



Bilkent University

Department of Computer Engineering

CS 319 Term Project

Spring 2025

Section 1

Group 1

Deliverable 2

Final Submission

Group Members:

Emre Algür - 22202673

Irmak İmdat - 22201570

Ömer Yaslitaş - 21902874

Alper Yıldırım - 22102033

Melih Rıza Yıldız - 21902958

Aykhan Ahmadzada - 21903609

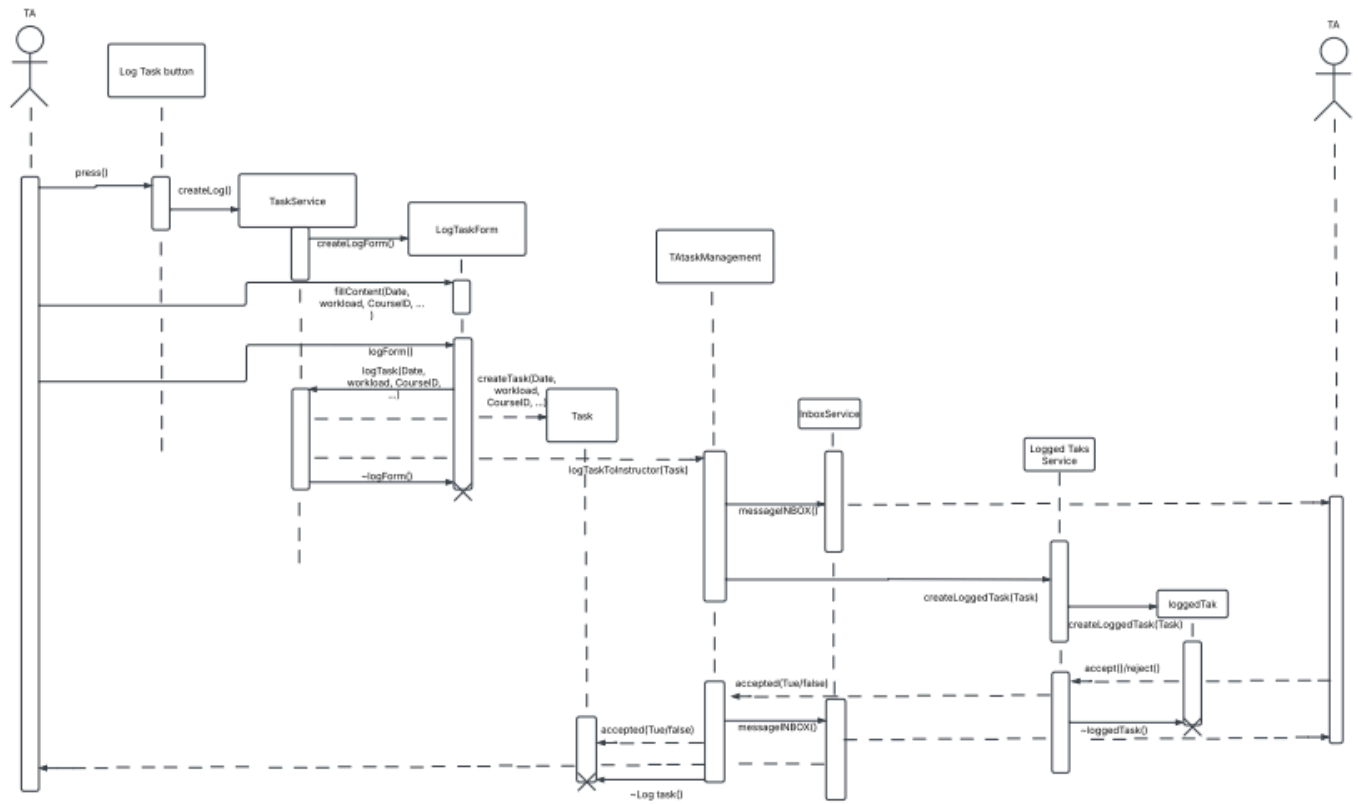
Instructor: Eray Tüzün

Teaching Assistant: Yahya Elnouby

- 1. Sequence Diagram**
- 2. Activity Diagrams**
- 3. State Diagrams**
- 4. Class Diagram**
- 5. Non-Functional Requirements**
- 6. Mock-Ups**

