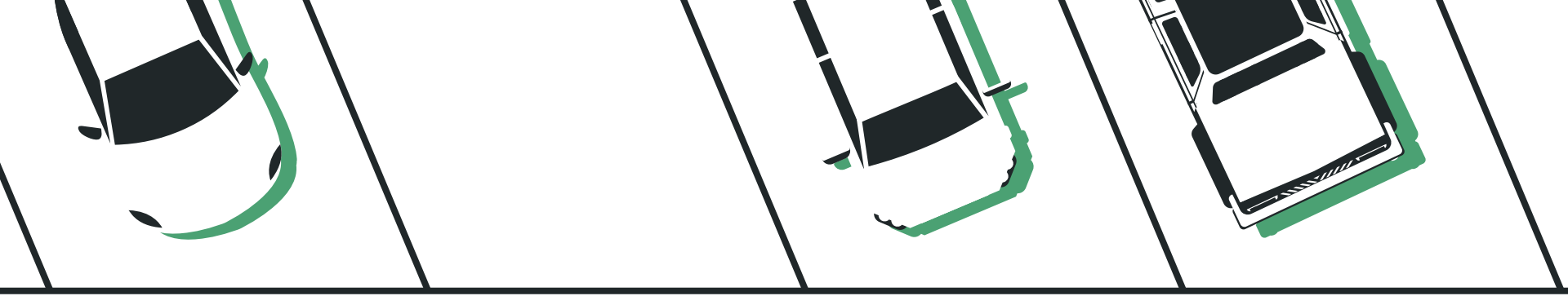


REDUCING LIGHT ENERGY CONSUMPTION IN PARKING AREAS

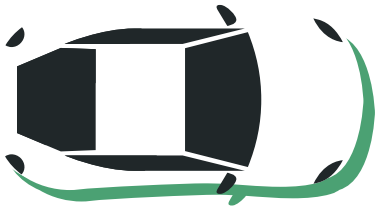
SmartSpot.

PROJECT 01

STYLIANI VLASSI - 1072792
ELIANNA POTOGLOU - 1072682

DESCRIPTION

- Car drivers, equipped with the system's bluetooth tag, can book one of the customised parking spots in advance via the system's application.
- When they reach the designated spot, if the system recognises the tag, the light above the parking space will turn on to both affirm it's the right place but also let the driver park securely.
- The light will then stay on for 2 minutes, giving time to the driver to walk away safely



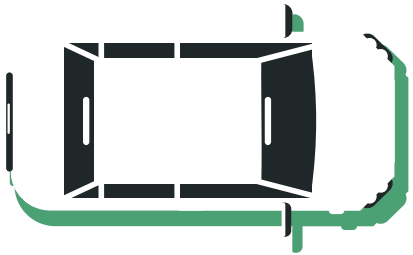
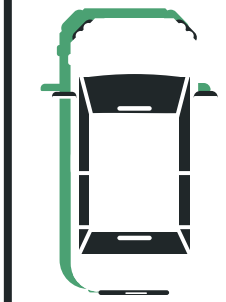


TABLE OF CONTENTS

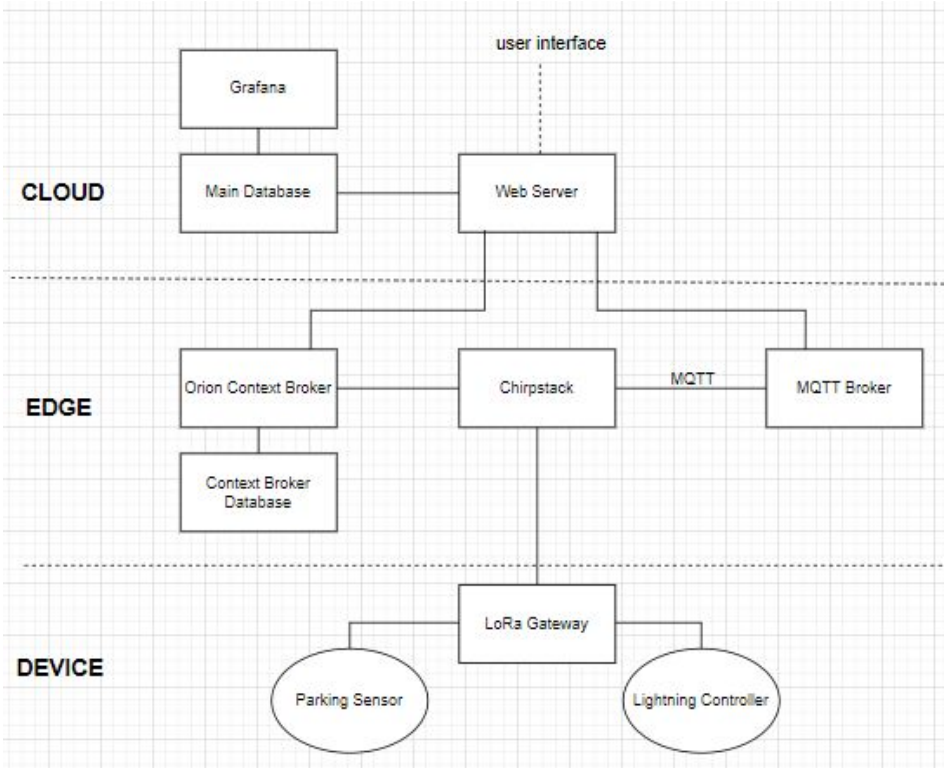
01	ARCHITECTURE & DATA FLOW	DATABASE	02
03	WEB APP	END TO END CONNECTION	04
05	VISUALIZATION WITH GRAFANA	PROJECT MANAGEMENT	06

