



KOÇ
UNIVERSITY



Comp 491 Project Progress – Progress Meeting 2



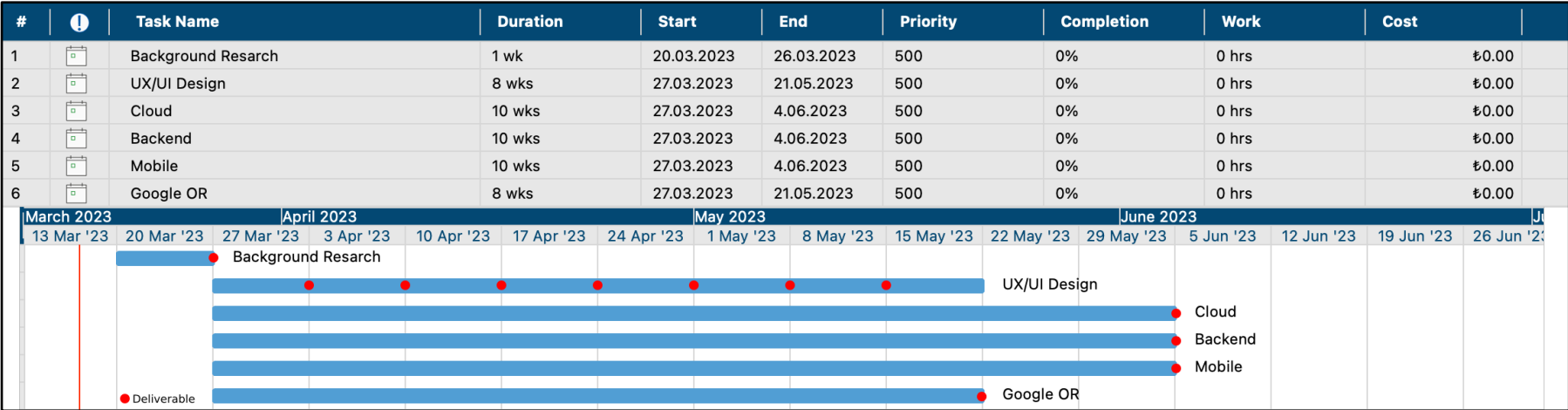
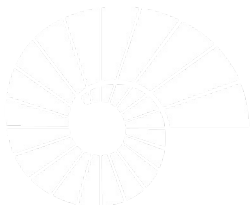
"Ülgen": Residence Activity Monitor and OR Solutions to Disasters

Kaan Turkmen, Can Usluel
Halil Doruk Yildirim, Bumin Aybars Inci



Project Description

Background Research (All), UX/UI Design (Doruk), Cloud (Kaan), Backend (Kaan), Mobile (Aybars), Google-OR (Can).





#	!	Task Name	Duration	Start	End	Priority	Completion	Work	Cost	
1		Background Research	1 wk	20.03.2023	26.03.2023	500	0%	0 hrs	₹0.00	
2		UX/UI Design	8 wks	27.03.2023	21.05.2023	500	0%	0 hrs	₹0.00	
3		Cloud	10 wks	27.03.2023	4.06.2023	500	0%	0 hrs	₹0.00	
4		Backend	10 wks	27.03.2023	4.06.2023	500	0%	0 hrs	₹0.00	
5		Mobile	10 wks	27.03.2023	4.06.2023	500	0%	0 hrs	₹0.00	
6		Google OR	8 wks	27.03.2023	21.05.2023	500	0%	0 hrs	₹0.00	

March 2023

April 2023

May 2023

June 2023

July 2023

13 Mar '23

20 Mar '23

27 Mar '23

3 Apr '23

10 Apr '23

17 Apr '23

24 Apr '23

1 May '23

8 May '23

15 May '23

22 May '23

29 May '23

5 Jun '23

12 Jun '23

19 Jun '23

26 Jun '23

Background Research

UX/UI Design

Cloud

Backend

Mobile

Google OR

Deliverable



Previous Project Meeting (1)

- Background Research
 - The data we store, and transfer is sensitive, thus, we thought a lot about these processes. We did brainstorm of the concepts such as applying cryptography, creating easy to use UI design, securing data in the client-side as well as server-side.
- Cloud
 - N/A
- Backend
 - Spring Boot 3 and Spring Security 6 were a major version updates, and they changed some terminologies that I used to know in Spring Boot. It was like a learning experience. Learned and implemented our initial backend with new knowledge.
- Mobile
 - Started Analyzing Android System Capabilities. Began researching for the main networking problem.