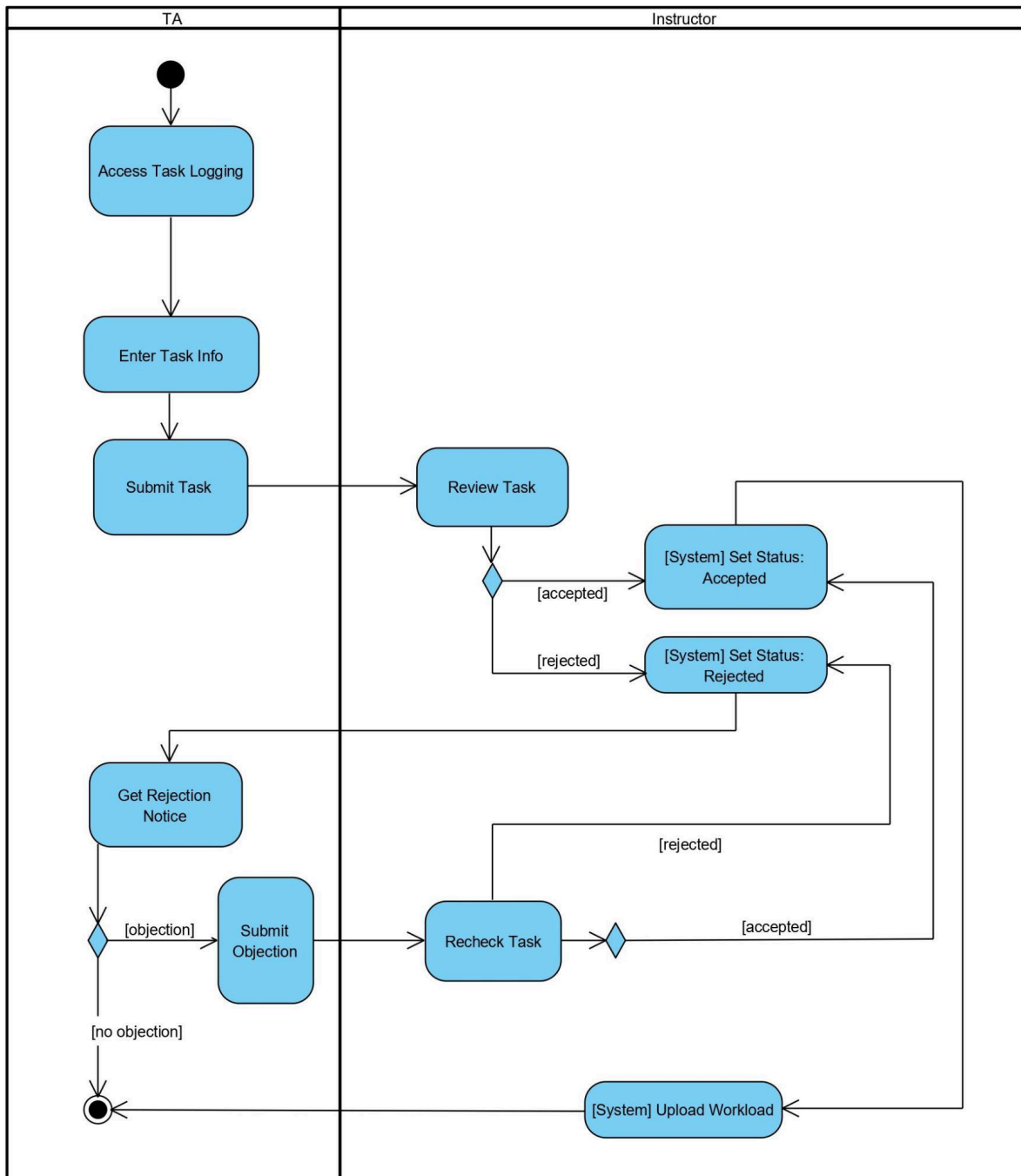
1. Sequence Diagram

Log task

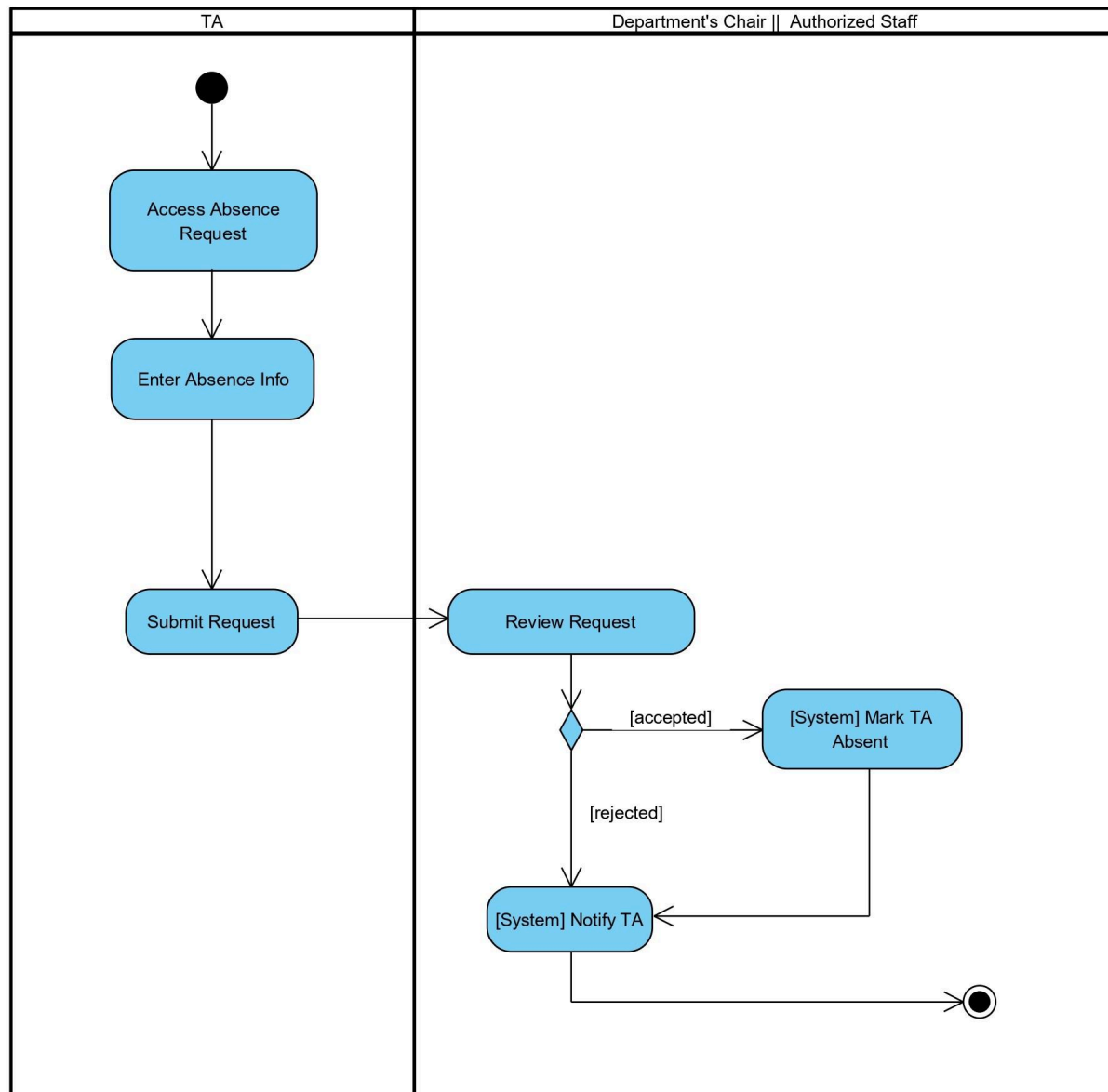


2. Activity Diagrams

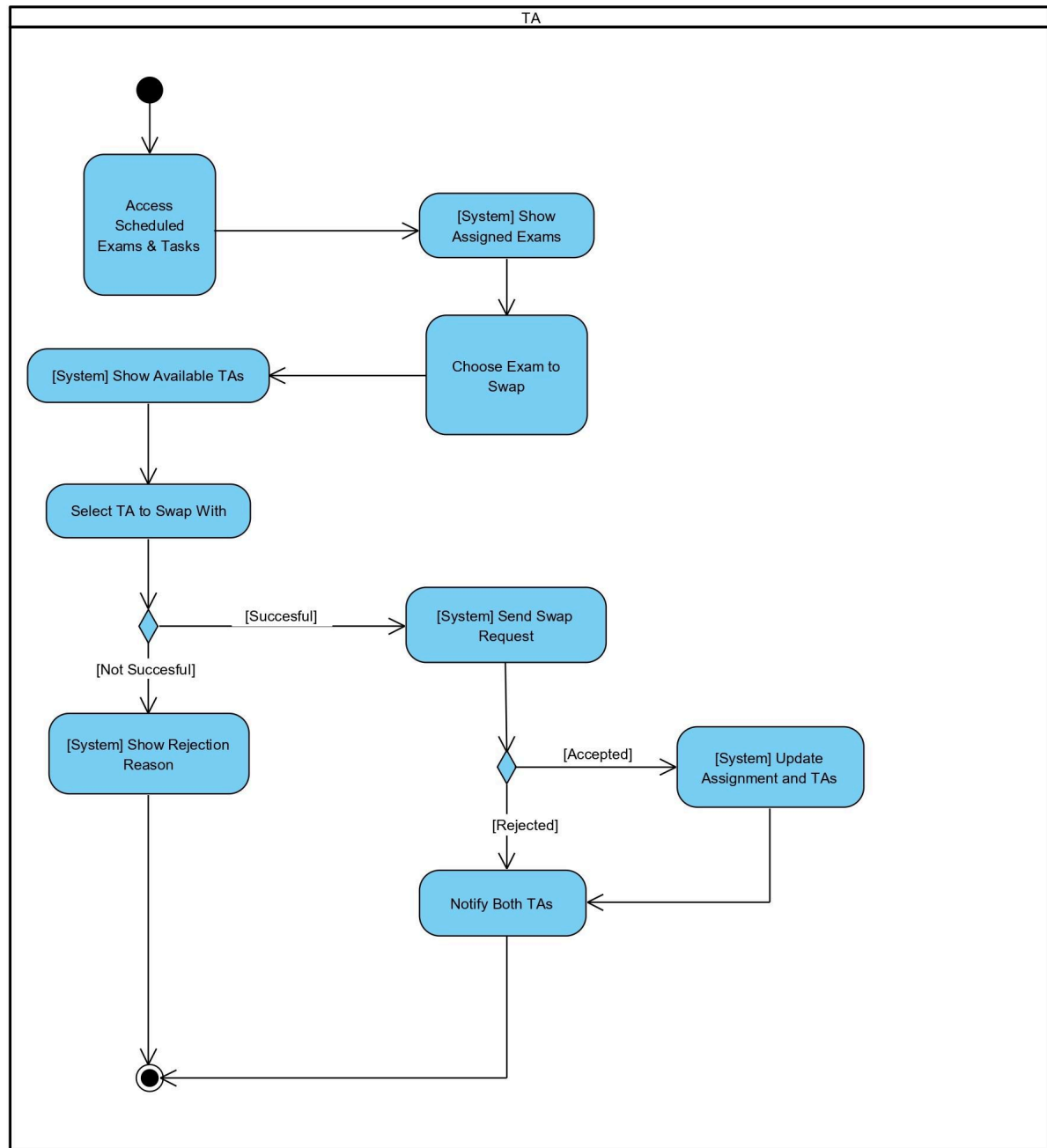
2.1. Log Task Activity



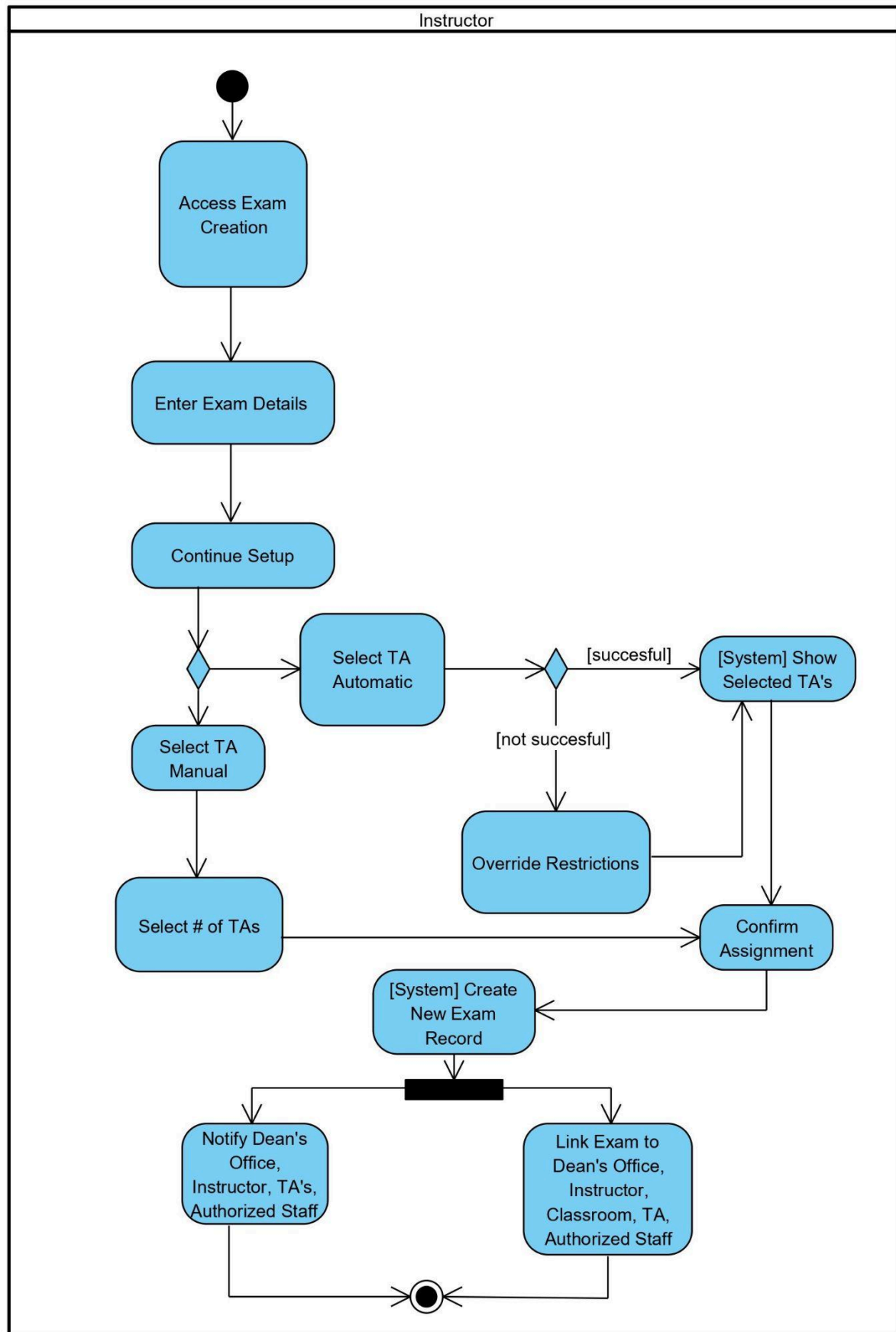
2.2. Mark Absence Activity



2.3. Swap Request Activity

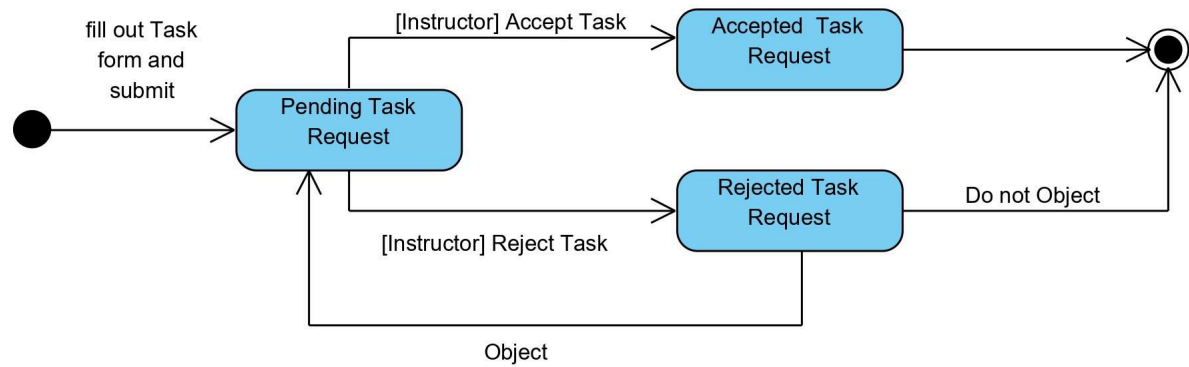


2.4. Exam Creation Activity

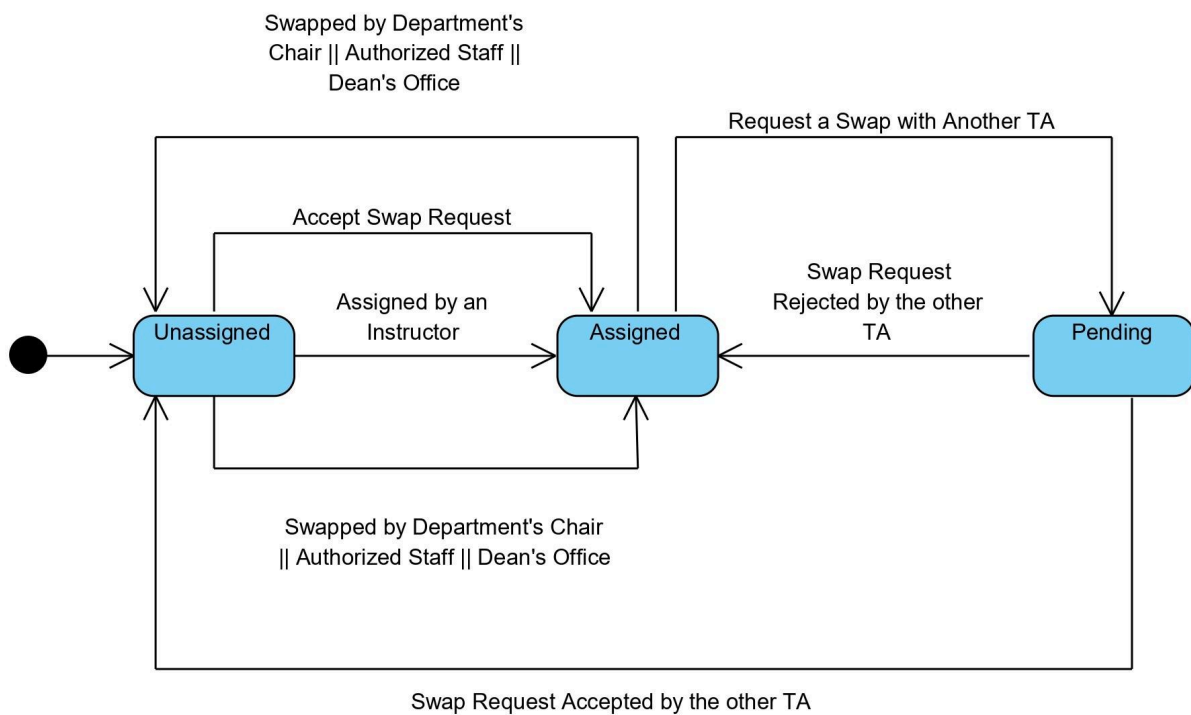


3. State Diagrams

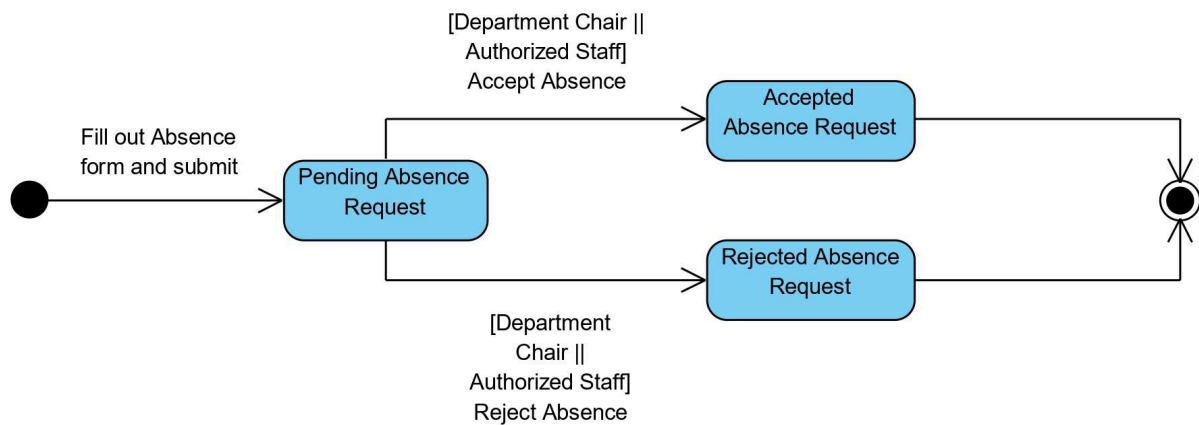
3.1. Logged Task State



3.2. Proctor Assignment State

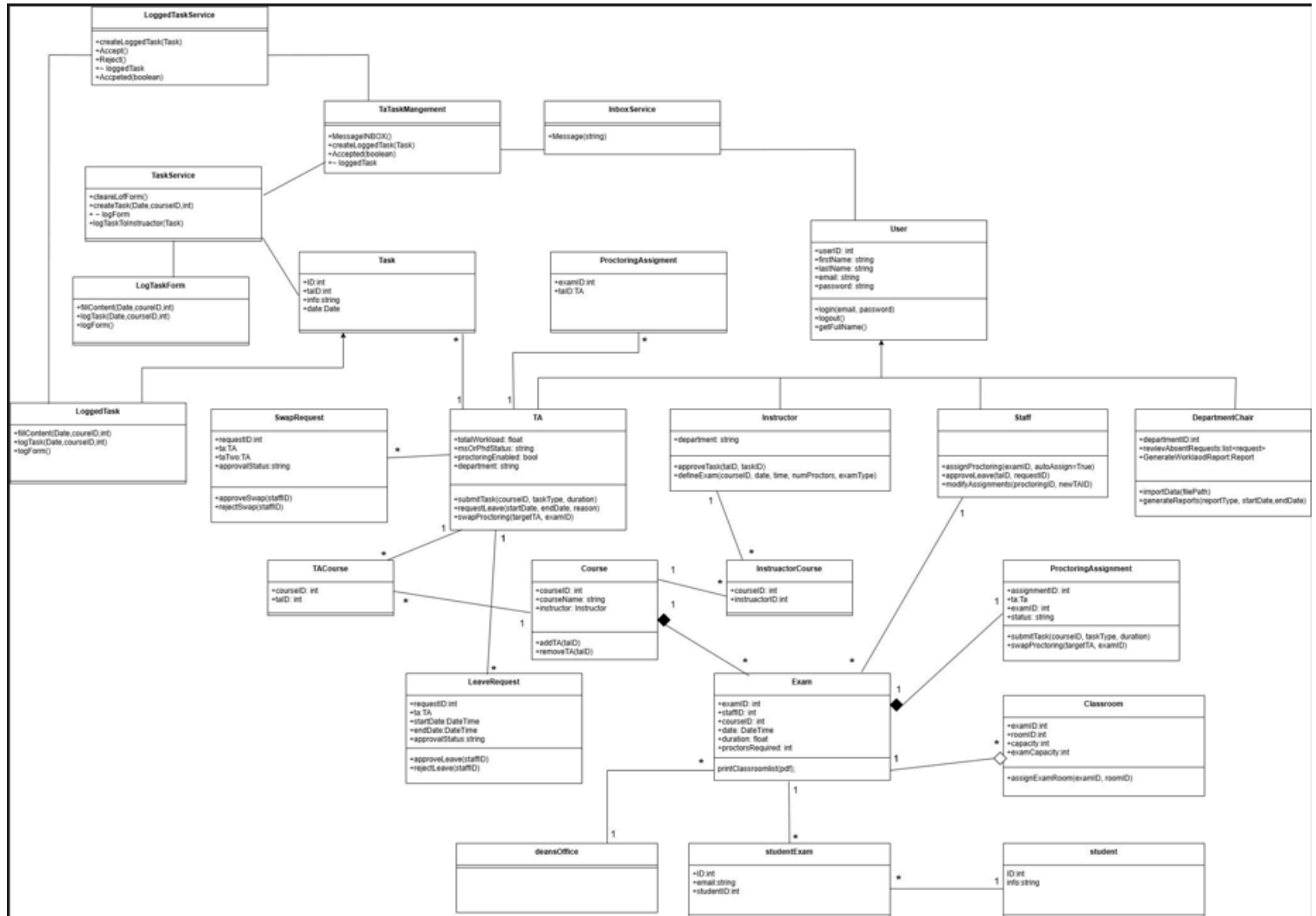


3.3. Absence State



4. Class Diagram