ARCHITECTURE & DATA FLOW

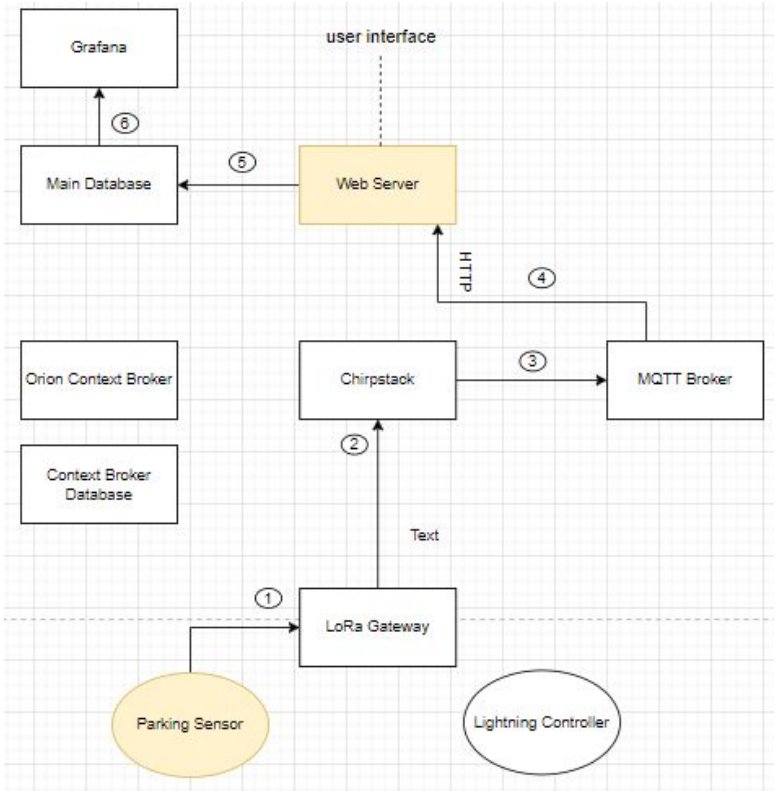
01



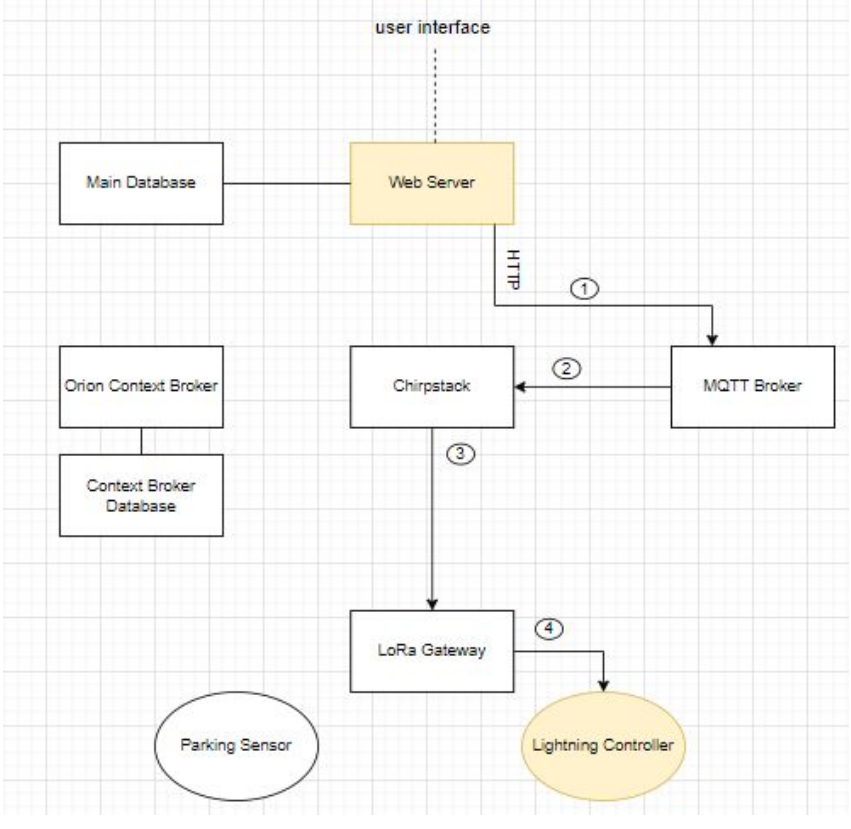
SYSTEM ARCHITECTURE



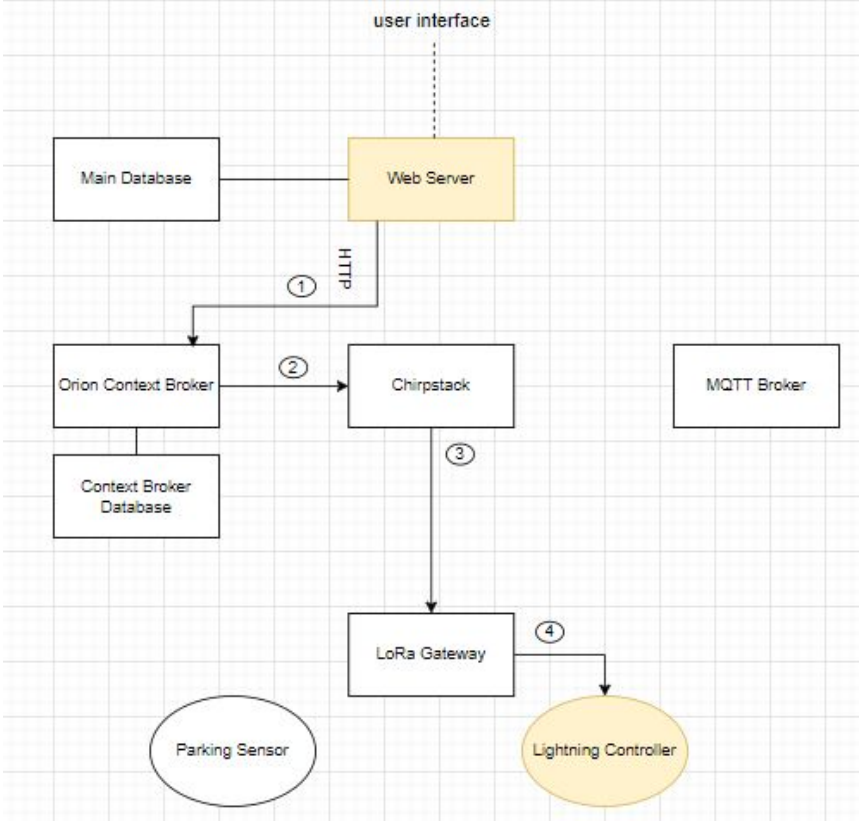
PARKING SENSOR ACTUATION



TURN LIGHT ON - MQTT Broker

