



BILKENT UNIVERSITY

CS491/492 - Logbook

Burak Baştuğ 22102266

Fall Semester - 2025

August

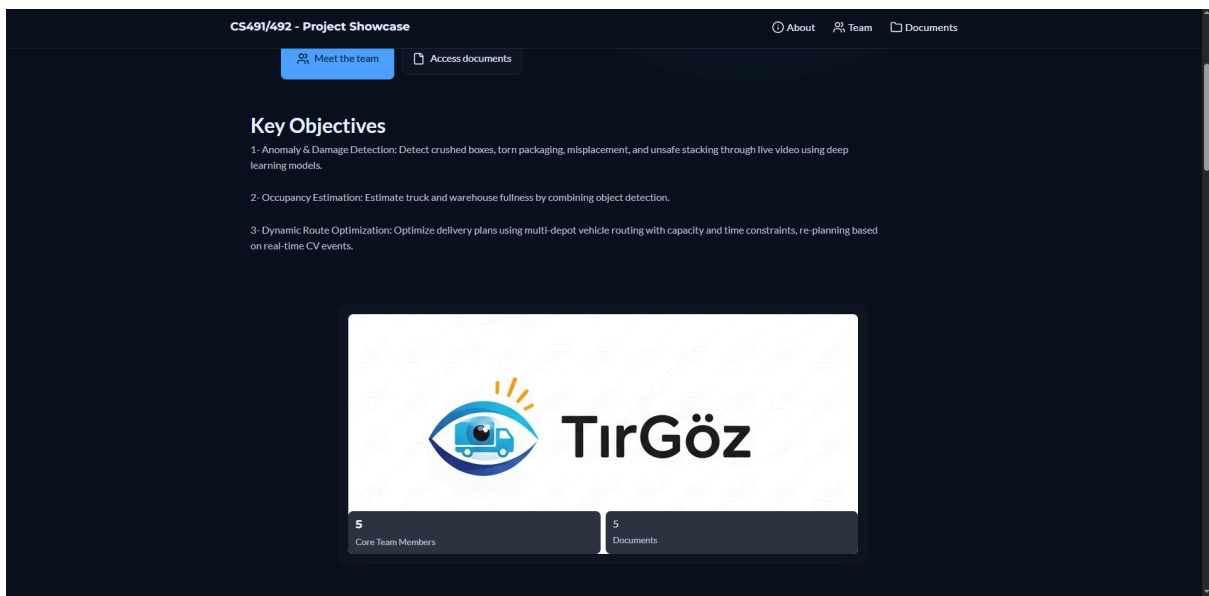
In August, we discussed the possible project ideas and decided on the problem we want to focus on for this course. We did research to find a suitable supervisor considering our project topic. We found Doruk Öner and had a meeting with him to introduce our idea. After the positive meeting with Doruk Öner, he agreed to be our supervisor. We discussed the future of the project and possible ways to expand the project according to course requirements.

