Bilkent University

Department of Computer Engineering

CS 319 Term Project

Spring 2025

Section 1

Group 1

Deliverable 2

Final Submission

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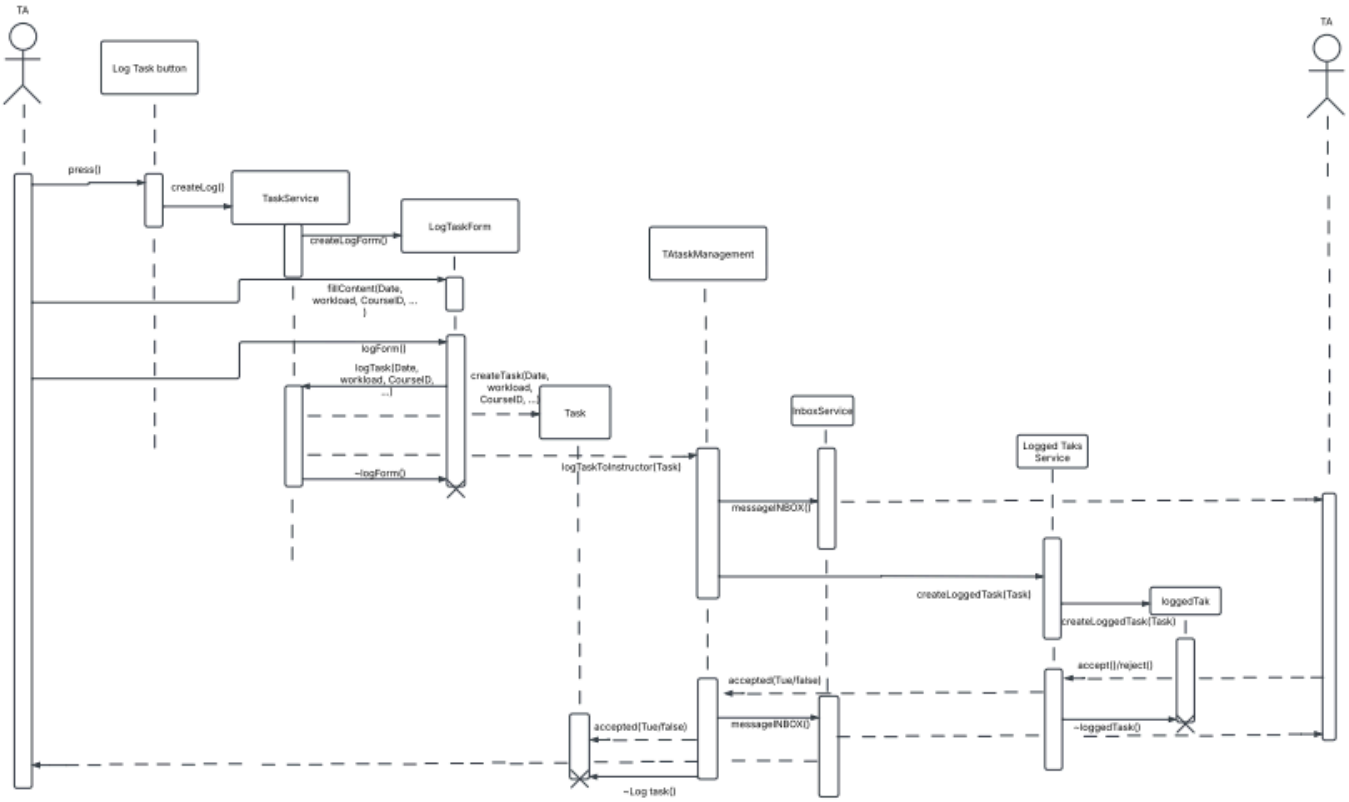
1. **Sequence Diagram**
2. **Activity Diagrams**
3. **State Diagrams**
4. **Class Diagram**
5. **Non-Functional Requirements**
6. **Mock-Ups**