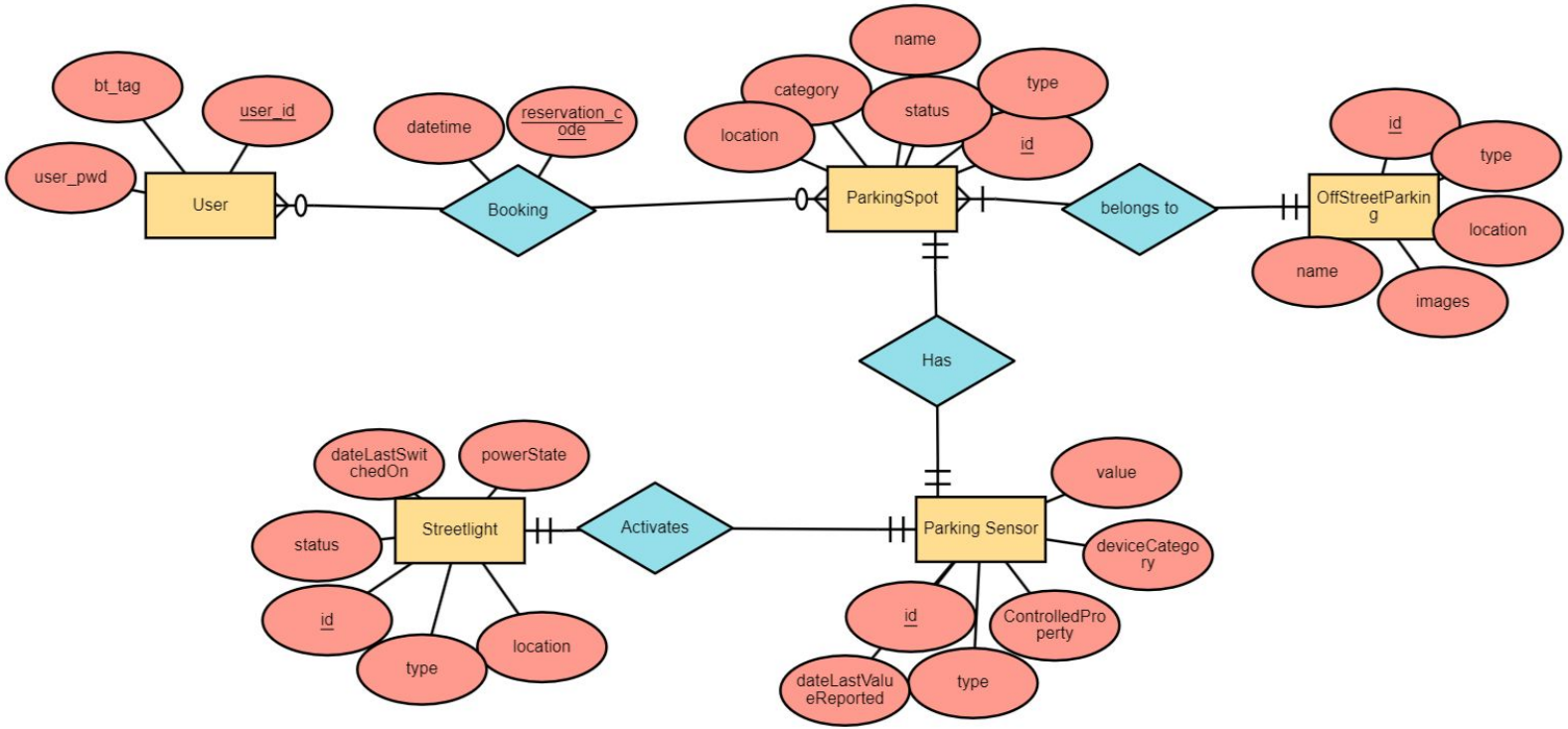


TURN LIGHT ON - Context Broker

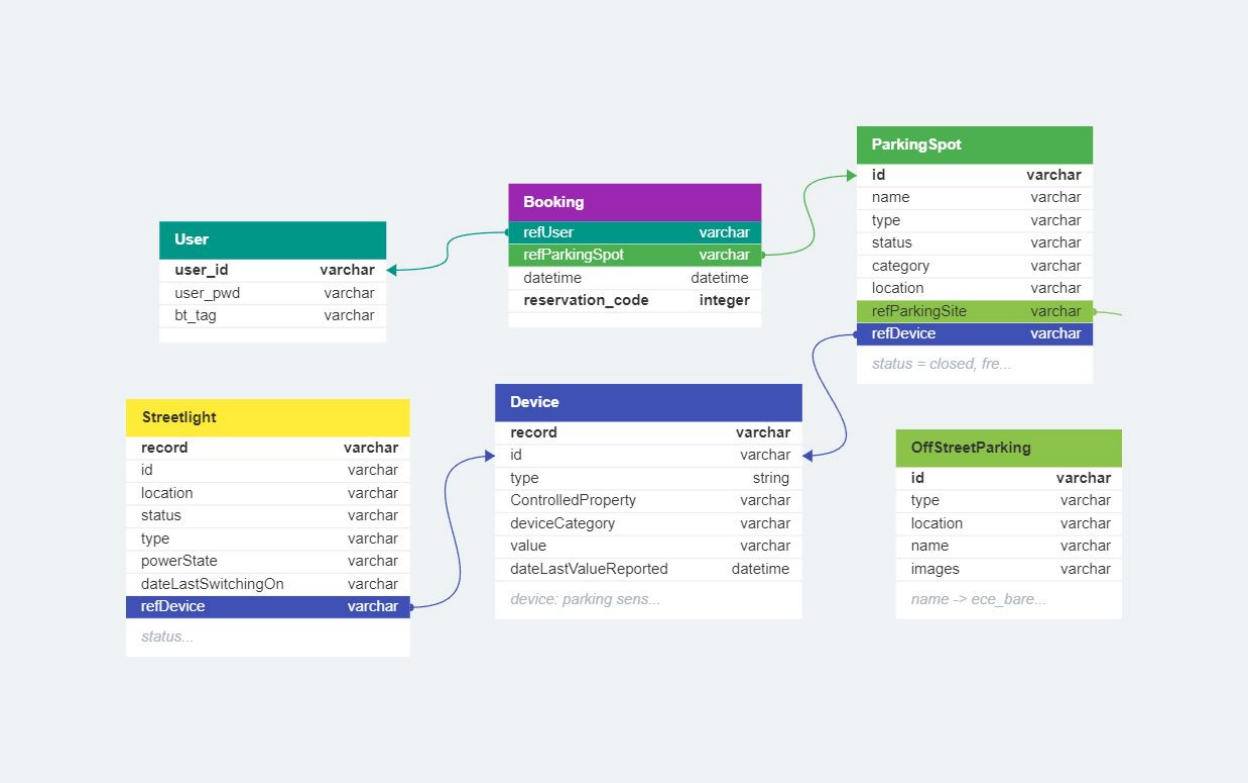


DATABASE 2

DATABASE ERD



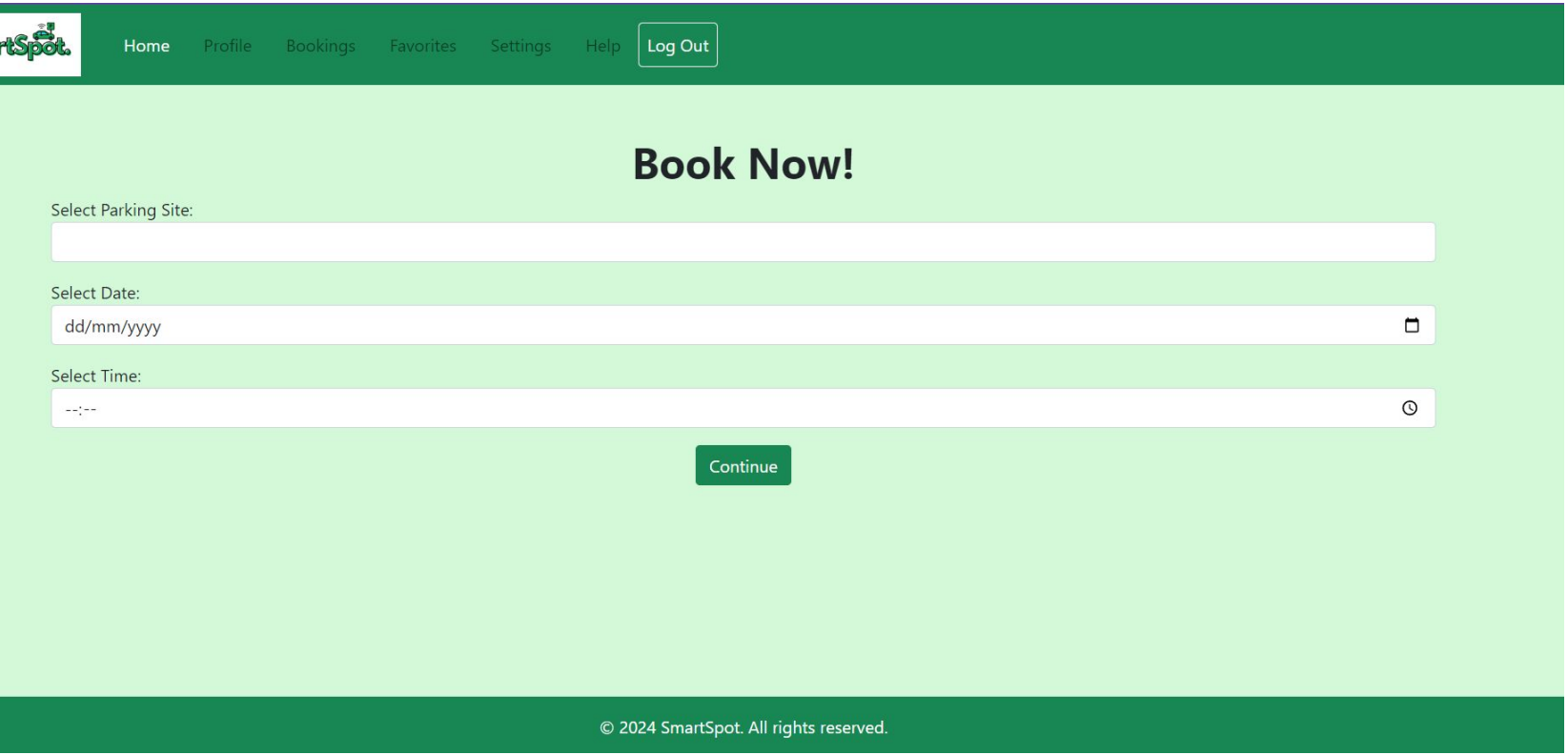
DATABASE DIAGRAM



WEB APP

03

WEB APP


SmartSpot.
Home
Profile
Bookings
Favorites
Settings
Help
Log Out
Book Now!
Select Parking Site:
Select Date:
dd/mm/yyyy
Select Time:
--:--
Continue
© 2024 SmartSpot. All rights reserved.

WEB APP

Parking Site: ECE Area 1

Parking1.1

Book the spot!

WEB APP

Your reservation is complete!