https://drive.google.com/file/d/1s-cxmjOeDE7DStZKjUq8Hi-2lXfR_zAu/view?usp=sharing



5. Non-Functional Requirements

Quality Requirements

Usability

- Users should be able to access key pages within three clicks from the main dashboard, ensuring an intuitive and efficient navigation experience.

Reliability

- In case of a system failure or crash, the TA Management System should not experience any data loss. Weekly backups should be maintained to enable system recovery within 30 minutes.

Performance

- The application should support screen resolutions of 320x480+ pixels on mobile, 600x800+ pixels on tablets, and 1280x720+ pixels on desktops.
- The web application should be accessible on PCs, laptops, and mobile devices.
- All pages should load within three seconds on the client side for optimal user experience.
- The backend should be capable of handling at least 100 simultaneous requests from Teaching Assistants and administrators.
- Backend server response times should not exceed 2000 milliseconds.

Constraints or Pseudo Requirements

Implementation

- Users should be able to access the application using the latest two versions of Chrome (117.0+), Safari (15+), Firefox (122+), or Microsoft Edge.

Legal

- The system should display a cookie consent banner to obtain user consent before storing non-essential cookies.
- The website must comply with GDPR regulations, allowing users to request data deletion and providing clear information on data usage.


6. Mock-Ups

Mockup link:


<https://lun-eu.icons8.com/d/v0r5GjB-D0OM0YBQ7xHEvw?page=wEr5GjB-D0OM0YBQ7xHEvw&vp=-913,-335,3589,1905>

6.1. Login


Bilkent University Online Services

**Bilkent University**

Login : **TAM** - Teaching Assistant Management System

Bilkent ID 

Personnel ID or Student ID number

Password 


[Forgot password](#)