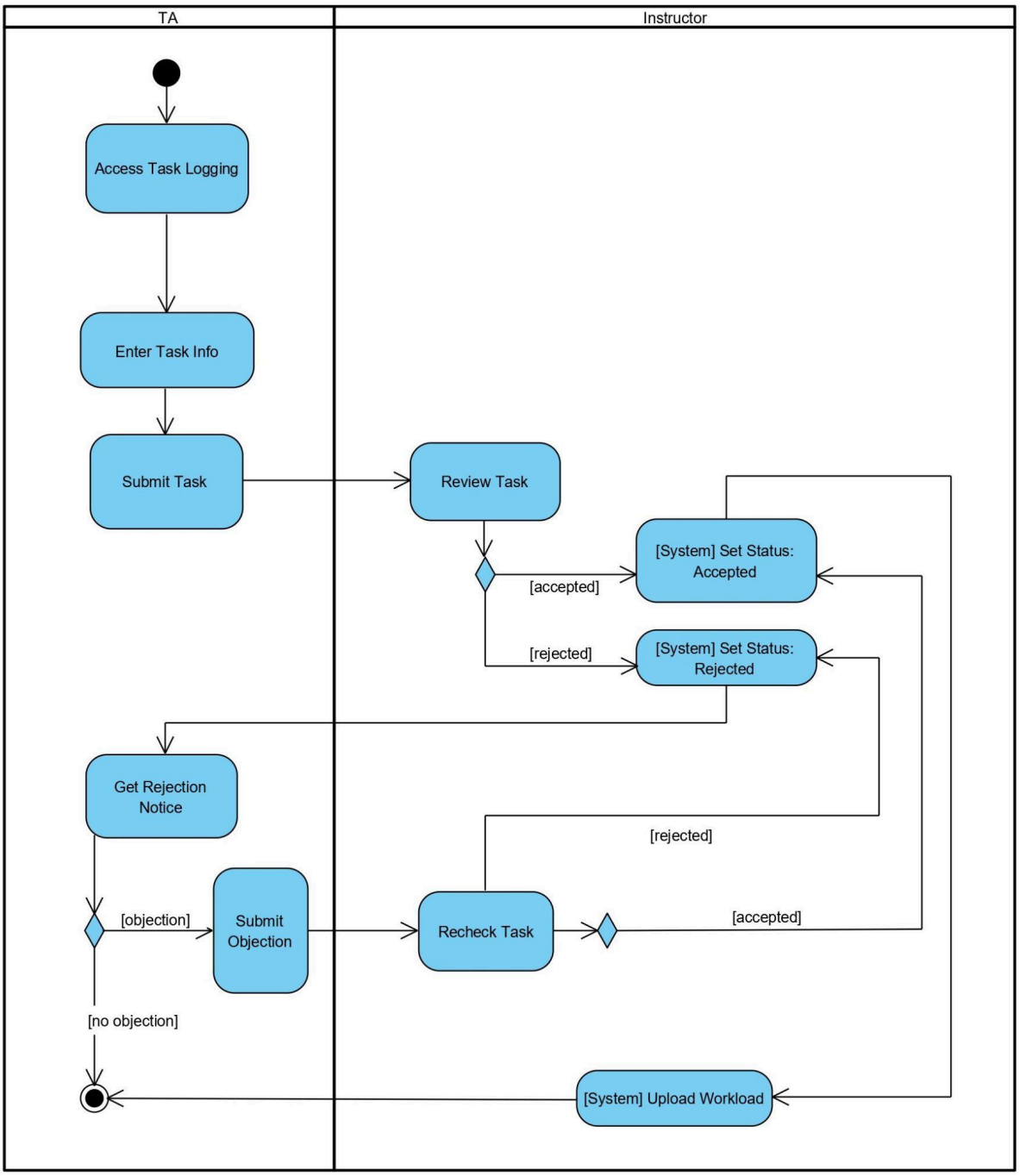
1. Sequence Diagram

Log task

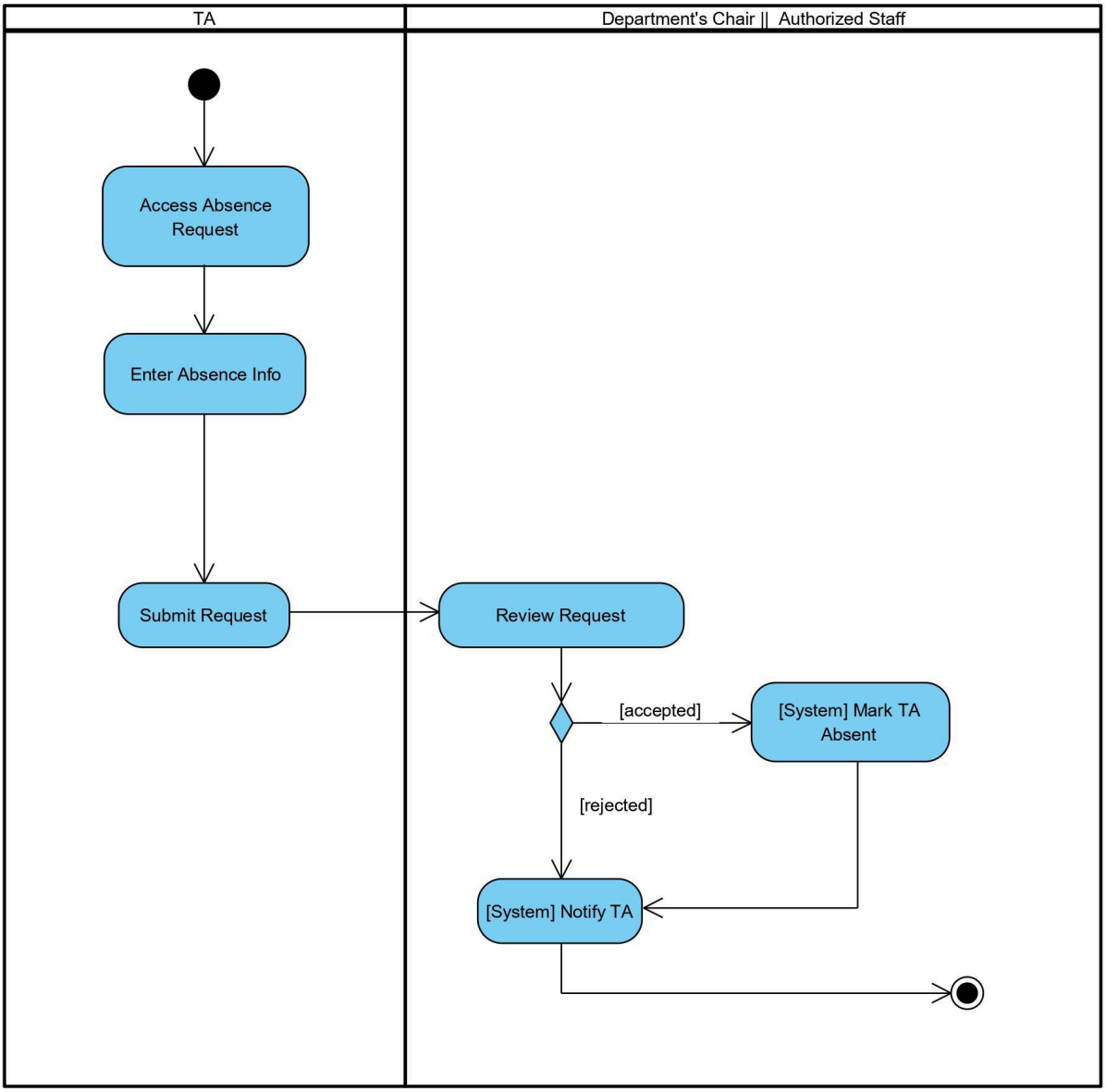


2. Activity Diagrams

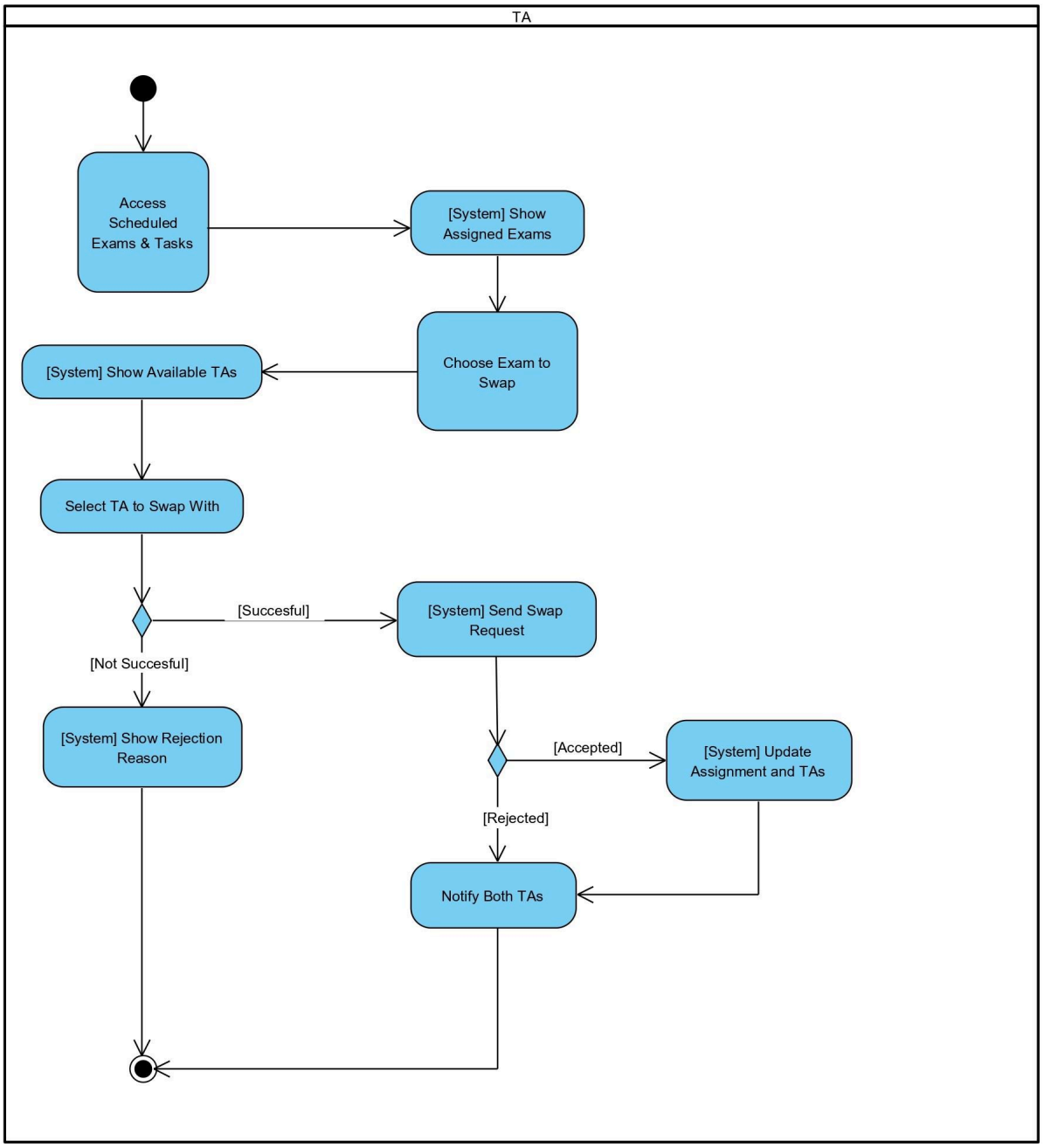
2.1. Log Task Activity



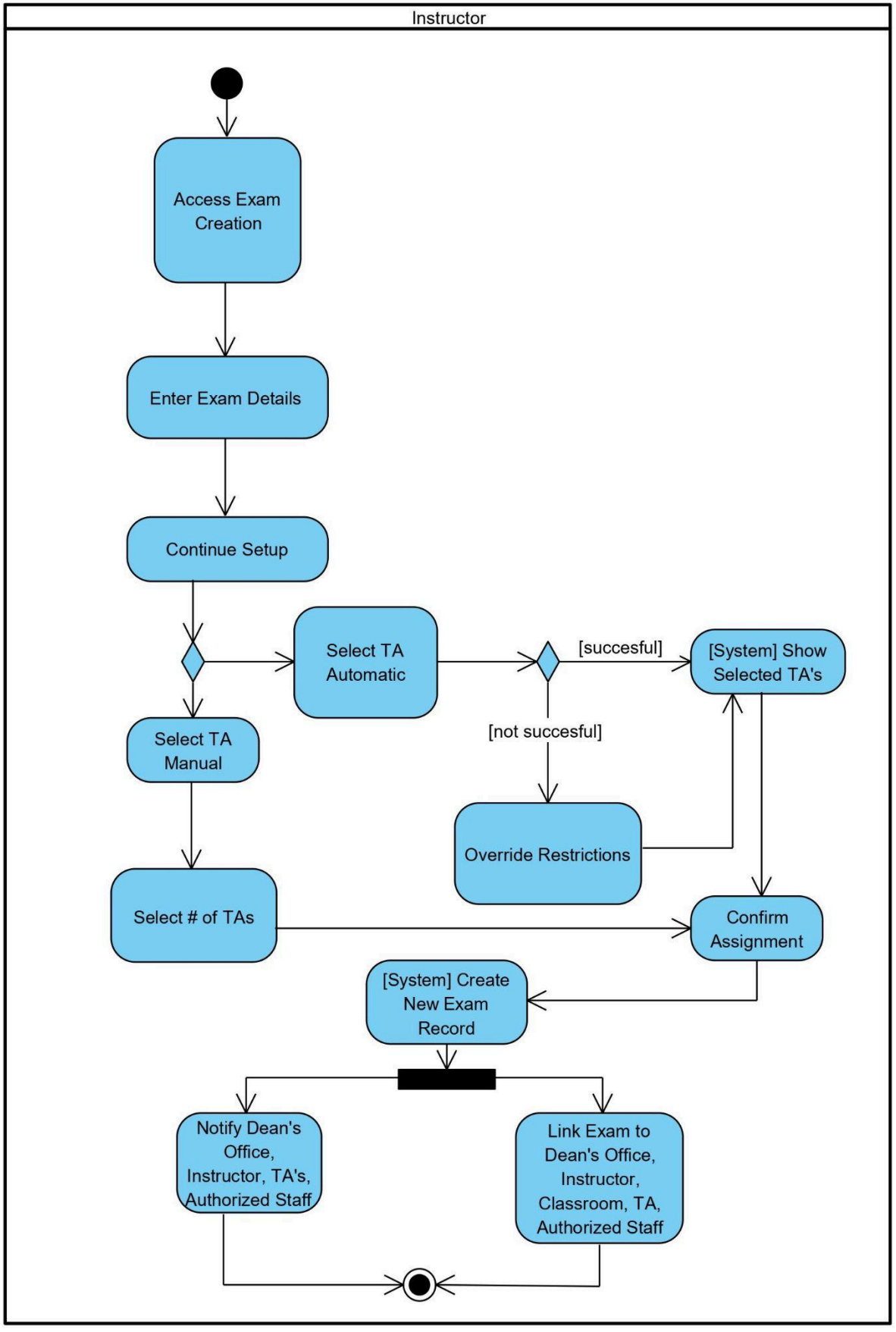
2.2. Mark Absence Activity



2.3. Swap Request Activity

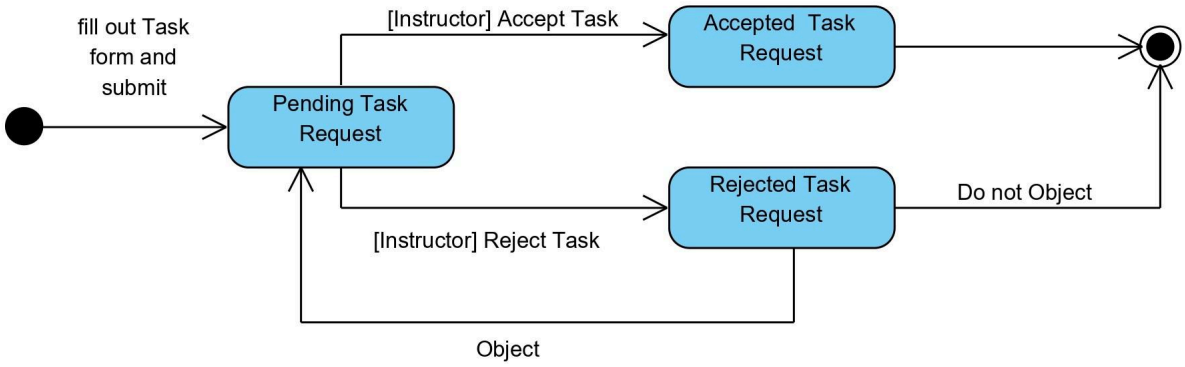


2.4. Exam Creation Activity

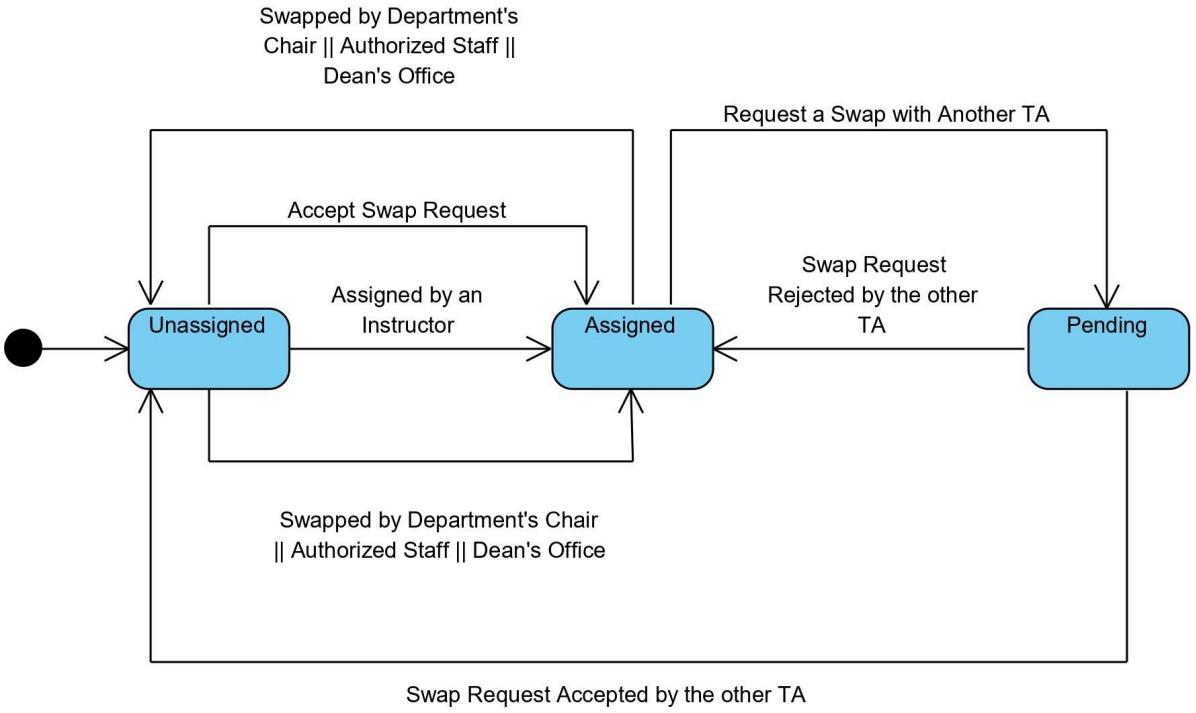

Instructor
Access Exam Creation
Enter Exam Details
Continue Setup
Select TA Automatic
[succesful]
[System] Show Selected TA's
[not succesful]
Select TA Manual
Override Restrictions
Select # of TAs
Confirm Assignment
[System] Create New Exam Record
Notify Dean's Office, Instructor, TA's, Authorized Staff
Link Exam to Dean's Office, Instructor, Classroom, TA, Authorized Staff

