CS319 Term Project

Erasmust: Bilkent's Erasmus and Exchange Application

Requirement Analysis Report

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Analysis Report

1 Introduction

Erasmust is an Erasmus and Exchange tracking and managing application created by the team BubbleZort. Erasmust was created as a solution to Bilkent's way of handling Erasmus and Exchange programs. Our project is a website that aims to simplify the Erasmus/Exchange application process for students, coordinators, instructors and all other stakeholders.

Erasmust helps students in their process of creating their Erasmus or Exchange applications and tracking them from a single software, thus minimizing the reliance on emails. By simplifying the process in a single application with clear instructions, Erasmust saves time and resolves most of the confusion generated by the existing system.

If the student is eligible to join the program of their choice, Erasmust will enable them to complete other steps of the application process. By almost eliminating all emailing, Erasmust will enable an easier tracking of the application for everyone. Students will be able to view/edit their application. Other parties involved, such as instructors and coordinators, will be able to see the status of applications they are responsible for in real-time thus making the whole process a lot easier and faster.

2 Proposed System

2.1 Overview

Erasmust doesn't have a separate sign up and sign in functionality. Both of these will be integrated into the STARS system. Students can make Erasmus or Exchange

applications through Erasmust. If they are eligible to apply, they can proceed to the next steps of their application. They can select the courses they want to take, create preapproval forms, and submit all required paperwork electronically. Both students and coordinators responsible for the application can view the current status of an Erasmus or Exchange application. Students can see how many of their requested courses are approved. They can view the status of their preapproval form.

2.2 Functional Requirements

2.2.1 Sign Up

There will be no additional sign up feature. The accounts will be created for every student and all responsible parties by using SRS data by the system.

2.2.2 Sign In

Sign in page will be integrated to SRS. No separate sign in procedure is needed.

2.2.3 View Profile

All users can view their profile by clicking the profile button. All user profiles contain first name, last name, profile picture, Stars ID, email address and department.

2.2.4 Edit Profile

All users can edit their profiles. Name, last name and ID is not editable. Other fields can be edited. Users can also change their password.

2.2.5 Apply for Erasmus

Students can make an Erasmus application by clicking the apply button. They can only proceed with other steps if they are eligible to apply for Erasmus.

2.2.6 Apply for Exchange

Students can make an Exchange application by clicking the apply button. They can only proceed with other steps if they are eligible to apply for Exchange.

2.2.7 Create Course Wishlist

Students can create a course wishlist that indicates the courses they want to take. They can also add the syllabus of the course as an image.

2.2.8 Edit Course Wishlist

Students can edit their course wishlist. They can add new courses or delete the existing ones. Total credits of the courses on the wishlist cannot exceed the maximum credit limit.

2.2.9 View Course Wishlist

Students can view their course wishlist.
Erasmus coordinators can view a student's course wishlist if they are responsible for the application and if it is submitted.
Course instructors can view a student's course wishlist if it contains courses that the instructor is responsible for and if it is submitted.

2.2.10 Delete Course Wishlist

Students can delete their course wishlist if they want to cancel it.

2.2.11 Submit Course Wishlist

Students can submit the course wishlist for the approval of the related authority.

2.2.12 Approve Course

Erasmus coordinators or course instructors can approve courses from the submitted course wishlist.

2.2.13 Reject Course

Erasmus coordinators or course instructors can reject courses from the submitted course wishlist.

2.2.14 Create Preapproval Form

Students can create a preapproval form with approved courses from their course wishlist.

2.2.15 Edit Preapproval Form

Students can edit existing preapproval forms. They can add or remove courses.

2.2.16 View Preapproval Form

Students can view their preapproval form.
Erasmus coordinators can view a student's preapproval form if they are responsible for the application and if the form is submitted.

2.2.17 Delete Preapproval Form

Students can delete their existing preapproval forms.

2.2.18 Submit Preapproval Form

Students can submit their preapproval forms to be evaluated in the future.

2.2.19 Accept Preapproval Form

Erasmus coordinators can accept a student's preapproval form if they are responsible for the application and it is approved by the Faculty Administration Committee.

2.2.20 Reject Preapproval Form

Erasmus coordinators can reject a student's preapproval form if they are responsible for the application.

2.2.21 Create Course Transfer Form

Erasmus coordinators can create a course transfer form for each student.

2.2.22 Edit Course Transfer Form

Erasmus coordinators can edit course transfer forms they have created.
Chair can edit course transfer forms to sign the form.
Dean/Director can edit course transfer forms to sign the form.