Login


*If the id and password were left blank

6.2. 2 Factor Authentication

Bilkent University Online Services

**Bilkent University**

SMS Verification

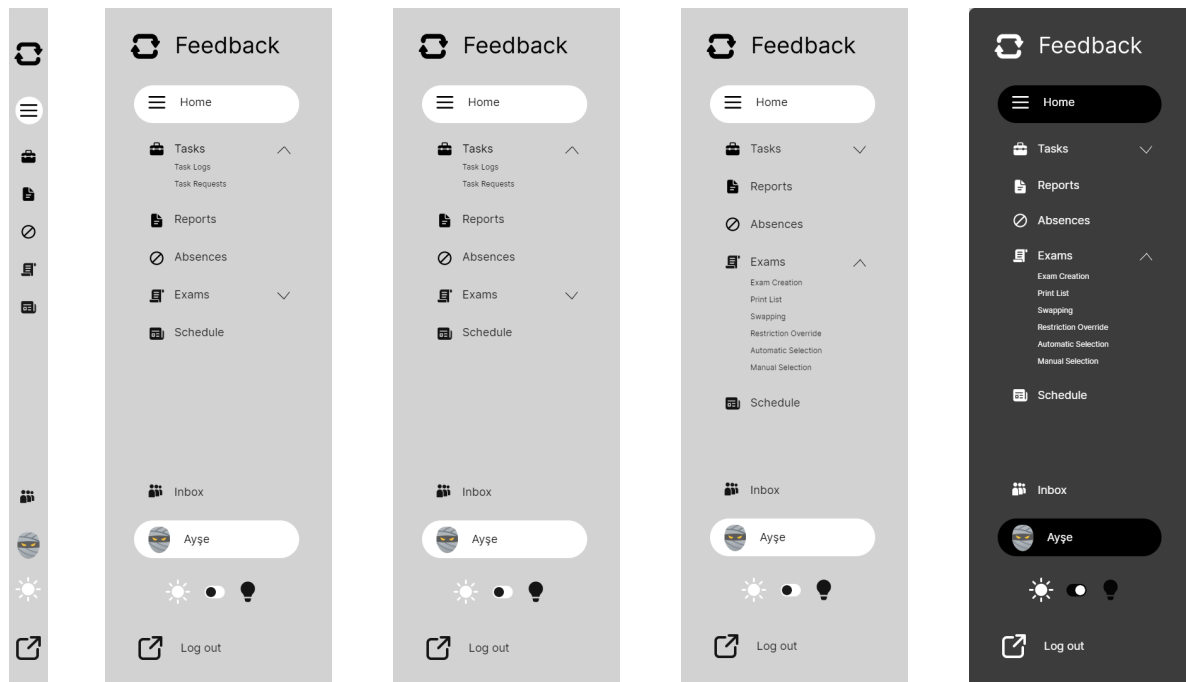
SMS Verification Code 

Enter the SMS verification code sent to your mobile number

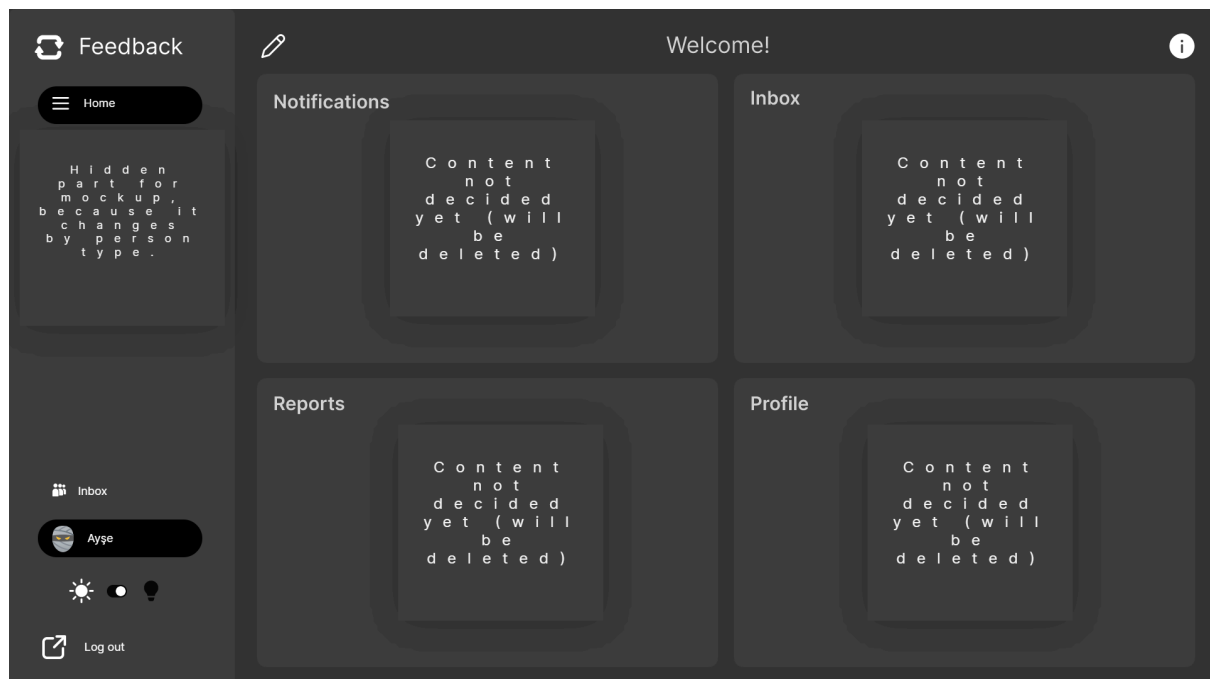
Verify

6.3. Side Panels

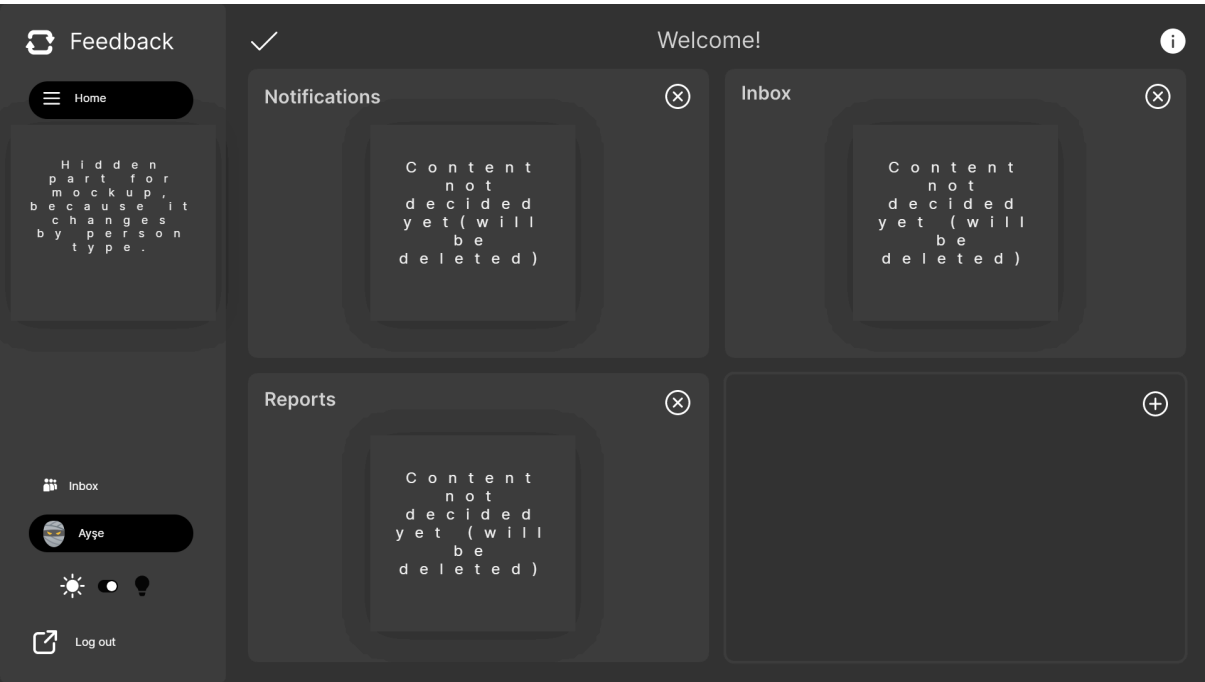
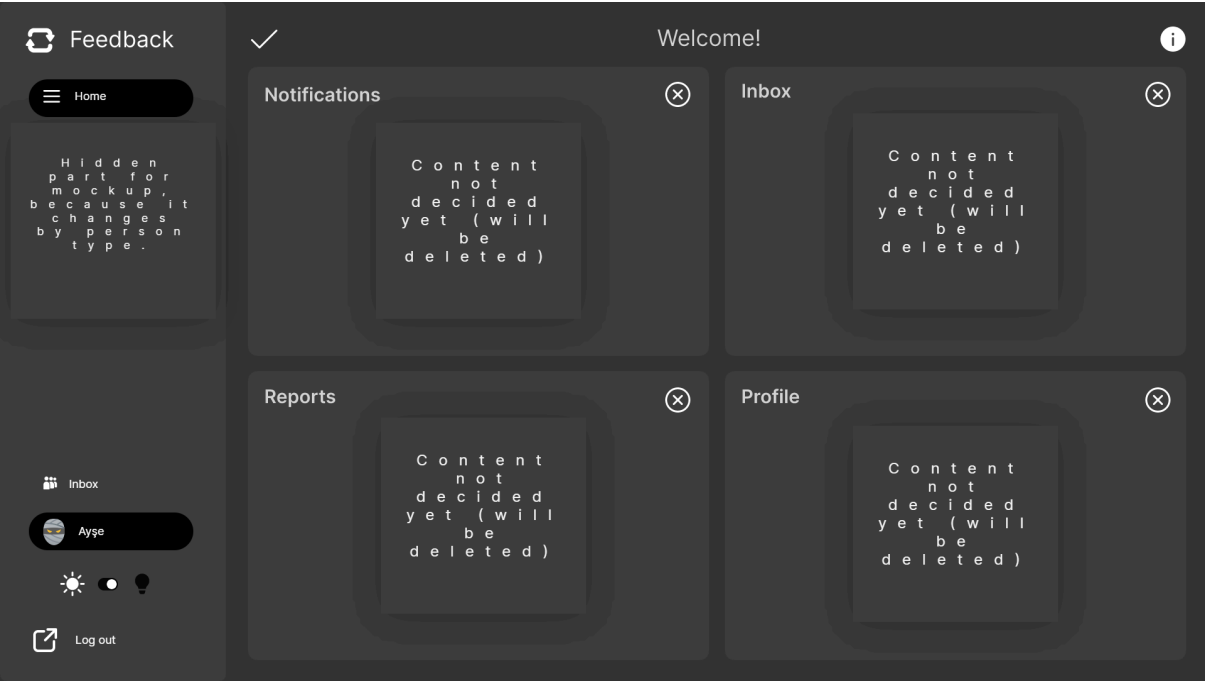
In TA;	Task Logs, Absences, Swapping, Schedule
In Instructor;	Task Logs, Task Requests, Exam Creation, Print List, Restriction Override, Automatic Selection, Manual Selection
In Dean's Office;	Reports, Absences, Exam Creation, Automatic Selection, Manual Selection
In Authorized Staff;	Reports, Absences, Print List, Swapping, Restriction Override, Automatic Selection, Manual Selection