3. State Diagrams

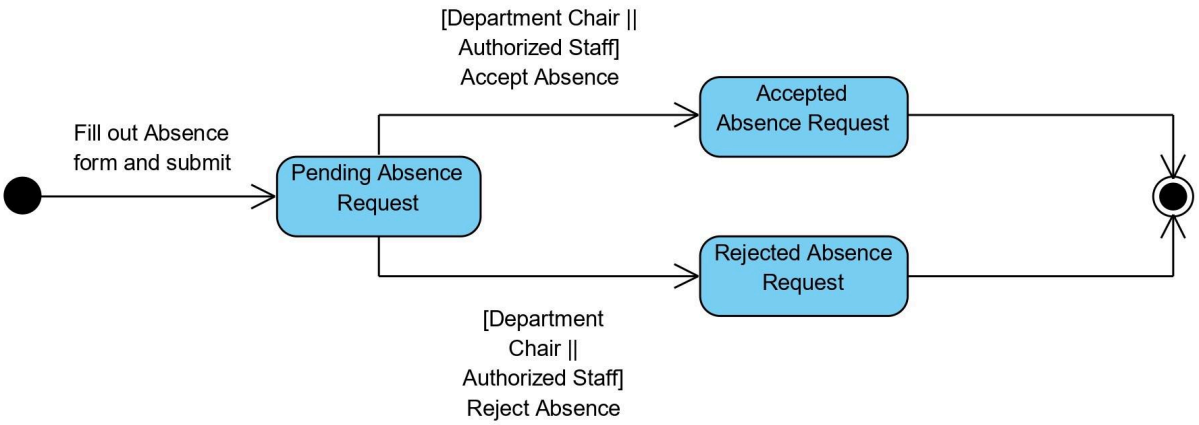
3.1. Logged Task State



3.2. Proctor Assignment State

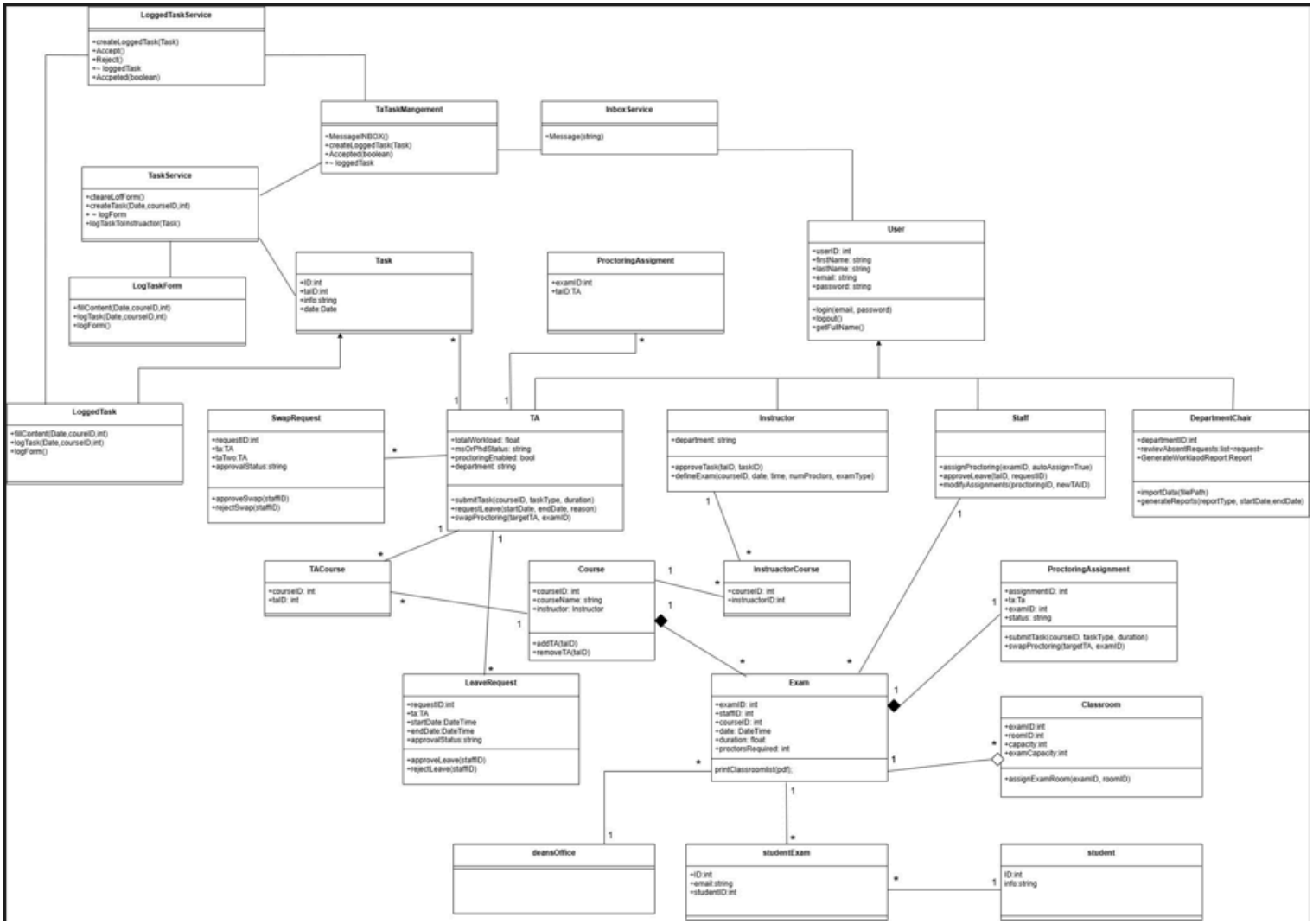


3.3. Absence State



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.

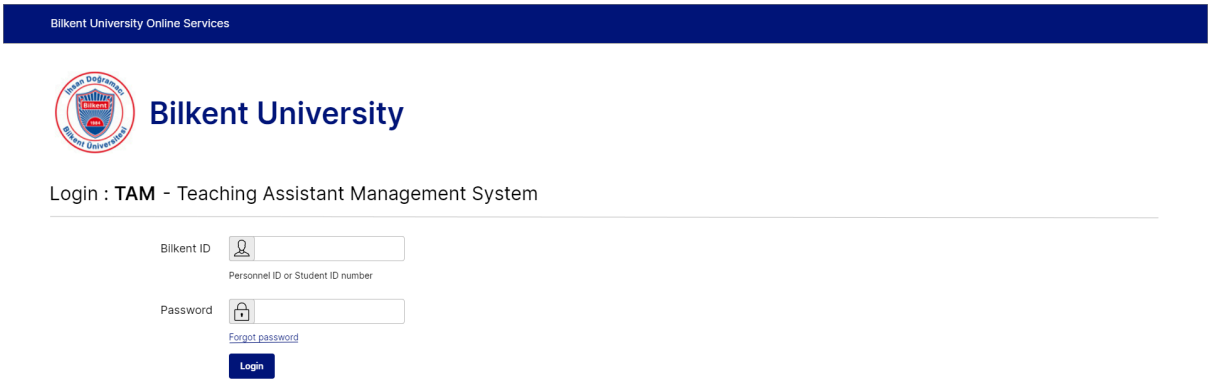
Legal

- 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

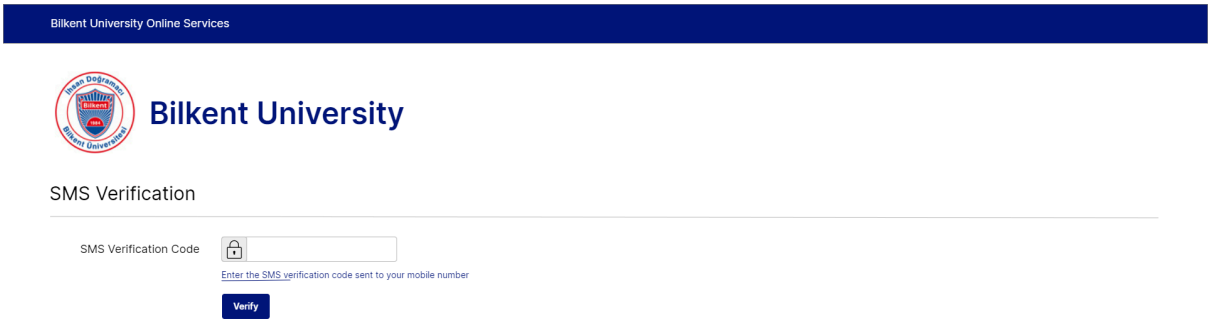
Mockup link:
https://lun-eu.icons8.com/d/v0r5GjB-D0OM0YBQ7xHEvw?page=wEr5GjB-D0OM0YBQ7xHEvw&vp=-913,-335,3589,1905

