



SNAP PARK

IES UA-2023/24

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Objectives

- Develop a software product specification, from its usage requirements/scenarios (user stories) to its technical design.
- Propose, justify and implement a software architecture, based on enterprise *frameworks*.
- Put collaborative work practices for code development and agile project management into practice.



Product concept

App designed with parking lot owners in mind. It aims to provide them with several monitoring and managing features, including essential information such as the number of parked vehicles.





Personas

John is a forty-year-old Portuguese owner of a moderately-sized general store that recently acquired the nearest parking lot, being immediately next to the store.

User stories

Register park epic

John should be able to add a park

John wants to add a sensor to a park

User stories

Monitor park epic

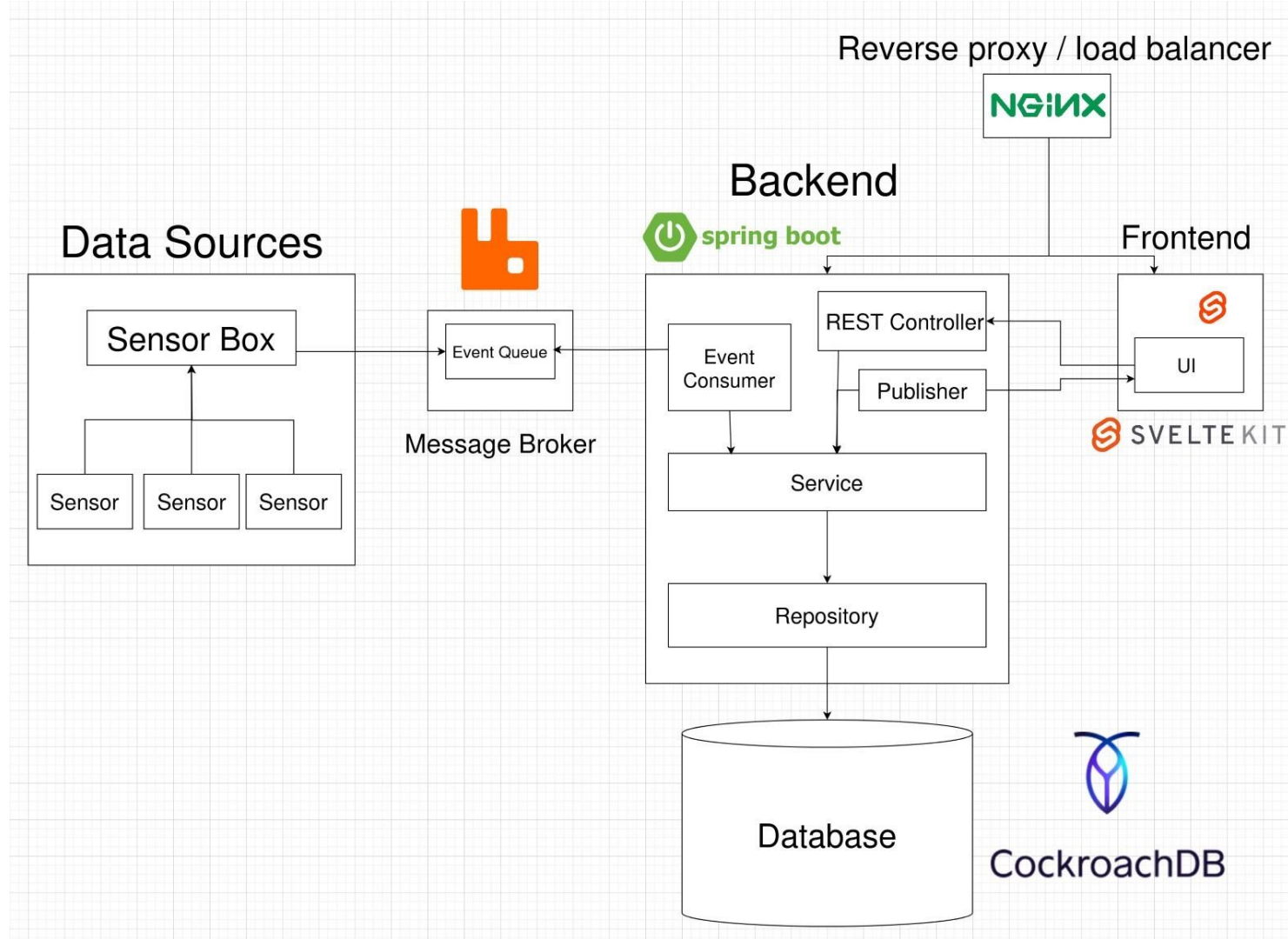
John should be able to monitor park movement