2.2.23 View Course Transfer Form

Students can view their own course transfer forms.
Erasmus coordinators, the dean, department chair can view course transfer forms of all students.

2.2.24 Delete Course Transfer Form

Erasmus coordinators can delete course transfer forms they have created.

2.3 Non-functional Requirements

2.3.2 Usability

Our system is much easier to learn and use than the current system with its clear user interface and simple commands. Erasmus is a system where each type of user can only access content that interests them, and all operations are based on simple downloads, screens and buttons. The users does not encounter any confusing content after logging in to their own account with their own user type. In addition, the system reminds the user through a to-do list and saves the user from wasting time, like the time wasted trying to find the contact information of the people to send documents.

2.3.3 Reliability

Any information of the user will either be withdrawn through the stars account linked to Bilkent University, or any information/document (such as forms) that must be stored in the application will be kept completely confidential and will not be shared with third parties who are not involved in the process. All possible fault situations will be intervened immediately and necessary measures will be taken to prevent recurrence.

2.3.4 Supportability

The project is carried out step by step, together with helpers like reports and diagrams, for unplanned situations such as adding features on request, correcting possible errors, and intervening in unexpected situations. In this way, the probability to intervene and understand in unexpected situations that may occur will be much higher.

2.4 Pseudo Requirements

2.4.1 Implementation

- Spring will be used at the back-end side.
- React will be used at the front-end side.
- PostgreSQL will be used for the database.