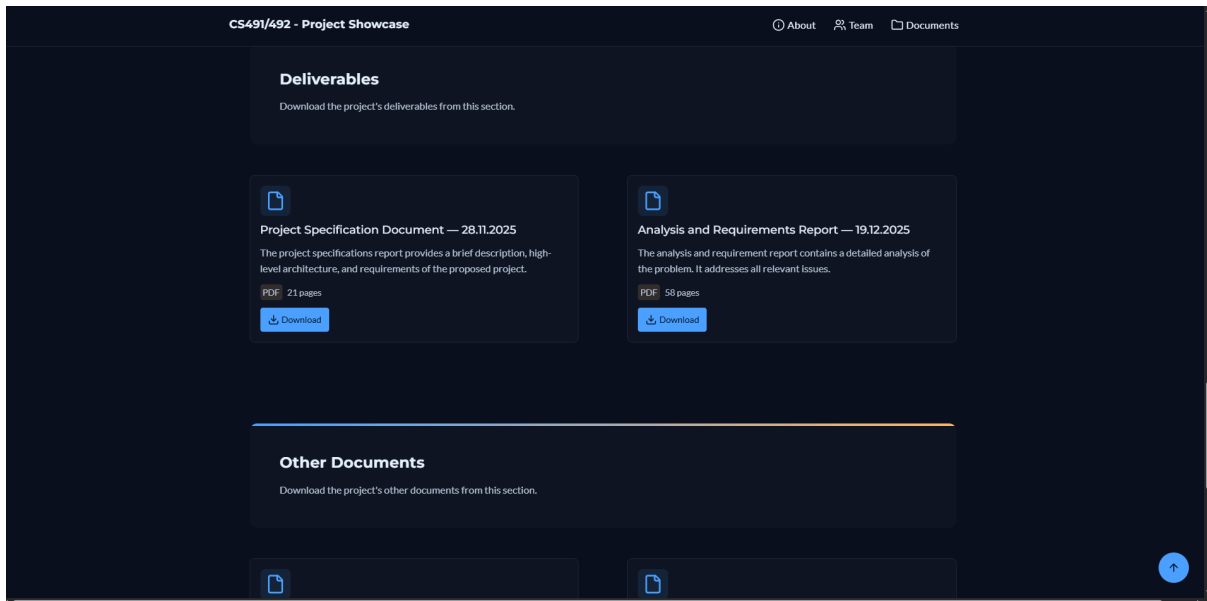
September

In September, we were required to find an innovation expert as part of our course. We did research on the expert list to find the best match with our project idea. I contacted Çağatay Kurt via LinkedIn for his feedback as an innovation expert.

October

In October, we wanted to join the AI mentorship program, so we created our application for it. Additionally, based on the responses we received from the possible innovation experts, we decided to proceed with Ali C. Beğen. I also created the project website on GitHub Pages. I have added a brief description, team members, and a document download section to the website.





November

In November, we were selected to get an AI mentorship during the course, so we had our first meeting with Onur Bıçakçı. He provided us with valuable ideas that greatly helped us. He helped us understand the problems and concepts in the logistics industry, which made our perspective closer to the real-life situations in logistics. He helped us to develop our project in many ways. Firstly, he suggested synthetic data for our machine learning training. He provided us with contact information for Ergin Selim Gönen, who owns a synthetic data company in Canada, and we subsequently contacted Ergin Selim Gönen to arrange a meeting. Additionally, our AI mentor, Onur Bıçakçı suggested that we should contact Alper Şen, a valuable IE academic at Bilkent, for our route optimization problem. I contacted Alper Şen to arrange a meeting. We also prepared our Project Specification document. I wrote the sections on Functional and Non-functional Requirements.

December

In December, we had our meeting with Alper Şen. He gave us valuable insights into the route optimization problem. Also helped us with brainstorming on how to use CV outputs in the route optimization problem. We also had our first meeting with Ergin Selim Gönen, discussing the creation of synthetic data and its application in our system. He provided us with ideas about the tools we can use to produce synthetic data as needed. Also, we completed our Analysis and Requirements Report. I wrote some scenarios, created diagrams, and helped organize the paper's structure. I have also updated the website to reflect our progress so far.