Booking Details

User: *Stellini*

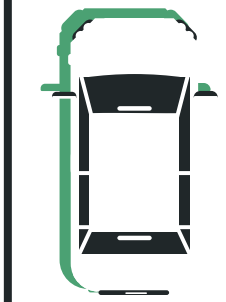
Datetime: *2024-02-07 at 10:16*

Parking Spot: *Parking1.9 in ECE Area 1*

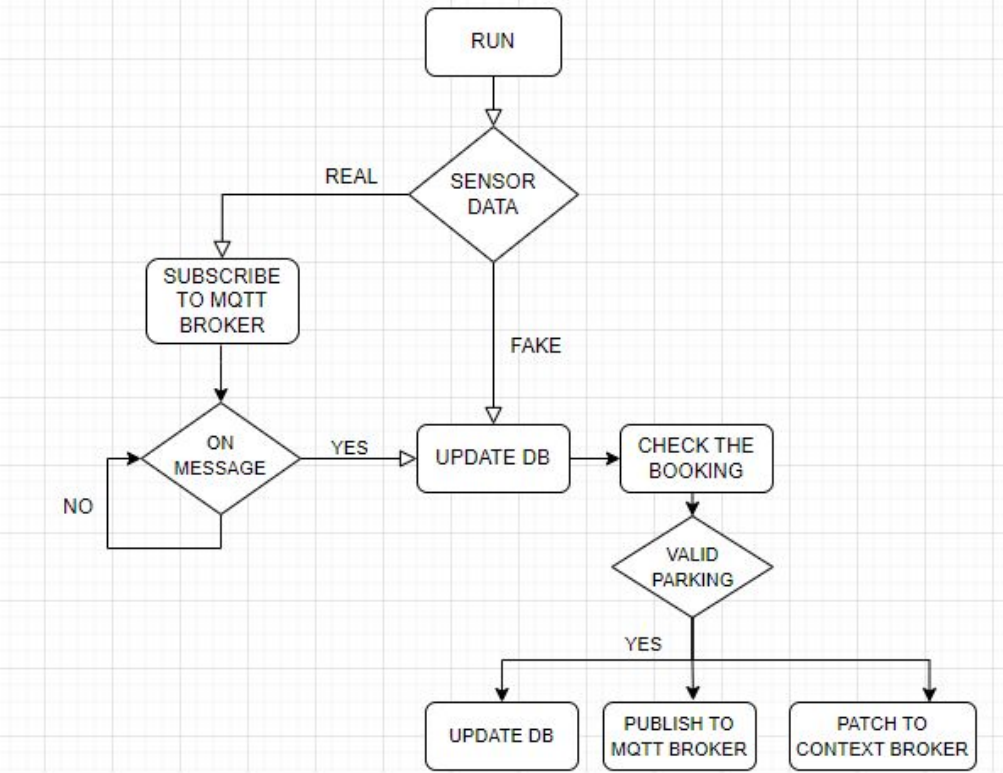
