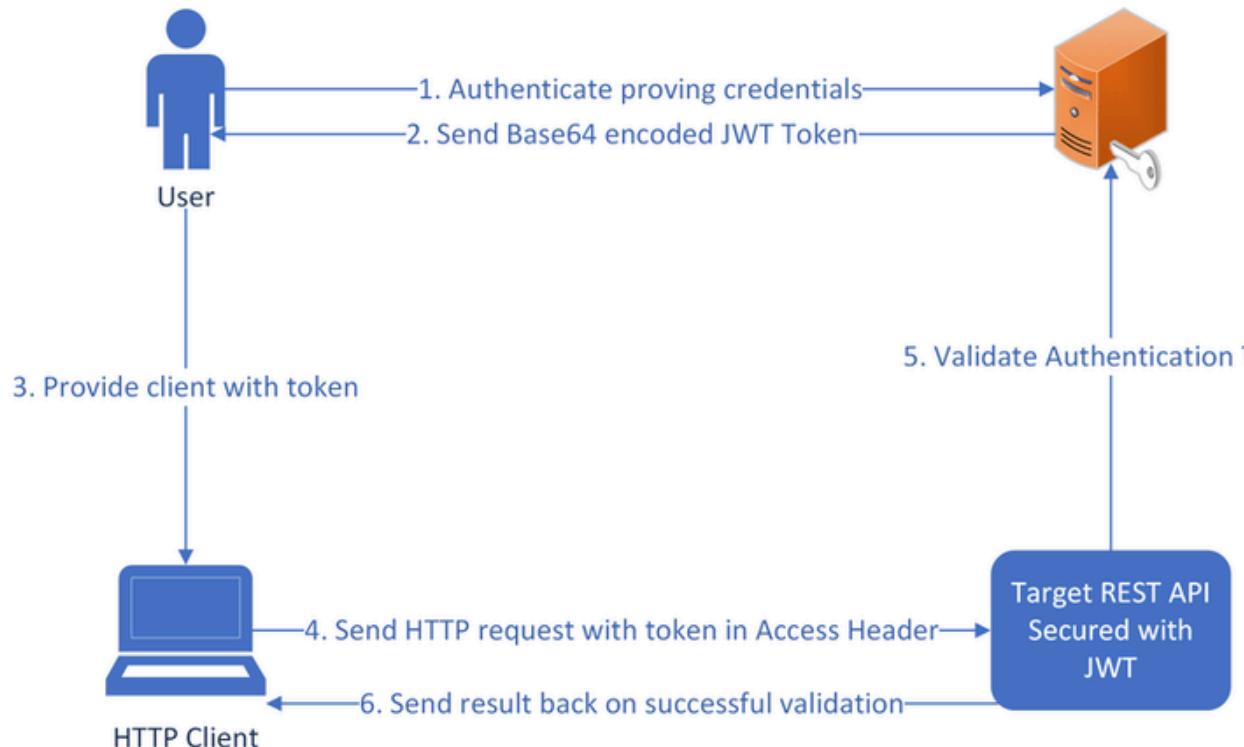
Stores

- Hotspots data (with details)
- User identifiers
- User feedback

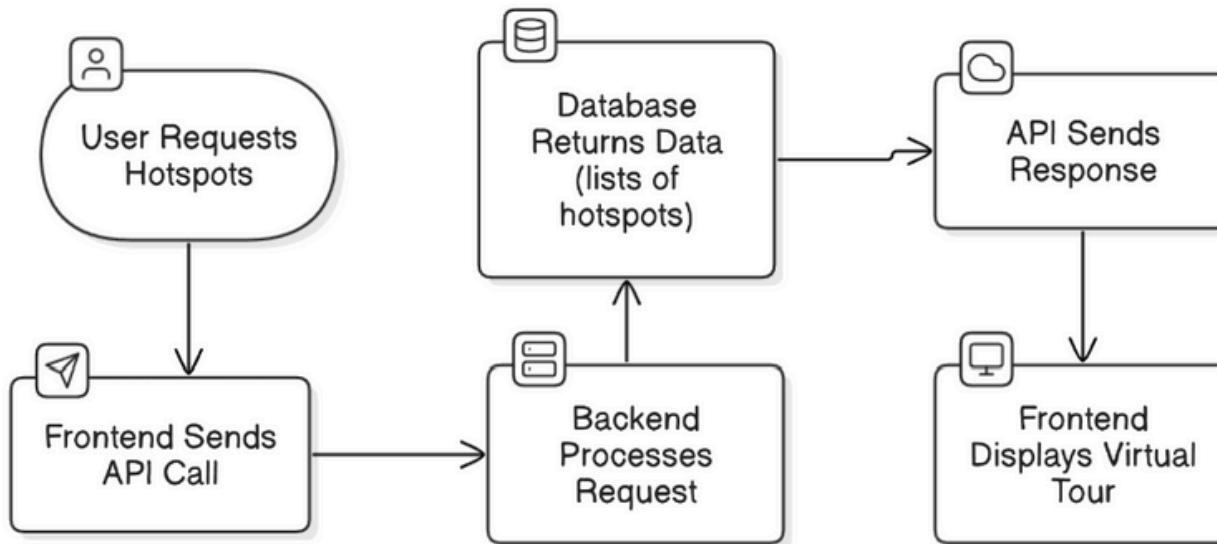
UML Diagram - API Component Breakdown



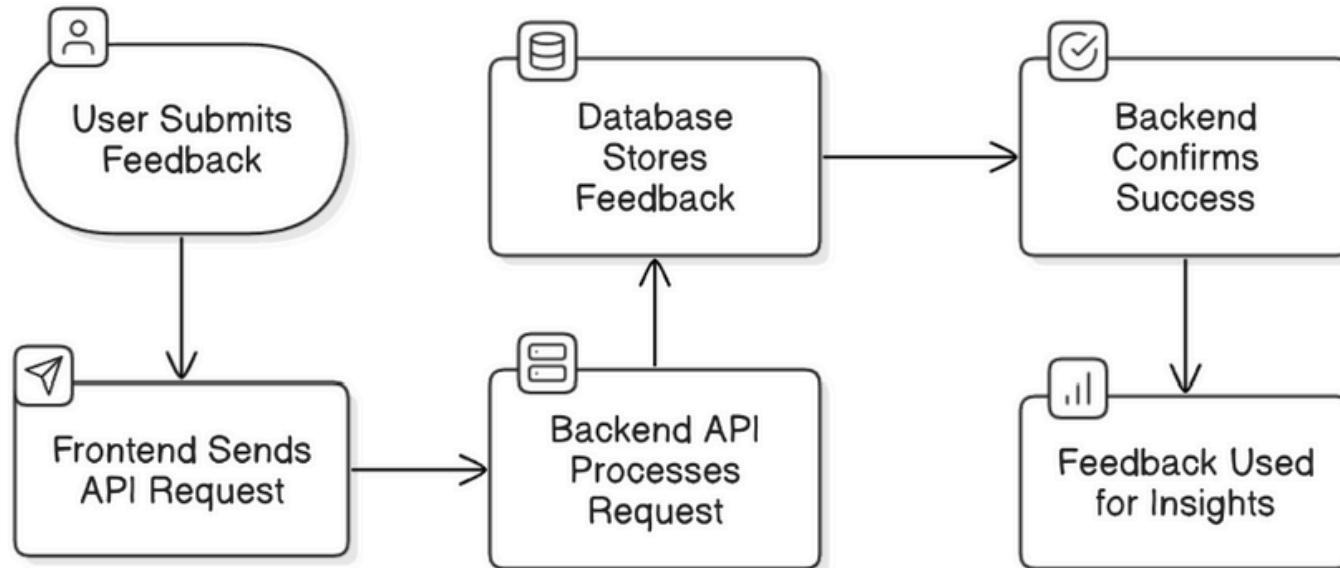
Authentication API - security with JWT



Tour API - fetching virtual Hotspots



Feedback API - User Engagement



Deployment Strategy

Next future step



Deploying
on a cloud
platform

AWS or AZURE

WHY Docker?
-For Environment consistency
, scalability, isolation and
portability

Building
Docker
containers

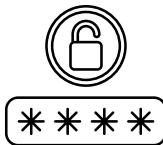
Local builds
and tests

Security Measures



JWT

JWT authentication generates a token at login, which the server verifies in each request to control access.



Password Hashing