6.4. Main



*Box categories includes only side panel labels (except notifications)



6.5. Log Task



Log Task

+ New one

Name

Ayşe Yıldız

ID

22501453

Date*

5.12.0005

Enter a valid date

Task Type*

Lab

Time of the task*

14:00-16:00

Supporting Documents

AyşeLab.txt

Upload

Submit



Log Task

+ New one

Name

Ayşe Yıldız

ID

22501453

Date*

10.9.1446

Task Type*

Lab

Time of the task*

14:00-16:00

Supporting Documents

AyşeLab.txt

Upload

Submit



Feedback

Home

Hidden part for mockup, because it changes by person type.

Inbox

Ayşe

Log out

Log Task

Task from Ayşe - 10.9.1446

Are you sure to send?

No

Yes

6.6. Task Requests

Feedback

Home

Hidden part for mockup, because it changes by person type.

Inbox

Ayşe

Log out

Task Request

Select a request
Task from Ayşe - 12.09.1446
Task from Mert - 12.09.1446
Task from Kazem - 10.09.1446
Task from Ayşe - 10.09.1446
Task from Mert - 10.09.1446
Task from Kazem - 10.09.1446
Task from Ayşe - 10.09.1446
Task from Mert - 10.09.1446
Task from Kazem - 10.09.1446

Pending Requests

Accepted Requests

Rejected Requests



Task Requests

Task from Ayşe - 10.9.1446

Name	ID	Date
Ayşe Yıldız	22501453	10.9.1446
Task Type	Time of the task	
Lab	14:00-16:00	

Reject

Accept



Task Requests

Task from Ayşe - 10.9.1446

Are you sure?

This process cannot be turned back.

Reason for Rejection*

Type here...

No

Yes



*Reason for rejection is seen only by clicking "Reject"



Task Requests

+ Task from Ayşe - 10.9.1446

Name* ID* Date*

Ayşe Yıldız 22501453 10.9.1446

Task Type Time of the task

Lab 15:00-17:00

Reason*

I wrote wrong time for the lab's hours, it wasn't between 03:00-05:00 but during 15:00-17:00. Also, in the documents I added which students I checked.

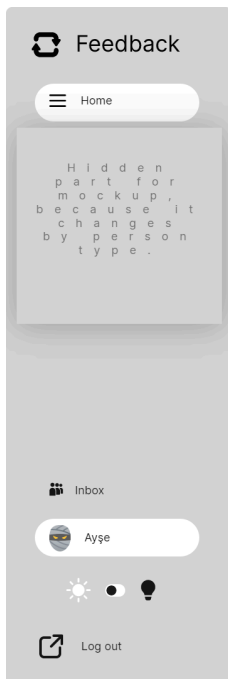
Supporting Documents

AyşeLab.txt Upload

Submit

*This is for changing, Reason part is automatically seen.

6.7. Absence Requests



Absence Requests

Select a request
+ Create new Request
Absence from Ayşe - 12.09.1446
Absence from Mert - 12.09.1446
Absence from Kazım - 10.09.1446
Absence from Ayşe - 10.09.1446
Absence from Mert - 10.09.1446
Absence from Kazım - 10.09.1446
Absence from Ayşe - 10.09.1446
Absence from Mert - 10.09.1446
Absence from Kazım - 10.09.1446

Pending Requests

Accepted Requests

Rejected Requests

*"+ new one" is for TA, TA only sees his/her requests



*TA

Absence Requests



+ New one

Name*

ID*

Date*

Ayşe Yıldız

22501453

10.8.1446

Reason*

I will be in quarantine at that date. (My test is positive)

Supporting Documents

AyşeRequest.txt

Upload

Submit

*TA



*TA

Absence Requests



Absence from Ayşe - 10.8.1446

Are you sure to request absence?

No

Yes



Absence Requests

Absence from Ayşe - 10.9.1446

Name	ID	Date
Ayşe Yıldız	22501453	10.9.1446

Reason

I will be in quarantine at that date. (My test is positive)

Supporting Documents

AyşeRequest.txt
AyşeRequest.pdf

Reject Accept

*Authorized Staff



Absence Requests

Absence from Ayşe - 10.9.1446

Are you sure?

This process cannot be turned back.

Reason for Rejection*

Type here...

No Yes

*Authorized Staff, Reason for rejection is seen only by clicking "Reject"

6.8. Exam Creation



Exam Creation Form

Course	Place
CS319	BZ-08
Time Duration*	Date*
<input type="text"/>	<input type="text" value="23.03.2025 17:00"/>
Missing Field	Time Conflict

Cancel Finish Creating Exam



Exam Creation Form

Course	Place
CS319	BZ-08
Time Duration	Date
2 hours	10.9.1448

Form is successfully created

Cancel Finish Creating Exam



6.9. Print Classroom List

Feedback

Home

Hidden part for mockup, because it changes by person type.