6.1. Login



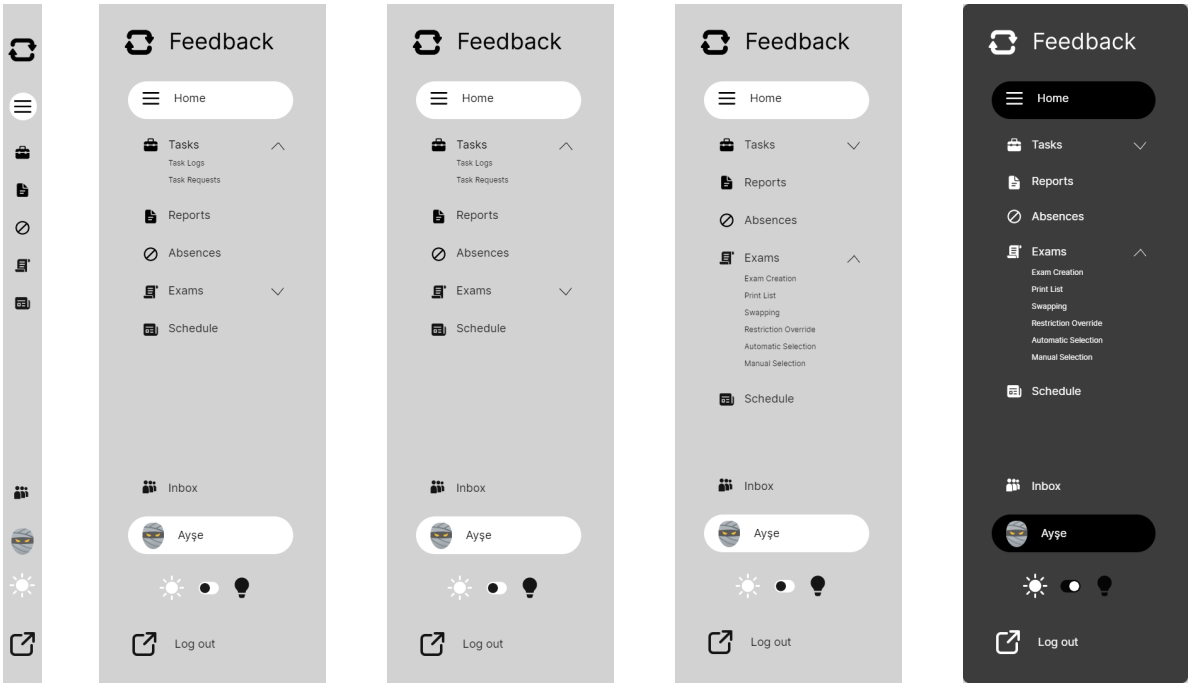
*If the id and password were left blank

6.2. 2 Factor Authentication

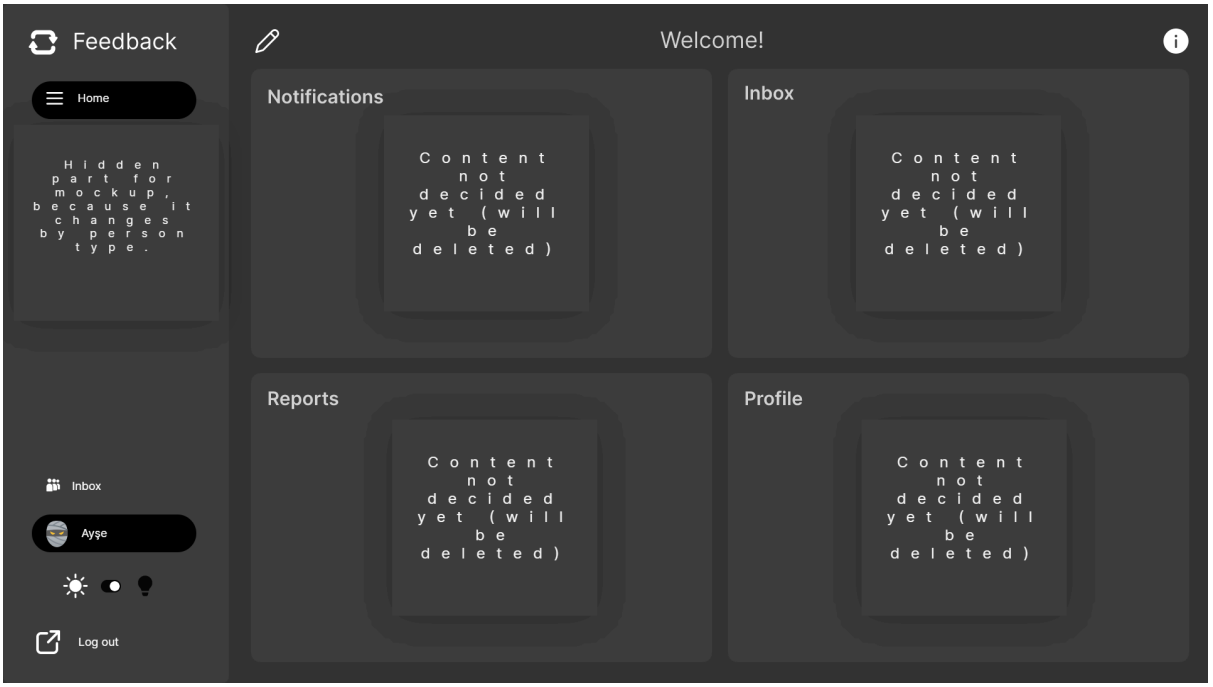


6.3. Side Panels

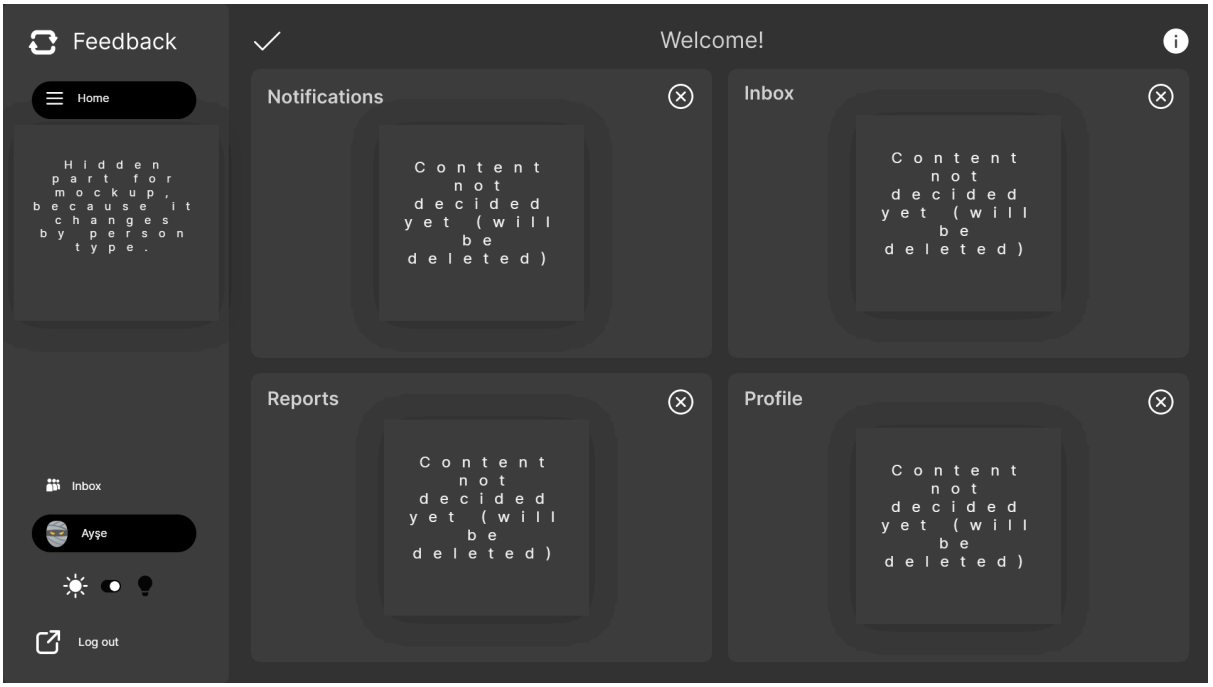
In TA; Task Logs, Absences, Swapping, Schedule
In Instructor; Task Logs, Task Requests, Exam Creation, Print List, Restriction Override, Automatic Selection, Manual Selection
In Dean's Office; Reports, Absences, Exam Creation, Automatc Selection, Manual Selection
In Authorized Staff; Reports, Absences,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

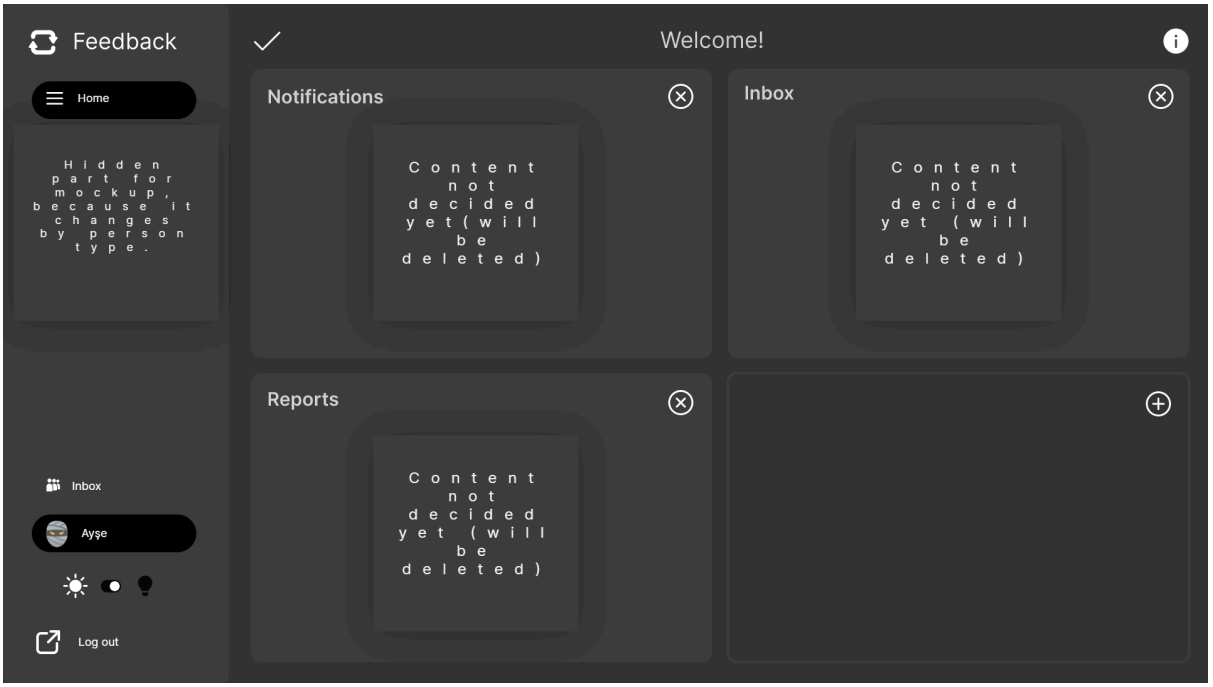


6.4. Main

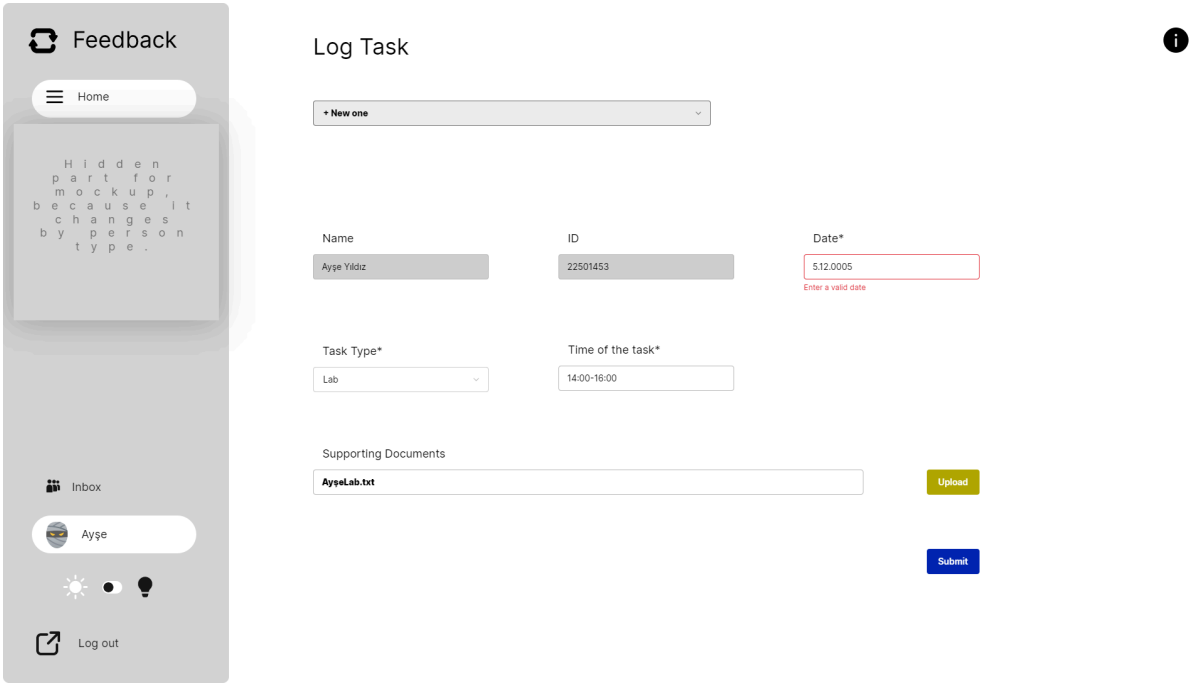


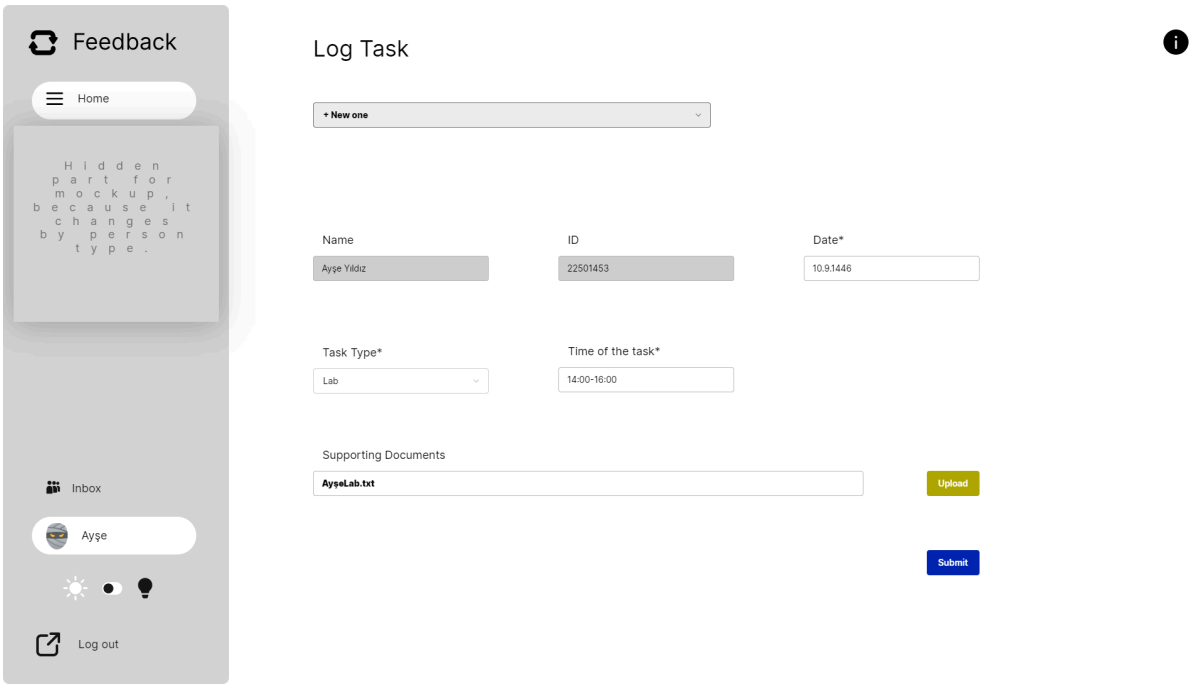
*Box categories includes only side panel labels (except notifications)