Spring Semester - 2026

January

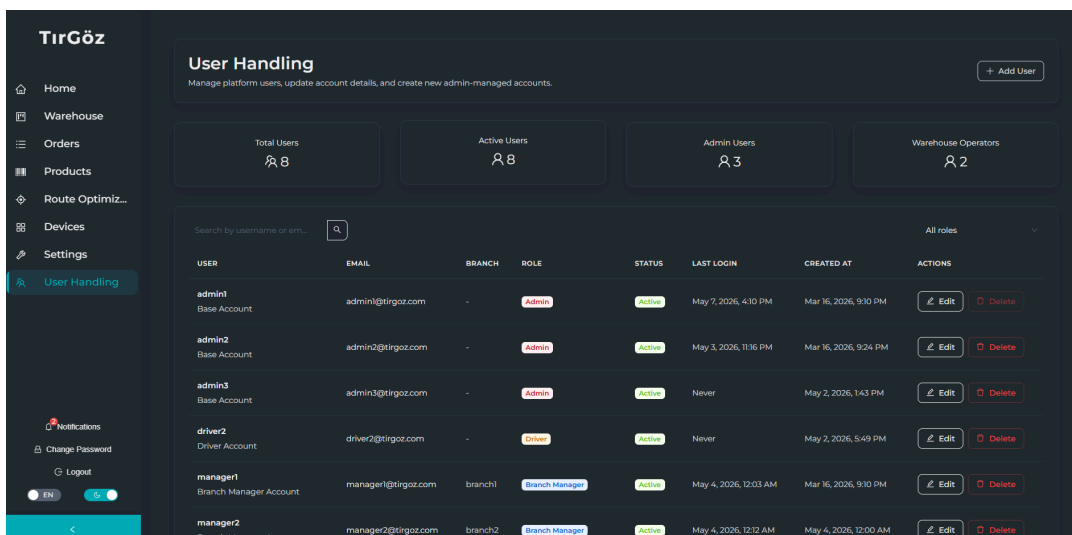
In January most of the month was semester break after the demo. I planned possible future works and roadmaps for my developments. I did research about our proposed project and evaluated the feedback from the demo to use it in future developments.

February

In February we continued the coding of the project. The structure, service architecture and general views of the app was already coded last semester. We continued to implement the functional features of last semester's work. I implemented the authentication and authorization mechanism. I also implemented the route guards of the frontend pages. I finalized the required views according to roles.

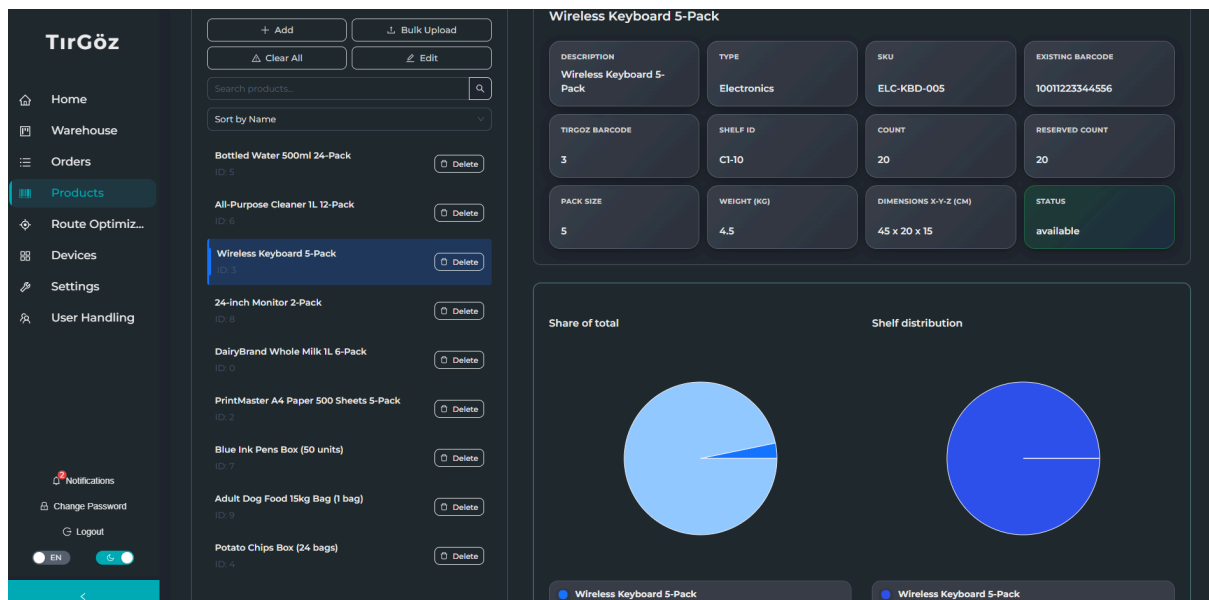
March

In March we delivered the Detailed Design report. I prepared the test cases for my part of the project. Also I contributed to the report as we all distributed the work of the report equally to every member. I implemented the user handling for admin. I also created different types of accounts and connected them to their page views based on the authorization decision of the project. I also implemented backend protection for the endpoints based on the authentication and authorization plan of the project.