Inbox

Ayşe

Log out

Exams

CS353 Midterm - 12.04.2025

Print

CS353 Final - 12.05.2025

Print

CS421 Final - 10.05.2025

Print

6.10. Automatic TA Selection / Override Restrictions

Feedback

Home

Hidden part for mockup, because it changes by person type.

Inbox

Ayşe

Log out

TA Assignment

Exam

CS319 Midterm

Not enough TAs met the criteria

Override Max hours per TA

Override Consecutive-day limit

Cancel

Automatic TA Selection

6.11. Manual TA Selection

Feedback

Home

Hidden part for mockup, because it changes by person type.

Inbox

Ayşe

Log out

Manual TA Selection

Select a TA

+ Create new Request

Ayşe

Mert

Absence

Confirm TA Selection

Return to TA Assignment

6.12. Swap Proctoring

Feedback

Home

Hidden part for mockup, because it changes by person type.

Inbox

Ayşe

Log out

Swap Request Form

Task

TA to swap

CS319 MT Proctoring

Ayşe Yildiz

Your swap request has been sent to Ayşe Yildiz. Waiting for their response...

Cancel

Send Swap Request



Swap Request



You have received a swap request from Ayşe Yıldız for CS 319 MT Proctoring

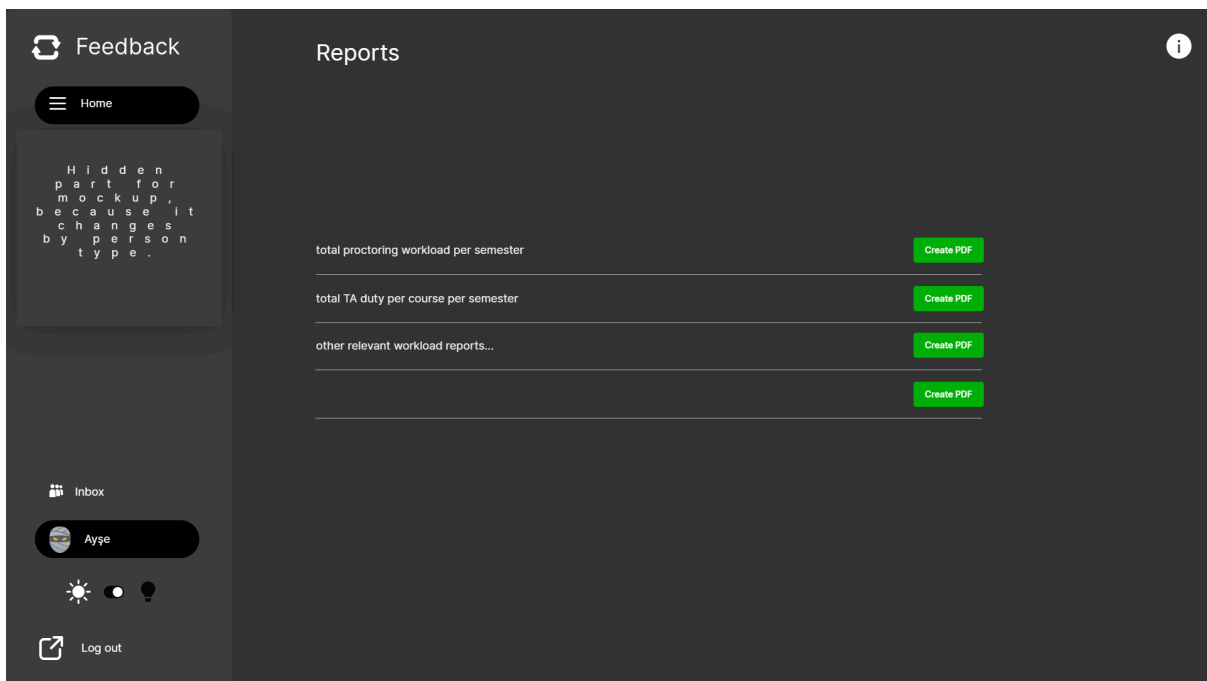
Cancel

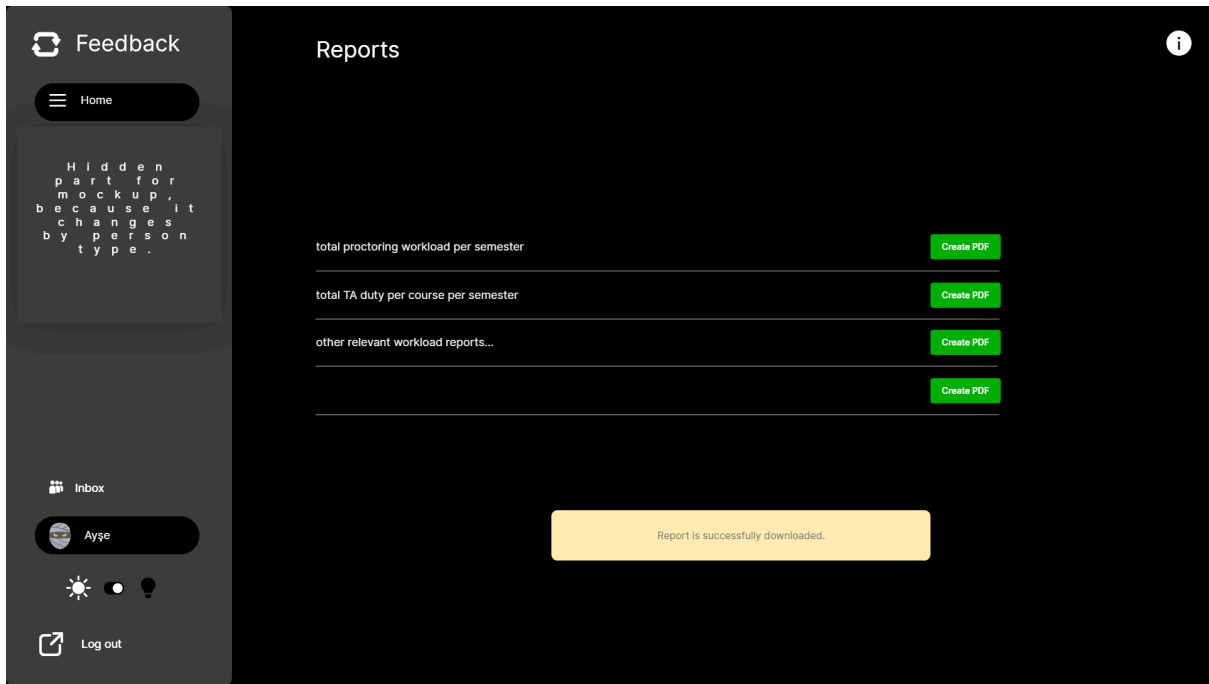
Reject Swap Request

Accept Swap Request

*Incoming Request

6.13. Create Reporting on Total Workload





6.14. Inbox



Note: Change profile photo is by clicking profile page (it will be informed in the page), log out is in side panel.