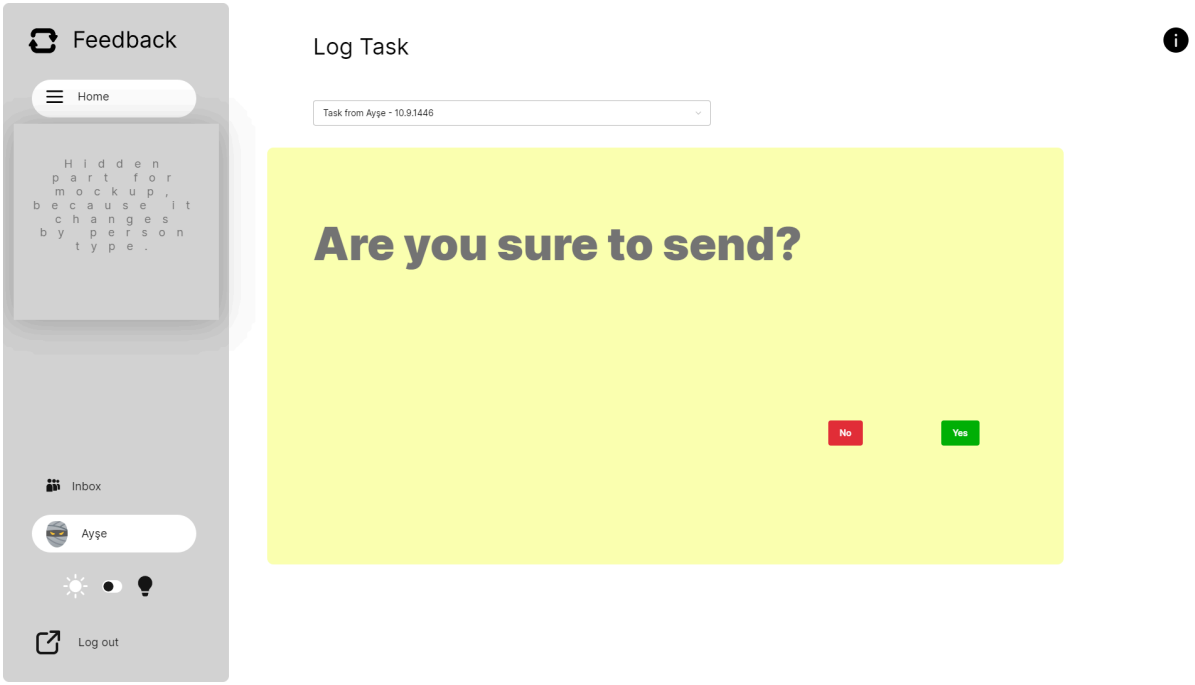

Feedback
Home
Hidden part for mockup, because it changes by person type.
Inbox
Ayşe
Log out
Welcome!
Notifications
Content not decided yet (will be deleted)
Inbox
Content not decided yet (will be deleted)
Reports
Content not decided yet (will be deleted)
Profile
Content not decided yet (will be deleted)


Feedback
Home
Hidden part for mockup, because it changes by person type.
Inbox
Ayşe
Log out
Welcome!
Notifications
Content not decided yet(will be deleted)
Inbox
Content not decided yet (will be deleted)
Reports
Content not decided yet (will be deleted)

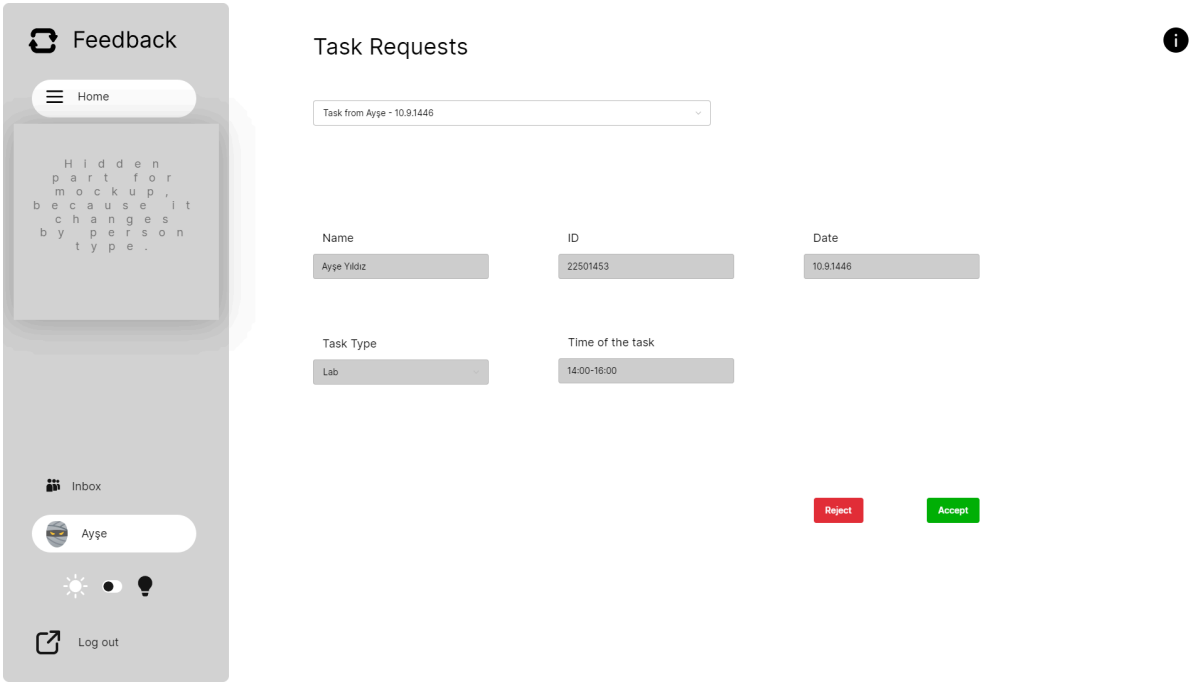
6.5. Log Task

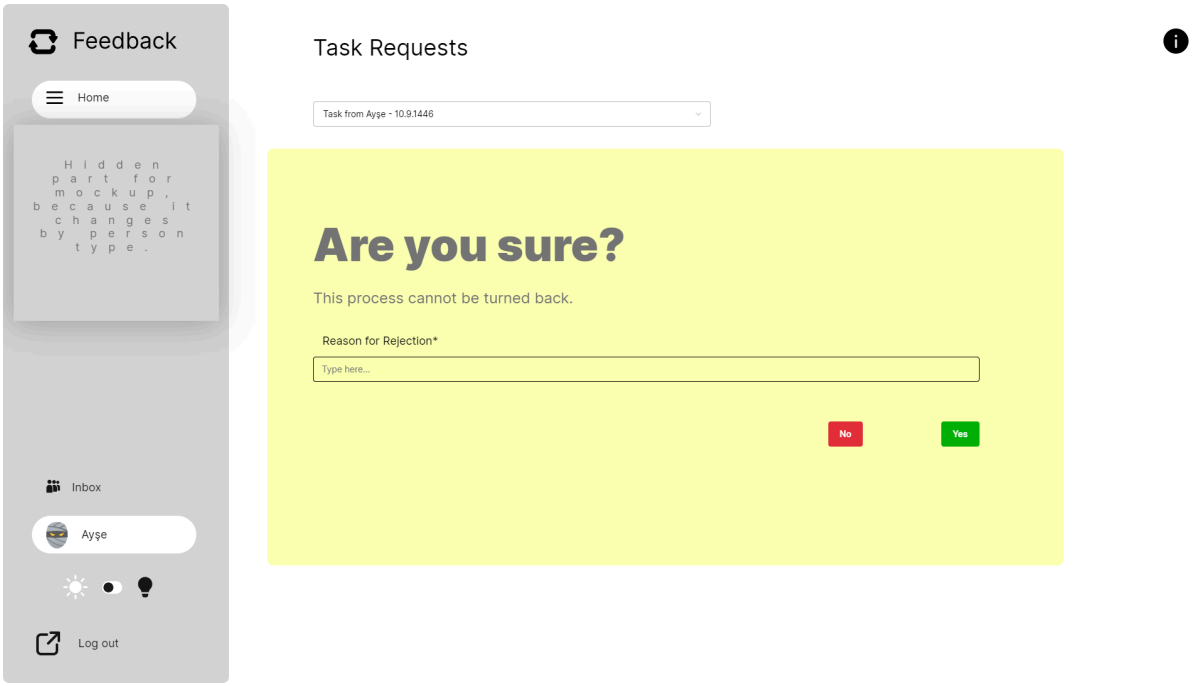

Feedback
Home
Hidden part for mockup, because it changes by person type.
Inbox
Ayşe
Log out
Log Task
+ New one
Name
Ayşe Yıldız
ID
22501453
Date*
5.12.0005
Enter a valid date
Task Type*
Lab
Time of the task*
14:00-16:00
Supporting Documents
AyşeLab.txt
Upload
Submit


Feedback
Home
Hidden part for mockup, because it changes by person type.
Inbox
Ayşe
Log out
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