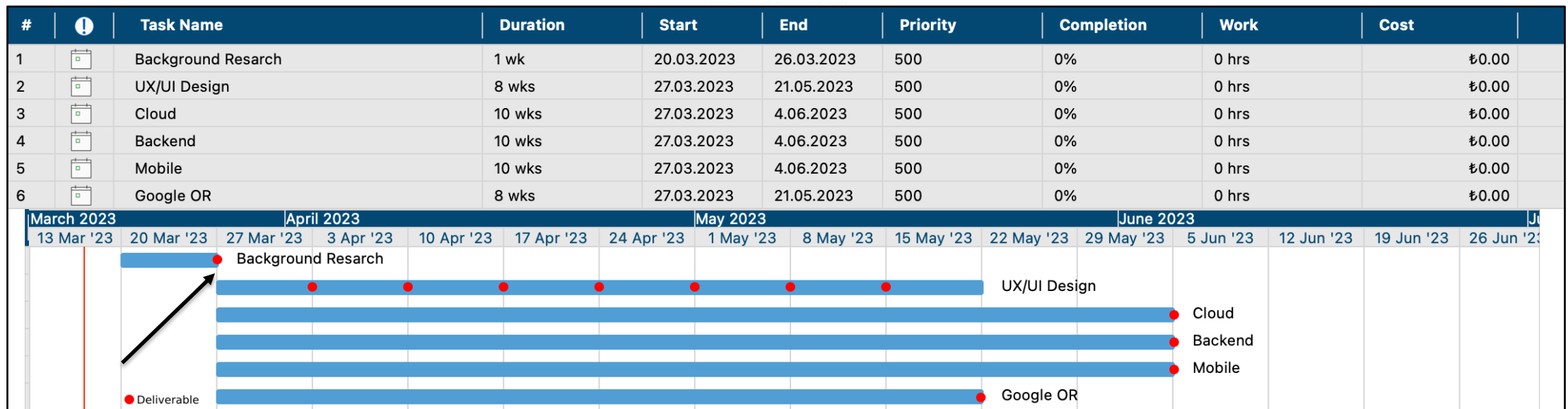
Previous Project Meeting (2)

- UI Design
 - Planned to create the design goal for the application and make a proper report.
 - Planned to begin wireframing the interface with the formed design goal.
 - Found it difficult to begin wireframing without thoroughly designing a goal. Created a design goal but it will probably be transformed during the project as we gain more information and go through more research methods; as is agile development.
- Google-OR
 - Problem of finding a suitable solution for our project in Google OR's example problems.
 - Examined possible solutions and found a feasible approach using modified version of TSP for priority implementation.