Reservation Code: *85636205*

END TO END CONNECTION

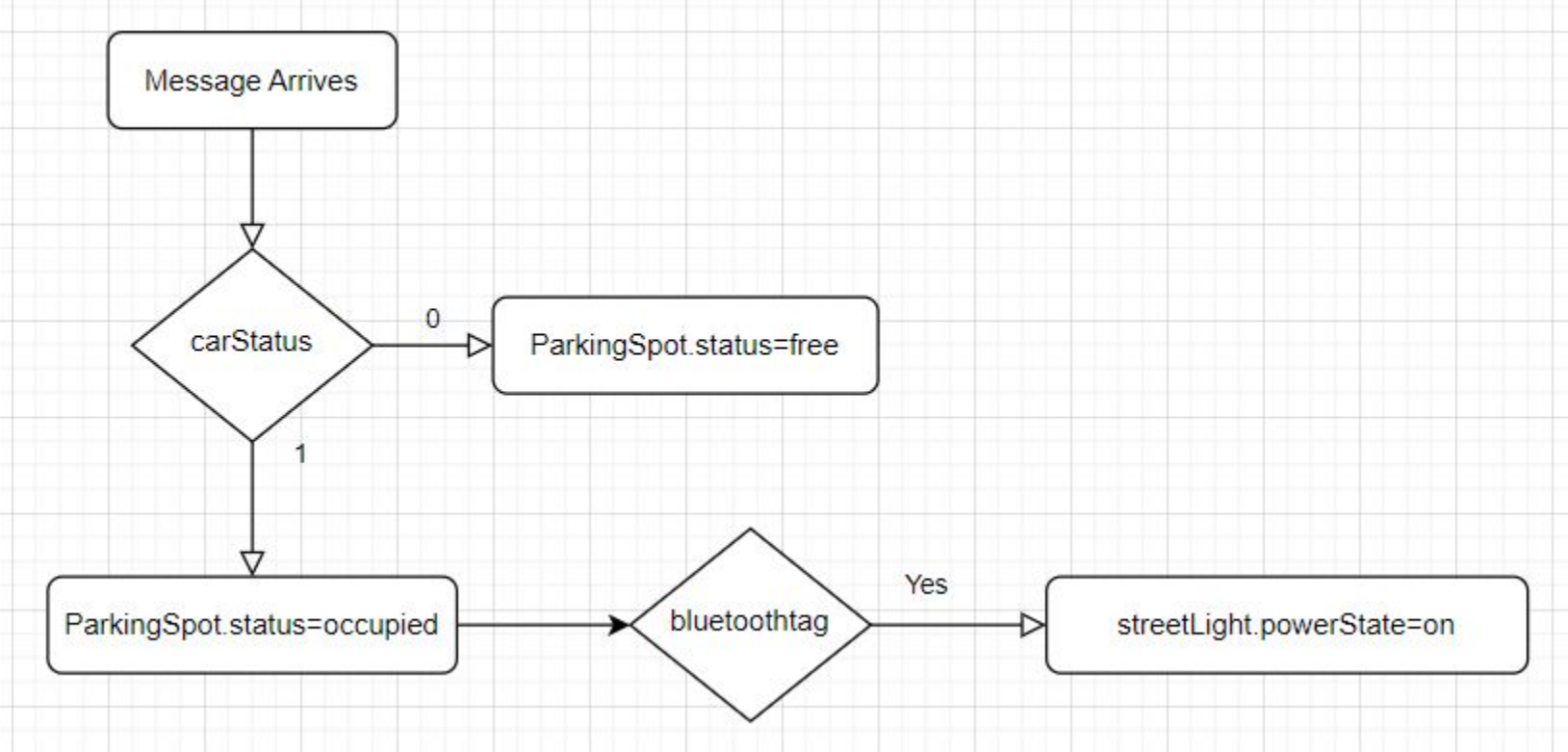
04



END TO END CONNECTION



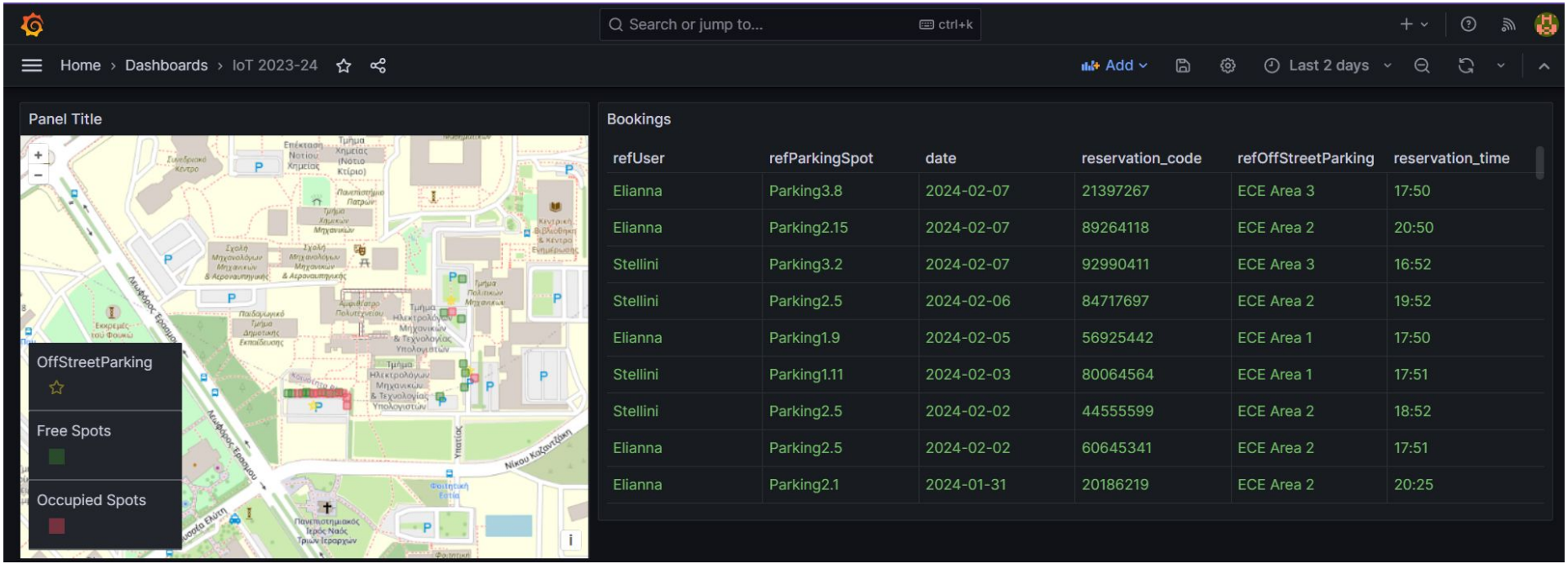
“Check the Booking”