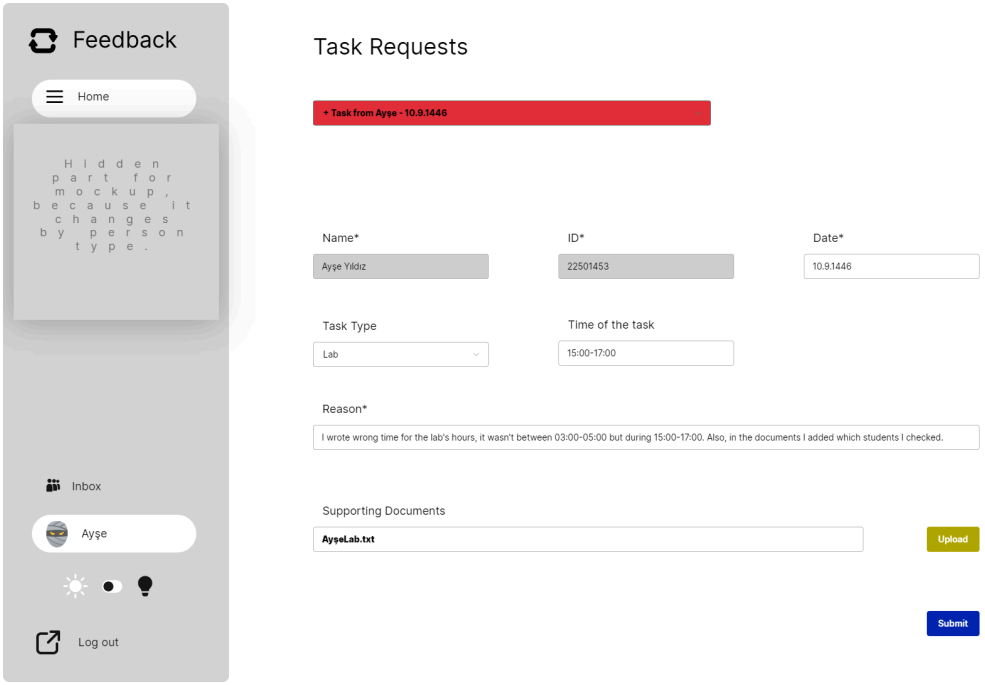


6.6. Task Requests



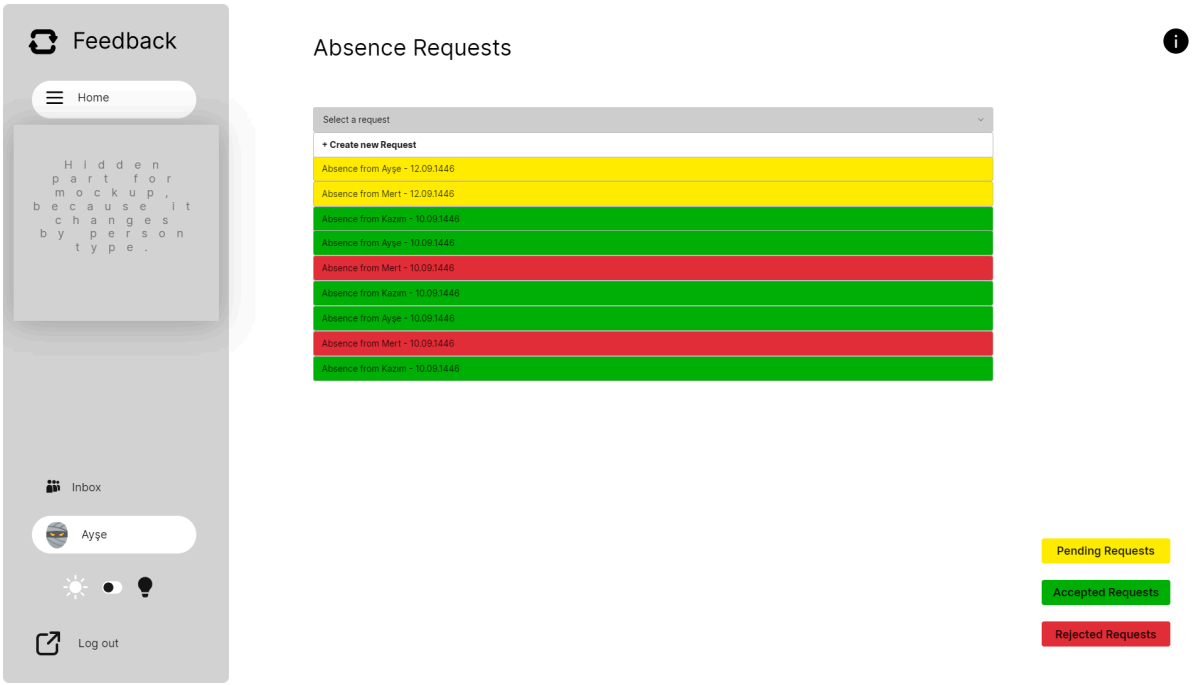


*Reason for rejection is seen only by clicking "Reject"

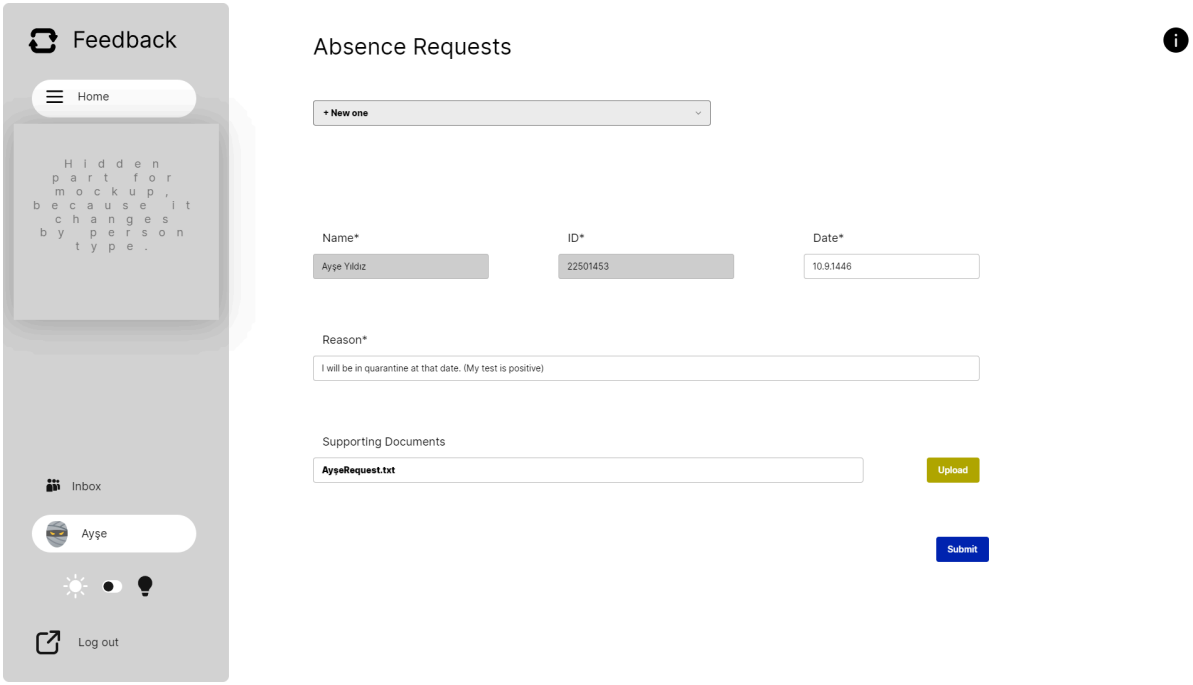


*This is for changing, Reason part is automatically seen.

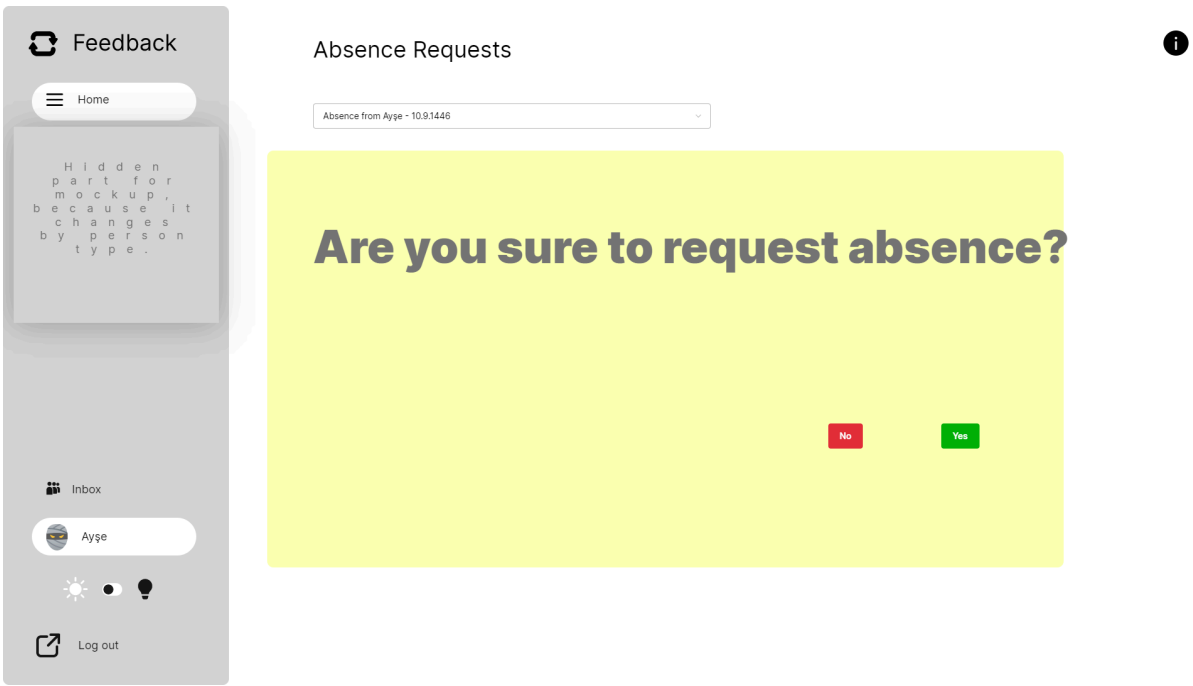
6.7. Absence Requests



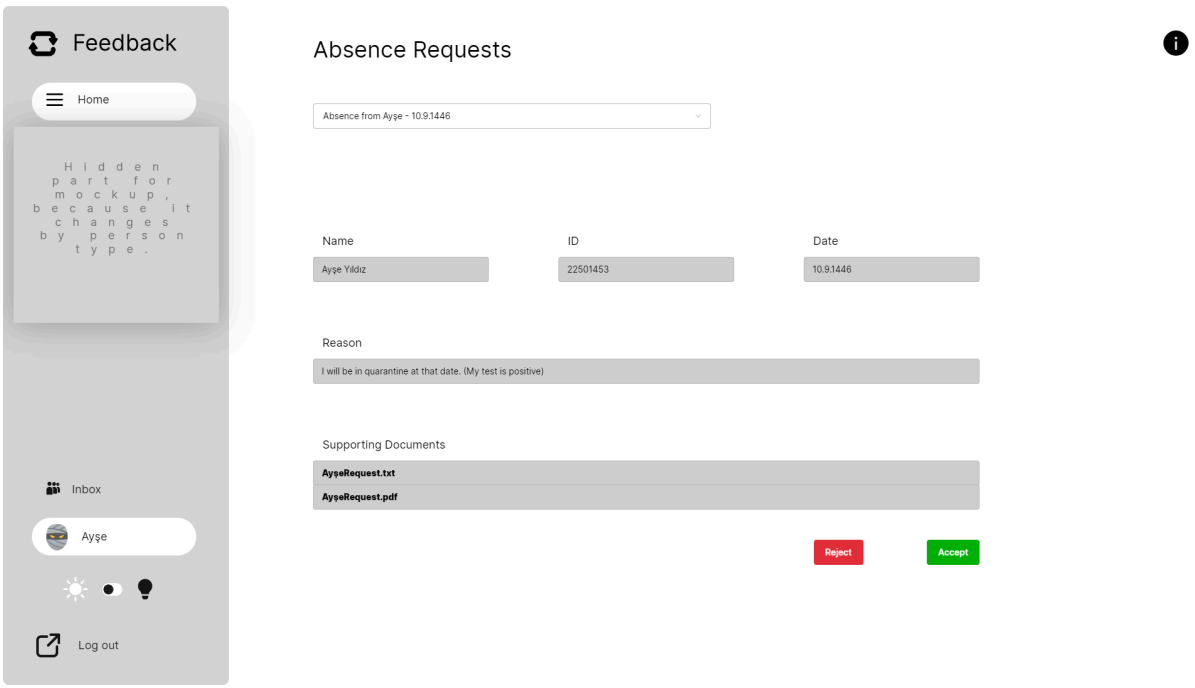
*"+ new one" is for TA, TA only sees his/her requests


Feedback
Home
Hidden part for mockup, because it changes by person type.
Inbox
Ayşe
Log out
Absence Requests
+ New one
Name*
Ayşe Yildiz
ID*
22501453
Date*
10.9.1446
Reason*
I will be in quarantine at that date. (My test is positive)
Supporting Documents
AyşeRequest.txt
Upload
Submit

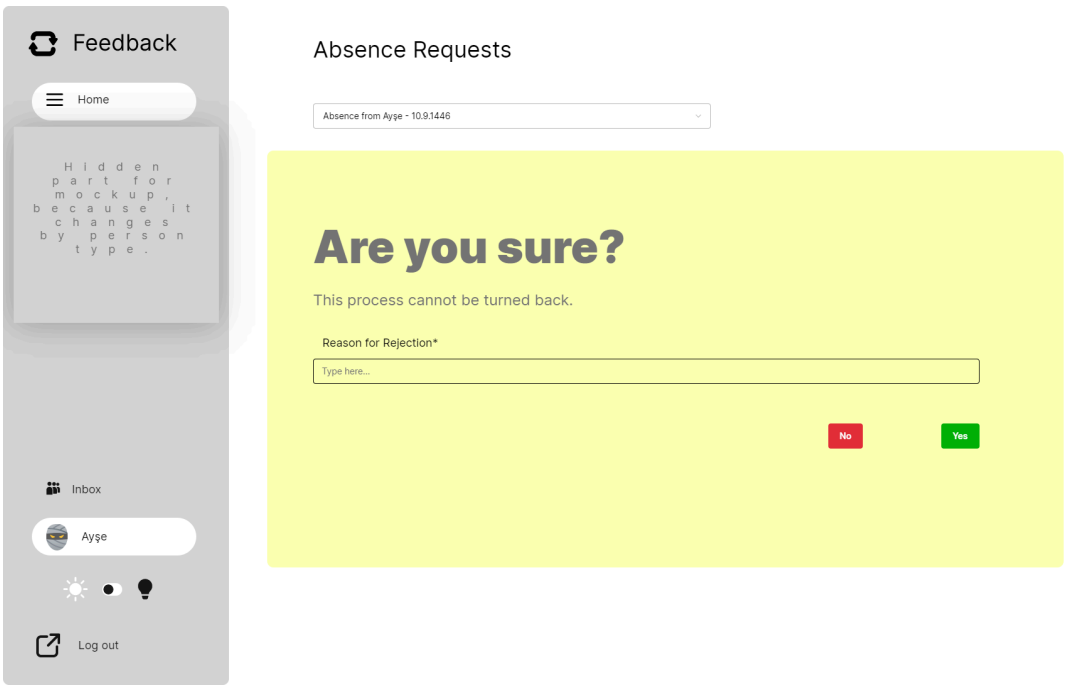
*TA


Feedback
Home
Hidden part for mockup, because it changes by person type.
Inbox
Ayşe
Log out
Absence Requests
Absence from Ayşe - 10.9.1446
Are you sure to request absence?
No
Yes