Current Progress Meeting

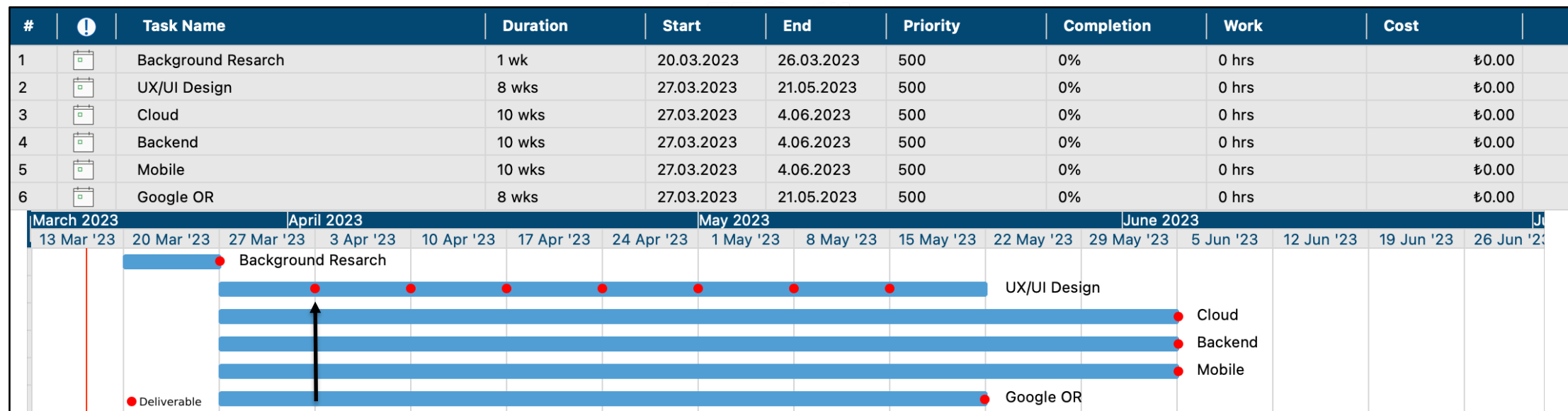
- Background Research Phase is completed.
- Architecture Diagram is introduced, Cost Estimation is made, and Initial Backend got Deployed on AWS EC2 (Kaan)
- Finalized the idea of Google OR exploration and its usage. (Can)
- UI/UX Design Goal is completed, and report created, planning of Exploratory Research (Doruk)
- Started analyzing Open-Source Repo: Ning. (Aybars)





Next Project Meeting

- Background Research Phase will be completed.
- Backend's User Part will be completed. (Kaan)
- Initial steps of the algorithm used in priority for TSP implementation will be implemented. (Can)
- Setting up and creating Exploratory User Research, start creating initial UI/Wireframing. (Doruk)
- Main networking problem will be solved. (Aybars)