User passwords are encrypted before storage, preventing unauthorized access even if the database is compromised.



Token Expiry & Refresh

JWT tokens have a limited lifespan, requiring renewal to enhance security and prevent unauthorized sessions.

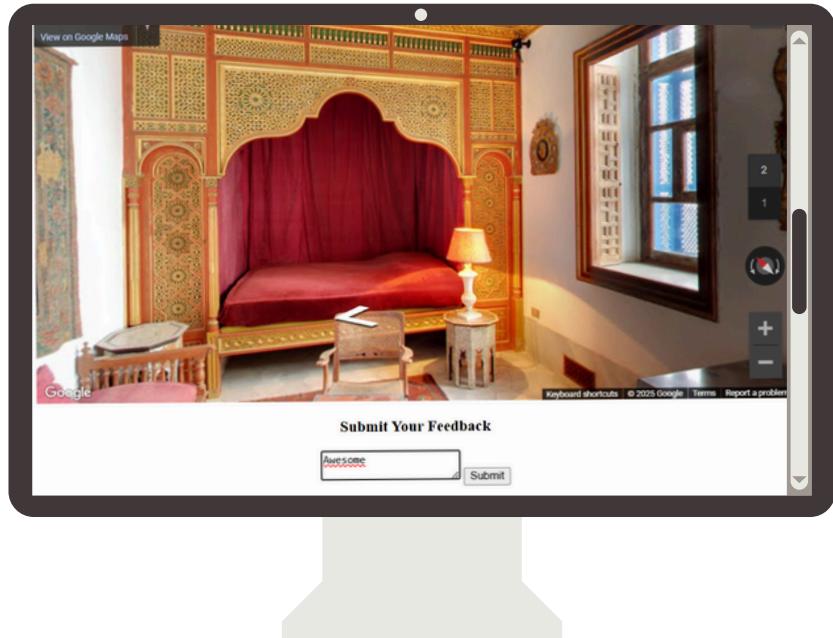


CORS Configuration

Restricts API access to trusted origins, preventing malicious requests from unauthorized sources.

User-experience consist of 3 elements

- 1 **Login:** enters the valid registered credentials
- 2 **Enjoy the Virtual-Tour:** explore the inside beauty of Ennejma Ezzahra Palace and interacts with Hotspots.
- 3 **Submits Feedback:** writing a constructive opinion to help improve the overall experience.



Thank You for your attention



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Gomaps.
pro-API



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