April

I created the product management page for the required roles. I implemented the bulk upload and single upload of the products. I also implemented edit and delete options based on the decided product structure. Then, I implemented an ordering page for the required roles. I implemented the ordering feature based on the selection from available product stock. I implemented approval of the orders using reserved stock logic. I also implemented the order monitoring page to see the status of the orders. Then I implemented the notification system. Notification system is a parametric system that can send notifications with different severities to different users based on the role or username scope. I also implemented some quick event buttons to be used in the different notifications based on the event type such as damaged item subtraction from the stock considering the reserved stock logic. Finally we also worked on the final report.



TirGöz

My Branch Location Pick on Map

branch1 39.91310, 32.85255

Opens: 09:30 Closes: 11:30 Save Hours Reset

Ordering

Checkout (0)

Select products you need and place an order.

PRODUCT TYPE	SKU	DESCRIPTION	AVAILABLE QTY	QUANTITY
Electronics	ELC-KBD-005	Wireless Keyboard 5-Pack	Out of Stock	0
Office Paper	PPR-A4-500-BOX5	PrintMaster A4 Paper 500 Sheets 5-Pack	35	0
Snacks	SNK-CHP-024	Potato Chips Box (24 bags)	50	0
Beverage	BEV-WTR-500-24	Bottled Water 500ml 24-Pack	180	0
Cleaning	CLN-APC-012	All-Purpose Cleaner 1L 12-Pack	45	0
Office Supply	OFF-PEN-BLU-50	Blue Ink Pens Box (50 units)	150	0
Electronics	ELC-MON-024-2	24-inch Monitor 2-Pack	10	0
Pet Food	PET-DOG-15KG1	Adult Dog Food 15kg Bag (1 bag)	25	0

Notifications

Change Password

Logout

EN

TirGöz

Home

Warehouse

Orders

Products

Route Optimiz...

Devices

Settings

User Handling

Orders

ORDER ID	BRANCH	DATE	STATUS	ITEMS	ACTIONS
#73	branch1	04.05.2026 00:04:34	Approved	<ul style="list-style-type: none"> PrintMaster A4 Paper 500 Sheets 5-Pack x35 Bottled Water 500ml 24-Pack x10 	Disapprove
#72	branch2	04.05.2026 00:02:35	Cancelled	<ul style="list-style-type: none"> Potato Chips Box (24 bags) x40 Bottled Water 500ml 24-Pack x10 	-
#71	branch2	04.05.2026 00:02:29	Rejected	<ul style="list-style-type: none"> Blue Ink Pens Box (50 units) x50 24-inch Monitor 2-Pack x5 	-
#70	branch1	04.05.2026 00:02:17	Approved	<ul style="list-style-type: none"> Wireless Keyboard 5-Pack x20 Bottled Water 500ml 24-Pack x10 	Disapprove
#69	branch1	04.05.2026 00:01:42	Pending	<ul style="list-style-type: none"> PrintMaster A4 Paper 500 Sheets 5-Pack x50 (Insufficient Stock: 35) Wireless Keyboard 5-Pack x10 (Insufficient Stock: 0) 	Approve Reject

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Login successful!

TirGöz

Home

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Route Optimiz...

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Notifications

WARNING - Role Based

double confirm test

03.05.2026 17:53:43

Notification handled

CRITICAL - Role Based

double confirm test

02.05.2026 10:01:14

Ignore Confirm Damage Acknowledge

INFO - Role Based

This is an English layout notification

01.05.2026 22:14:45

Mark as Read Acknowledge

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EN

May

I implemented the e-mail sending feature of the notification system as the last implementation of mine at the very beginning of May. Then we delivered the final demo and presentation. We prepared for the CS Fair and this is how the CS491/292 courses are concluded.