John should be able to check revenue

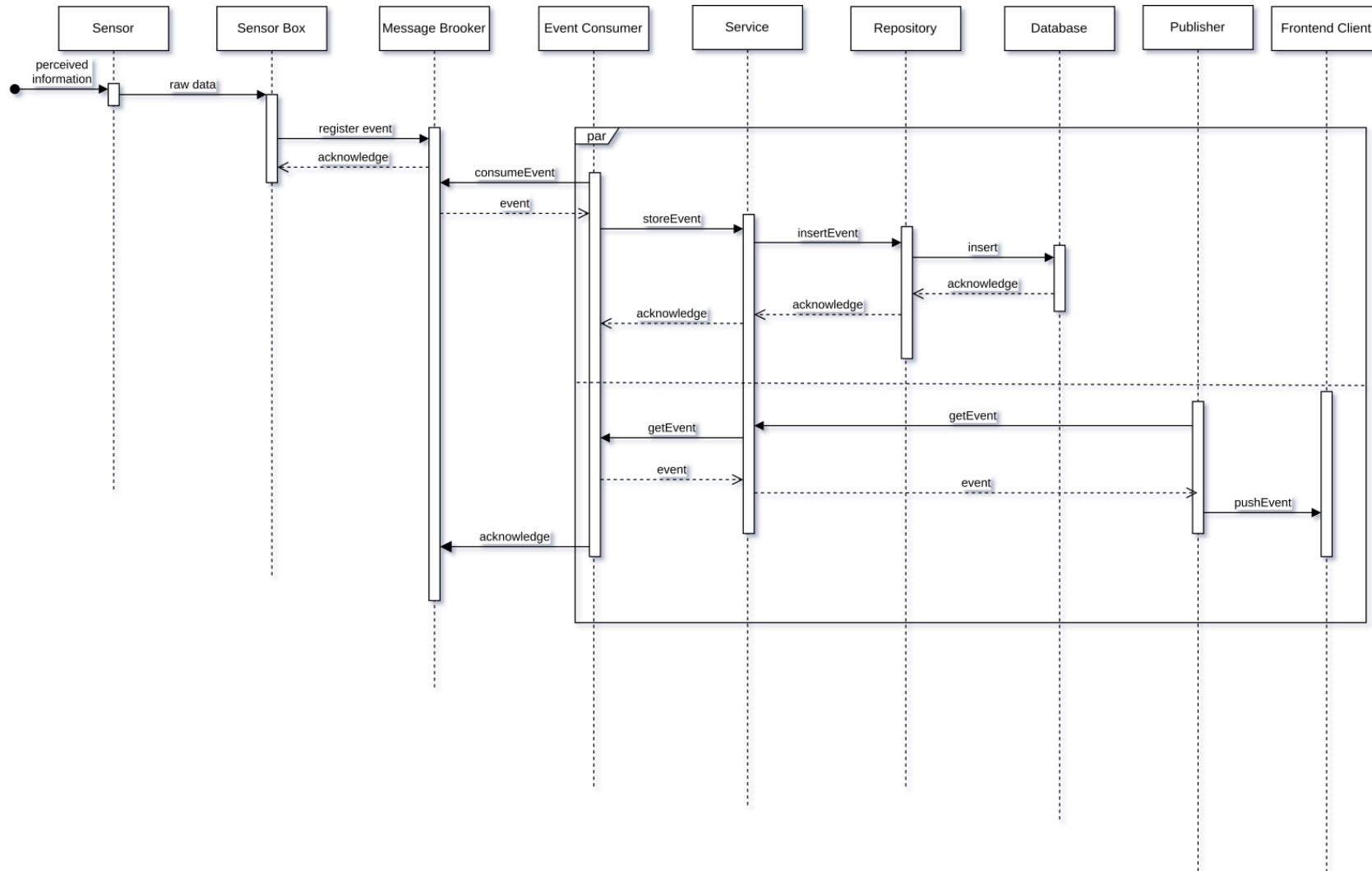
John wants to monitor air quality

John should be able to view the light levels of a park

Architecture



Module interactions



Agile Practices

- Work divided in several sprints
- Scrum
- Backlog
- Feature Driven WorkFlow
- Weekly meetings



Product Backlog and Prioritization:

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SnapPark
Software project

PLANNING
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DEVELOPMENT
Code

Project pages
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Projects / SnapPark
I4 Sprint

0 days remaining | ⚡ ☆ ↗ **Complete sprint** ...

GROUP BY: None | Insights | View settings

TO DO 1

- John wants to have an account
MANAGE ACCOUNT
SNAP-19 3

IN PROGRESS 1

- John wants to view his park sensors
MONITOR PARK
SNAP-18 3 VS

DONE 5 ✓

- Jonh wants to add a sensor to a park
REGISTER PARK Feature
SNAP-3 ✓ 3 VS
- John should be able to check Revenue
MONITOR PARK Feature
SNAP-5 ✓ 2
- John wants to monitor air quality
MONITOR PARK Feature
SNAP-6 ✓ 3 TP
- John should be able to view the light levels of a park
MONITOR PARK Feature
SNAP-7 ✓ 3 VS
- John should be able to monitor park movement
MONITOR PARK Feature
SNAP-4 ✓ 4 TP

REVIEW

RELEASE

<https://snappark.atlassian.net/jira/software/projects/SNAP/boards/1#>

Demo and Showcase of the App

```
... object to mirror  
mirror_mod.mirror_object =  
operation == "MIRROR_X":  
mirror_mod.use_x = True  
mirror_mod.use_y = False  
mirror_mod.use_z = False  
operation == "MIRROR_Y":  
mirror_mod.use_x = False  
mirror_mod.use_y = True  
mirror_mod.use_z = False  
operation == "MIRROR_Z":  
mirror_mod.use_x = False  
mirror_mod.use_y = False  
mirror_mod.use_z = True
```

```
selection at the end -add  
mirror_ob.select= 1  
mirror_ob.select=1  
next scene objects.  
("Selected" + scene.objects[one.name].select  
mirror_ob.select = 0  
= bpy.context.selected_object  
data.objects[one.name].select  
print("please select exactly
```

```
-- OPERATOR CLASSES --
```

```
types.Operator):  
X mirror to the selected  
object.mirror_mirror_x"  
mirror X"
```

A large, stylized blue smiley face is centered on a white background. The smiley face has a thick blue outline and a wide, open-mouthed smile. The word "Thanks" is written in a white, rounded, sans-serif font across the middle of the face.

Thanks