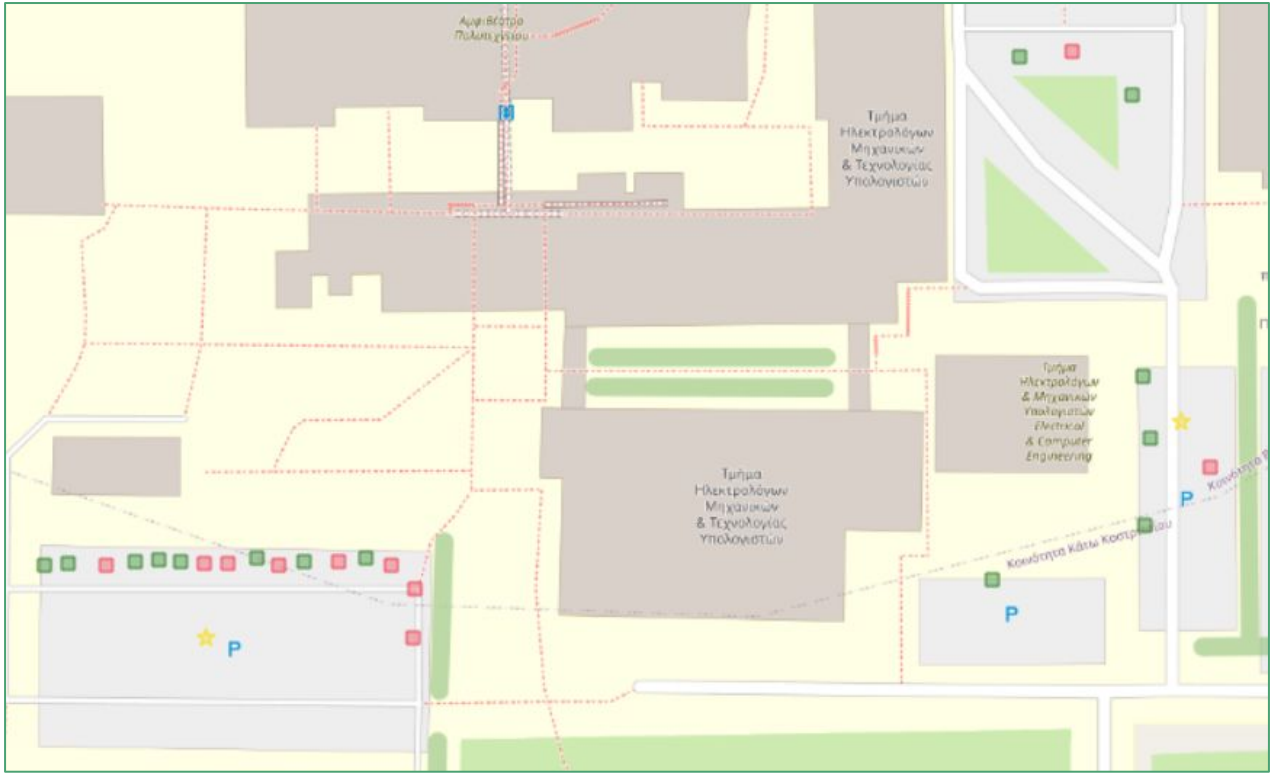
VISUALIZATION WITH GRAFANA

05

Admin Dashboard



Geomap Feature



PROJECT MANAGEMENT

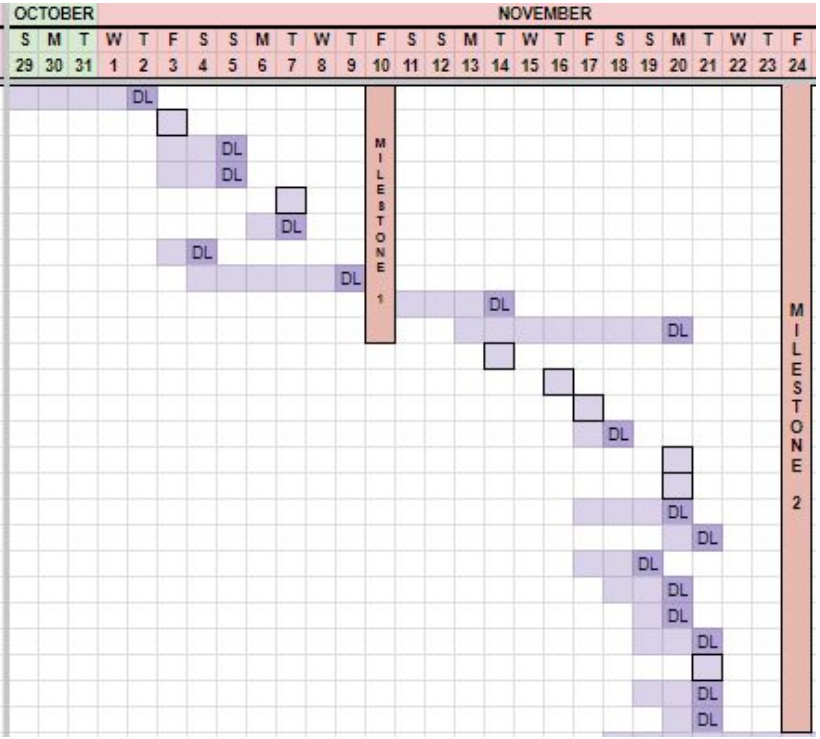
06

TIMELINE

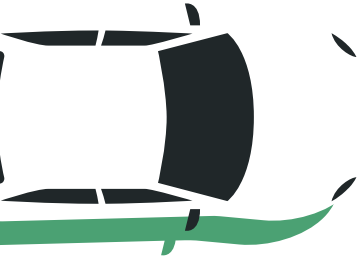
Generic Task	Responsible	November	December	January	February
Pitching	Stella&Elianna				
App Design Figma	Stella&Elianna				
Architecture Design	Stella&Elianna				
Database Design v1	Elianna				
Connect to MQTT Broker	Stella				
App's Frontend	Stella				
Database Design with SMDs	Elianna				
Dummy Data for DB	Stella&Elianna				
App's Backend	Elianna				DL: 8/2
Exchange Data with MQTT Broker	Stella				
Data Flow Implementation	Stella				
Grafana	Elianna				
Test with Dummy Data	Stella				
Connect Context Broker	Stella&Elianna				
Exchange Data with Context Broker	Stella				
~~Test with Real Data~~					
Report	Stella&Elianna				

GANTT CHART

AREA	TASK	WHO	STATUS	Comment
Meeting	Reading for 1st Meeting	Elianna & Stella	Done	
Meeting	1st Meeting	Elianna & Stella	Done	
Milestone	Brainstorming for pitching	Elianna & Stella	Done	