*TA

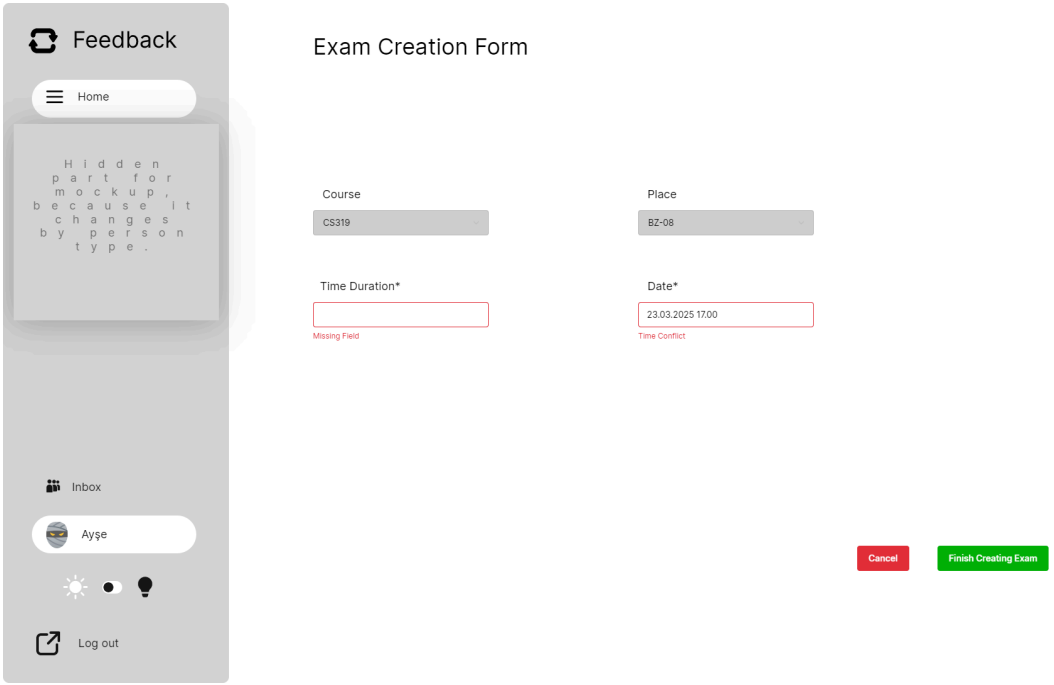


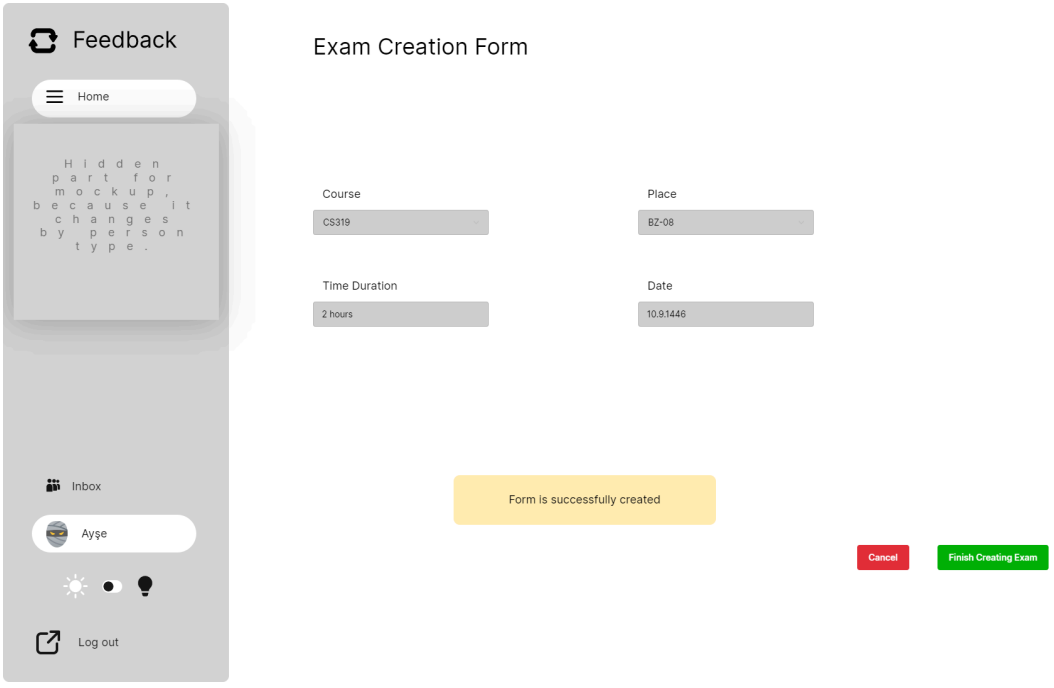
*Authorized Staff



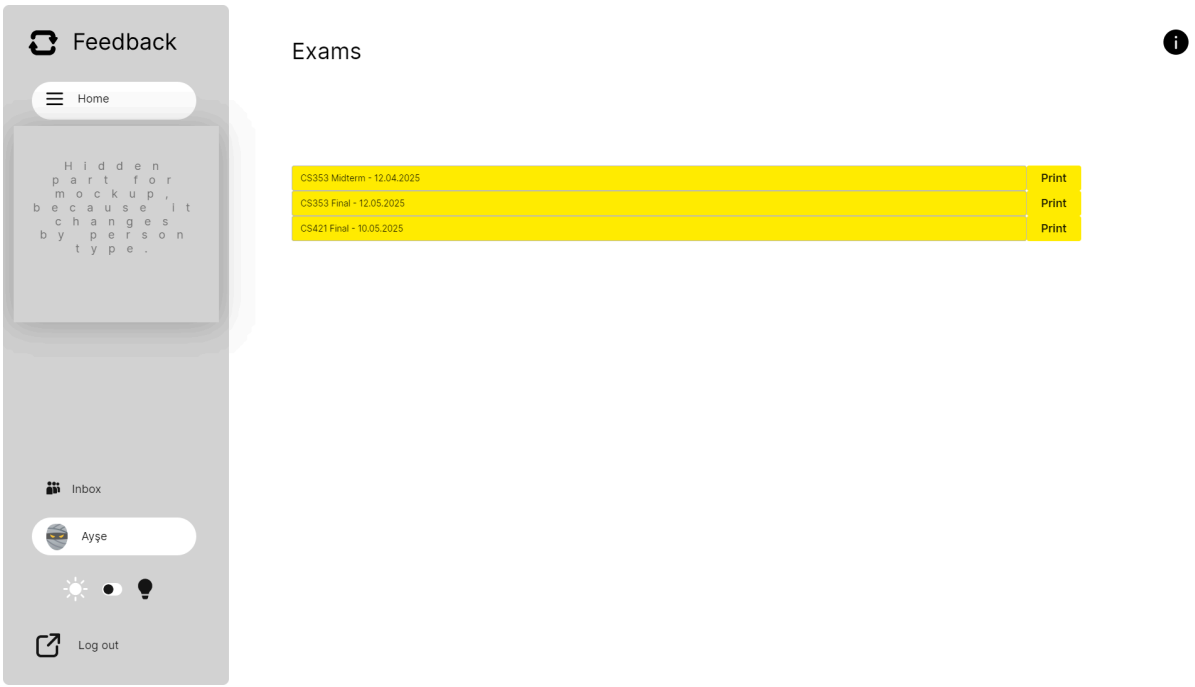
*Authorized Staff, Reason for rejection is seen only by clicking "Reject"