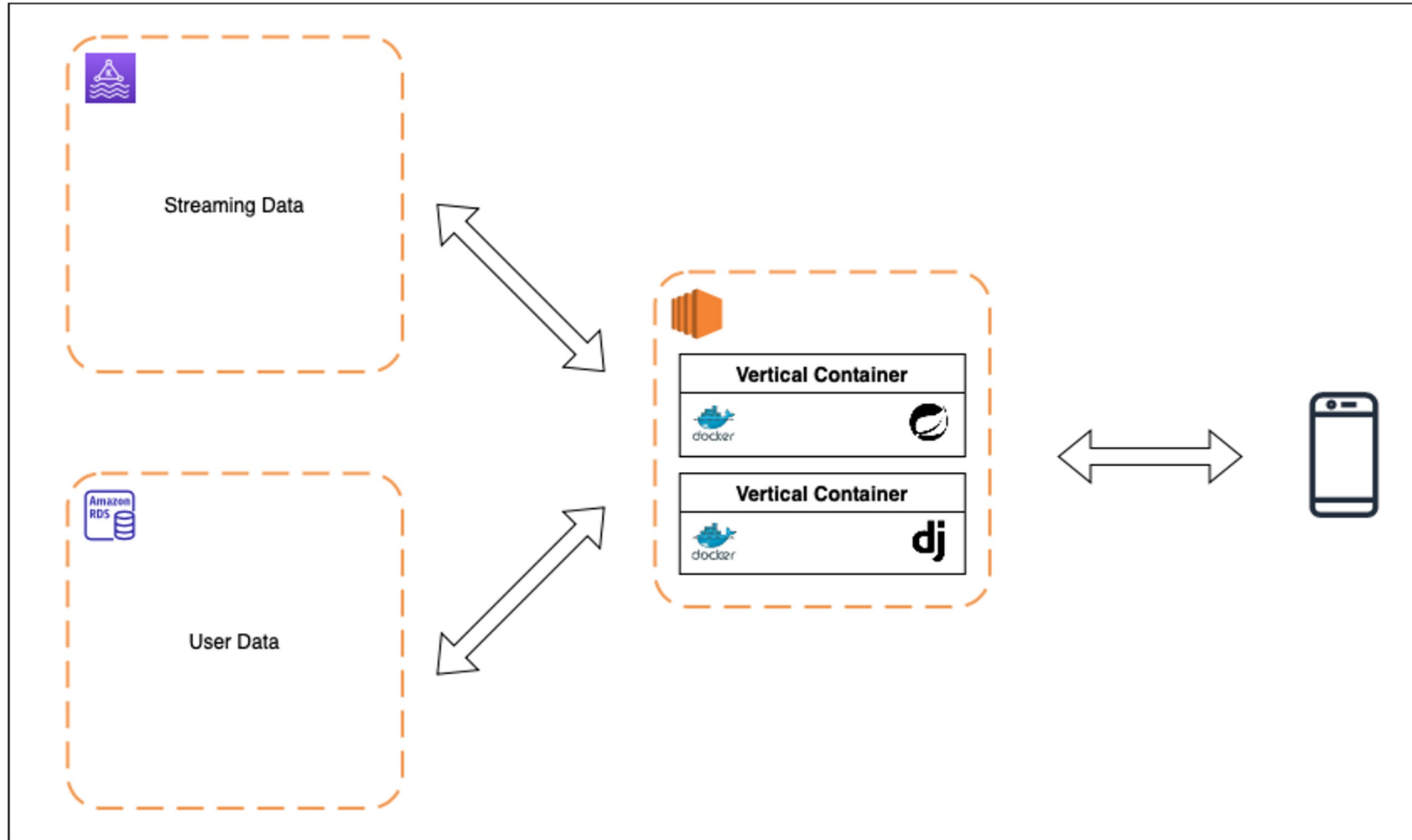


Deliverable - Concrete Plan

- Cloud
 - It is considered to it is a good practice to deploy Kafka on EC2 in initial stages and will be looked into at later in the end of the project.
 - Cloud is set up, EC2 is now running our Dockerized Backend while RDS running on PostgreSQL DB.
- Backend
 - Microservice architecture seems unnecessary.
 - Initial Backend is completed: Commit 3118147 at github.com/UlgenApp under Ulgen-Backend Repo.
- Mobile
 - Android Network Service Discovery is not suitable for expected network capabilities: it only discovers “ready-to-connect” devices.
- UI Design
 - Design goal is determined, and report is made but can be reevaluated depending on exploratory research.
 - Creating the wireframe of the interface with respect to the set design goals using Figma.
- Google-OR
 - Focused on finding solutions for priority problem in Traveling Salesman Problem. Found 4 possible solutions which will be discussed with the team.
 - Initializing the first steps of algorithm of the chosen solution.



Deliverable - Kaan (1)





- The screenshot displays the Postman application window. At the top, there's a navigation bar with "Home", "Workspaces", and "Explore". Below it, a yellow banner indicates "Working locally in Scratch Pad. Switch to a Workspace". The main interface shows a REST client request configuration:

 - Scratch Pad**: Includes tabs for "New" and "Import". A sidebar on the left shows "Collections" (empty), "APIs", "Environments", "Mock Servers", "Monitors", and "History". A message states: "You don't have any collections. Collections let you group related requests, making them easier to access and run. Create Collection".
 - Overview**: Shows the URL "ec2-44-193-17-15.compute-1.amazonaws.com:8080/api/v1/auth/register". It includes a "Save" button and a "Send" button.
 - Params**: Tab selected. Shows no parameters.
 - Authorization**: Tab selected. Shows no authorization.
 - Headers (8)**: Tab selected. Shows no headers.
 - Body**: Tab selected. Shows a JSON body:

```
{  "firstName": "Kaan",  "lastName": "Turkmen",  "email": "kaanurkmen@gmail.com",  "password": "hello-world"}
```
 - Pre-request Script**, **Tests**, and **Settings**: Empty tabs.
 - Cookies**: Tab selected. Shows no cookies.
 - Status**: 200 OK. Time: 419 ms. Size: 498 B. A "Save Response" button is present.