Coach	Mail to coach	Stella	Done	
Coach	Meeting with coach #1	Elianna & Stella	Done	expectations
Brand	Prototype Figma	Elianna & Stella	Done	
Milestone	Presentation Template	Elianna & Stella	Done	
Milestone	Make Presentation	Elianna & Stella	Done	
Meeting	Reading for 2nd Meeting	Elianna & Stella	Done	
Brand	Make logo	Stella	Done	
Meeting	2nd Meeting	Elianna & Stella	Done	
Meeting	3rd Meeting	Elianna & Stella	Done	
Meeting	4th Meeting	Elianna & Stella	Done	
Coach	Mail to coach	Elianna	Done	
Coach	Meeting with coach #2	Elianna & Stella	Done	questions
Meeting	5th Meeting	Elianna & Stella	Done	
Architecture	Architecture design	Stella	Done	
Architecture	Flow design	Stella	Done	
Database	ERD	Elianna	Done	
Database	DB Design	Elianna	Done	
Database	SQL code	Elianna	Done	
Other	Gantt Chart	Elianna & Stella	Done	
Meeting	6th Meeting	Elianna & Stella	Done	
Milestone	Make Presentation	Stella	Done	
Coach	Mail to coach	Stella	Done	feedback



THANK YOU!



CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon** and infographics & images by **Freepik**