6.8. Exam Creation

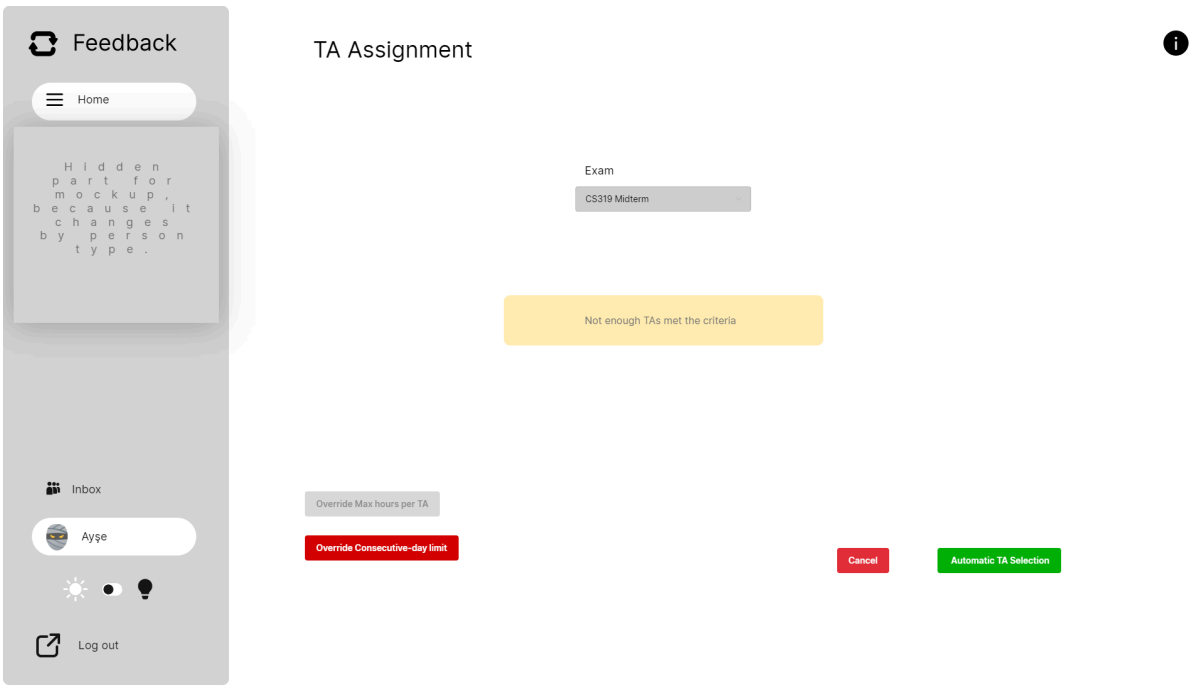




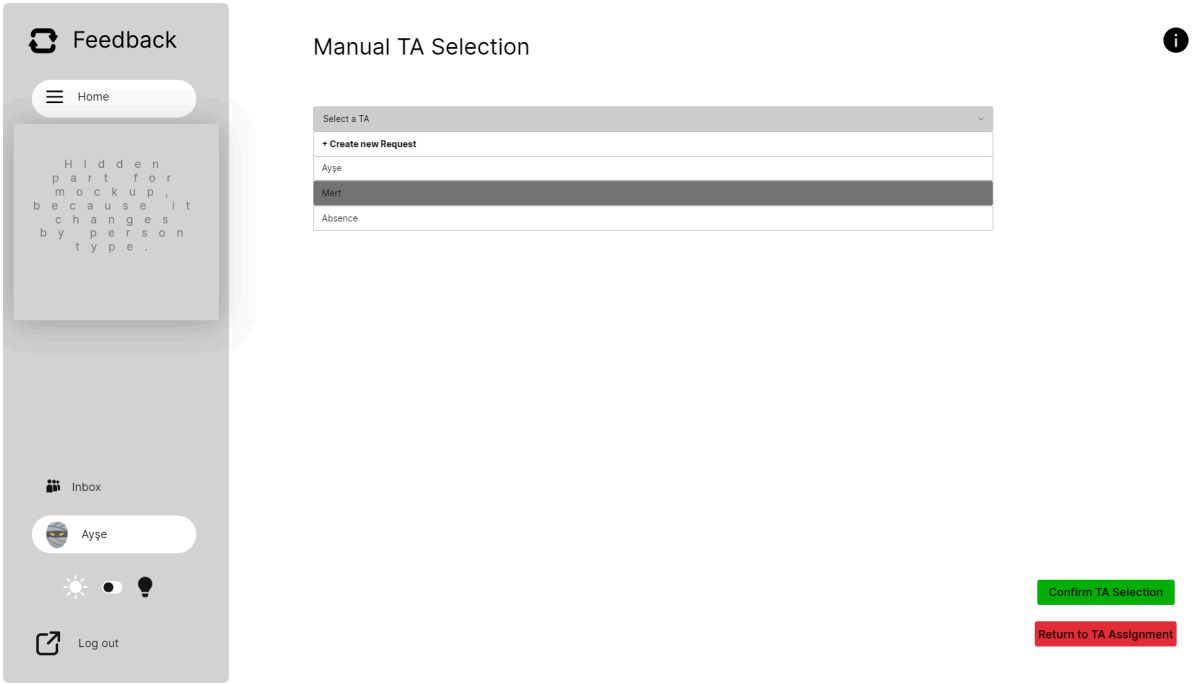
6.9. Print Classroom List



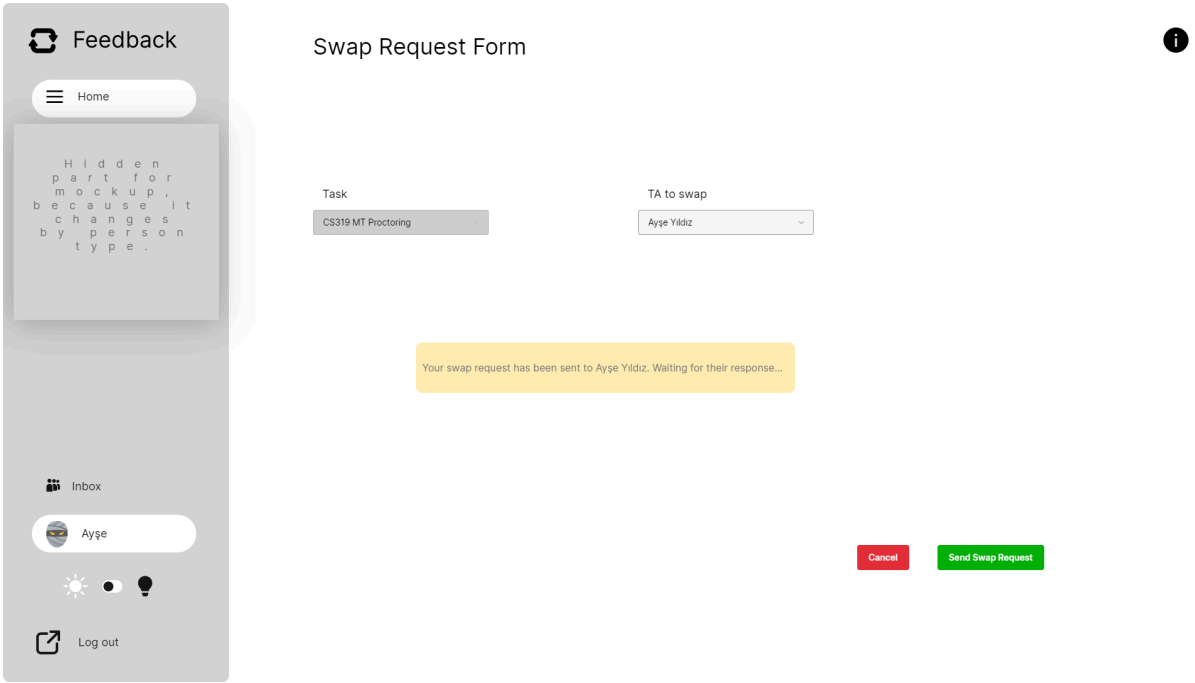
6.10. Automatic TA Selection / Override Restrictions

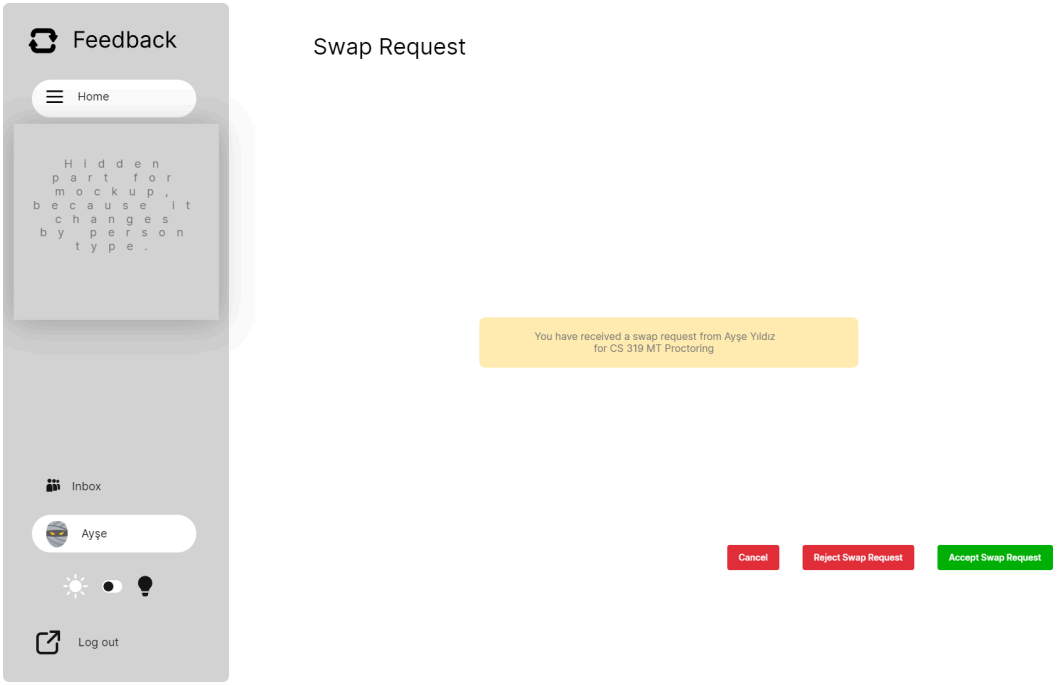


6.11. Manual TA Selection



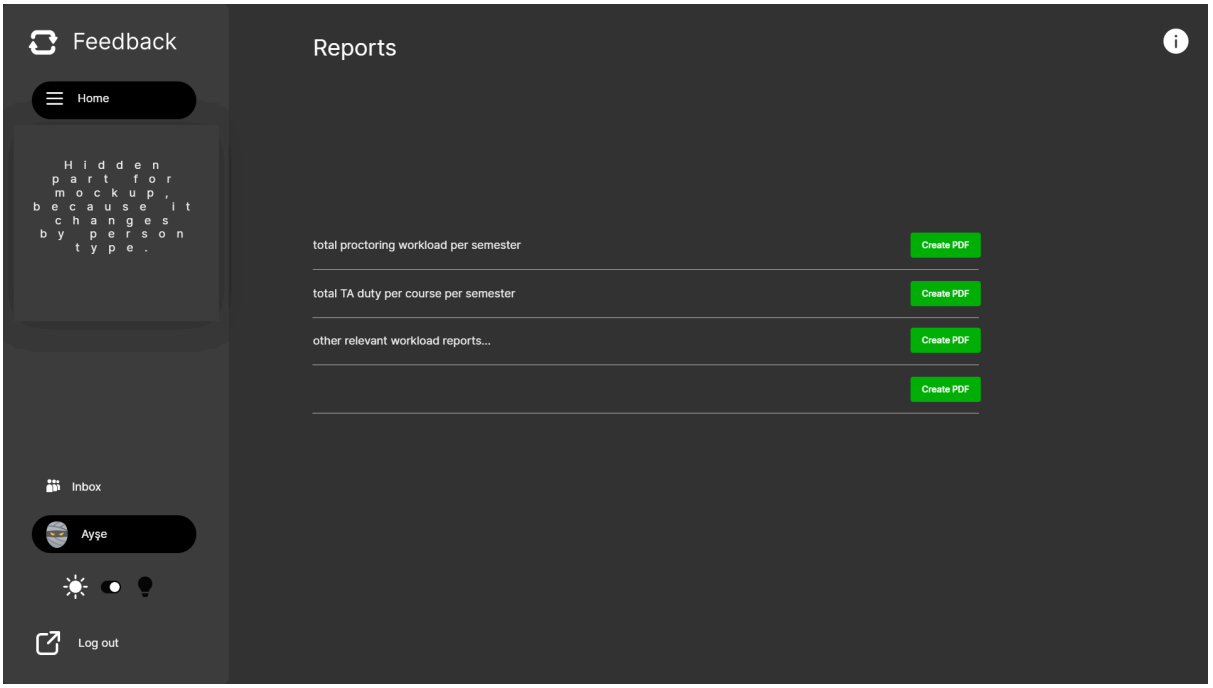
6.12. Swap Proctoring

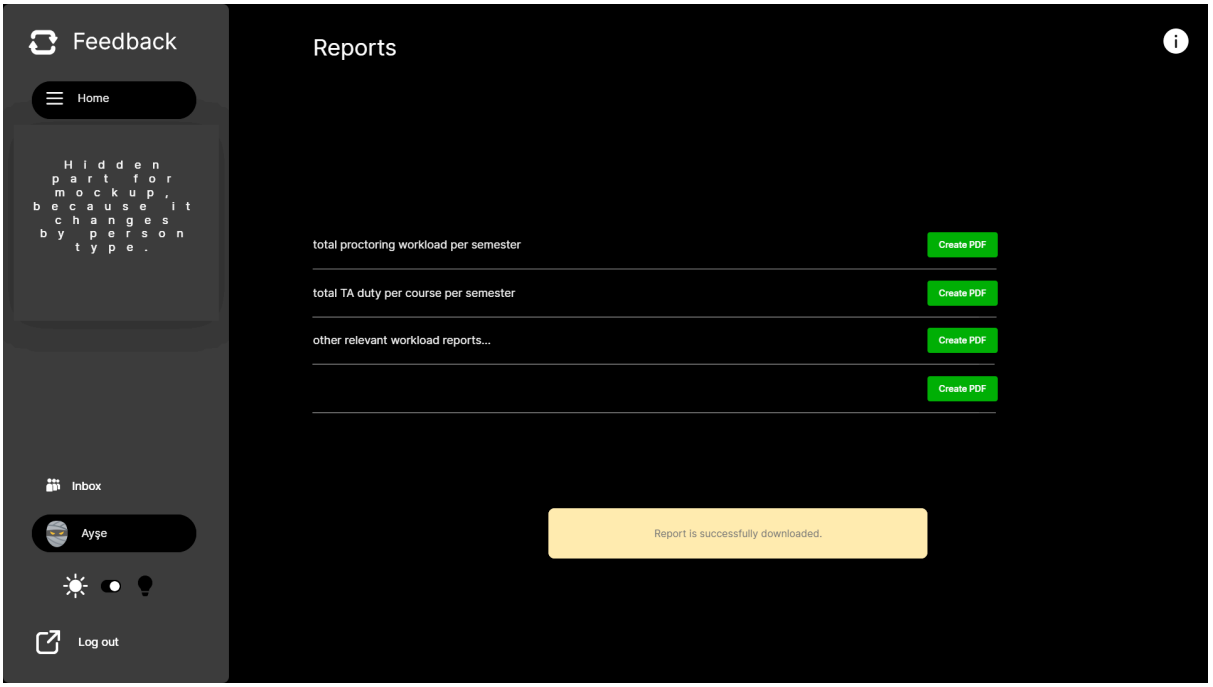




*Incoming Request

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.