2.5 System Models

2.5.1 Use Case Model
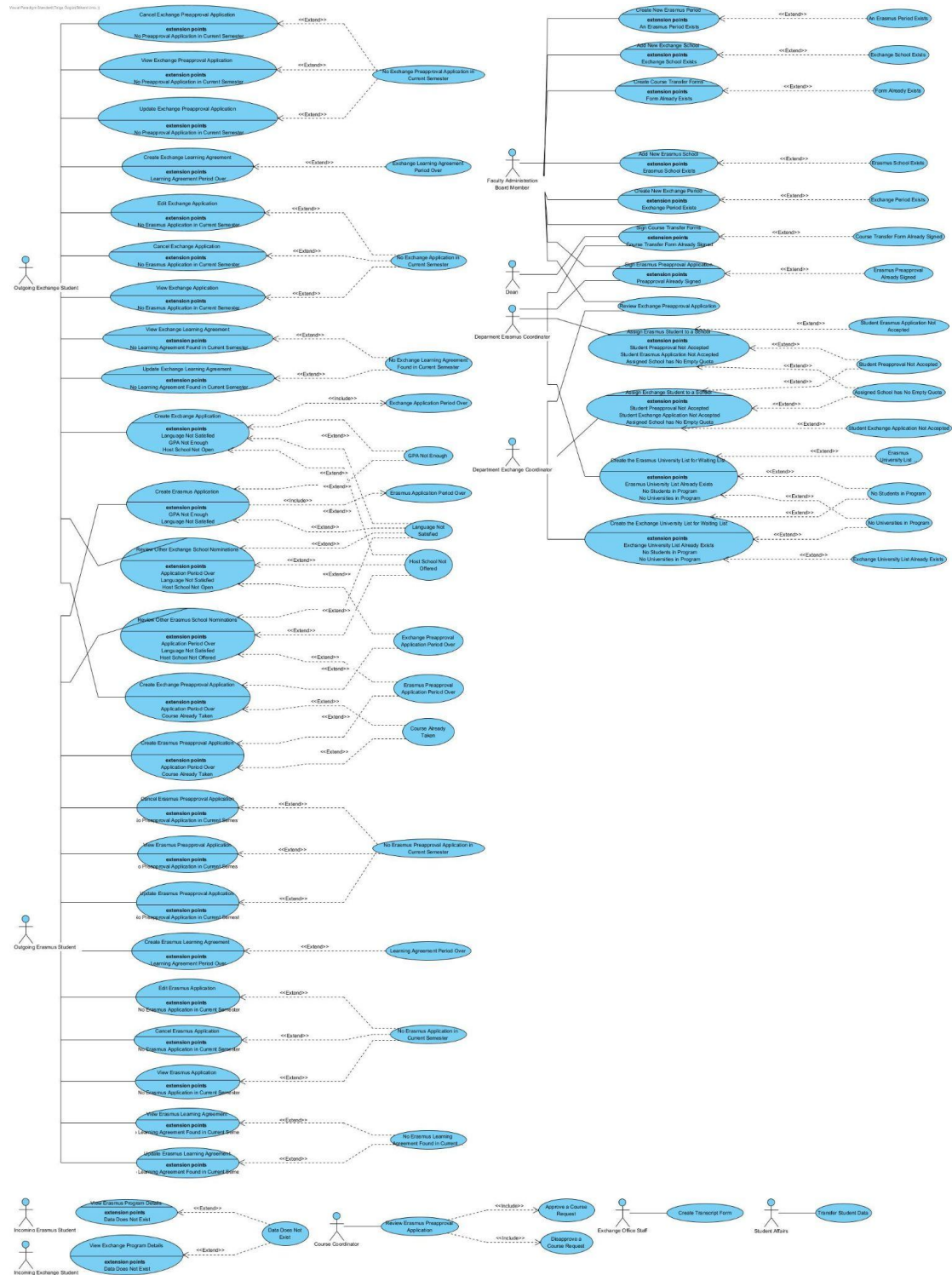
Fig. 1. Use Case Diagram (Click here for full size)

Name: Create Exchange Application

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks on "Create", while on Exchange Program page

Exit Condition:

● Actor successfully creates their preapproval application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Create" button.

4. Actor fills the form.

5. Actor clicks "Save Changes".

6. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

● Actor should not have an existing Exchange Application in the current semester.
● Actor should satisfy the academic GPA requirements.

Name: View Exchange Application

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks on their own application, while on Exchange Program page

Exit Condition:

● Actor successfully views their preapproval application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on their own exchange application

Special/Quality Requirements:

- Actor should not have an existing Exchange Application in the current semester.
- Actor should satisfy the academic GPA requirements.

Name: Edit Exchange Application

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks on "Edit" button while viewing their Exchange Application

Exit Condition:

- Actor successfully edits their exchange application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on their own exchange application.

4. Actor fills the form with new changes.

5. Actor clicks "Save Changes".

6. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should have an existing Exchange Application in the current semester.

Name: Cancel Exchange Application

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks on "Cancel" button while viewing their Exchange Application

Exit Condition:

- Actor successfully edits their exchange application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on their own exchange application.

4. Actor clicks on "Cancel" button.

5. Actor clicks on "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should have an existing Exchange Application in the current semester.

Name: Create Exchange Preapproval Application

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks on "Create Exchange Preapproval Application", fills the form and saves changes.

Exit Condition:

- Actor successfully creates their preapproval application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Preapproval Applications" button.

4. Actor clicks on "Create" button.

5. Actor fills the form.

6. Actor clicks "Save Changes".

7. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should not already have an existing Exchange Proposal Application in the current semester.
- Actor should have an existing Exchange Application.

Name: View Exchange Preapproval Application

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks on "My Exchange Preapproval Application"

Exit Condition:

- Actor successfully views their preapproval application or is prompted an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Preapproval Applications" button.

4. Actor clicks on their own preapproval application.

Special/Quality Requirements:

- Actor should already have an existing Exchange Proposal Application.

Name: Cancel Exchange Preapproval Application

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks "Cancel" while reviewing their Exchange Preapproval Application, and clicks "Yes" on "Are you sure?" prompt.

Exit Condition:

- Actor successfully cancels their preapproval application or reverts their decision by clicking "No" on "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Preapproval Applications".

4. Actor clicks on their own preapproval application.

5. Actor clicks on "Cancel" button.

6. Actor clicks on "Yes" when prompted "Are you sure?"

Special/Quality Requirements:

- Actor should already have an existing Exchange Proposal Application in the current semester.
- The exchange preapproval application period should not be over.

Name: Update Exchange Preapproval Application

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks "Update" while reviewing their Exchange Preapproval Application

Exit Conditions:

- Actor successfully updates their preapproval application or exits the page without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Preapproval Applications".

4. Actor clicks on their own preapproval application.

5. Actor clicks on "Update" button.

6. Actor makes changes on their application.

7. Actor clicks "Save Changes".

8. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should already have an existing Exchange Proposal Application in the current semester.
- The exchange preapproval application period should not be over.

Name: Create Exchange Learning Agreement

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks "Update" while reviewing their Exchange Learning Agreement.

Exit Conditions:

- Actor successfully creates their Exchange Learning Agreement or decides not to by without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Learning Agreement".

4. Actor clicks on "Create" button.

5. Actor fills the form.

6. Actor clicks on "Save Changes" button.

7. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should not already have an existing Exchange Learning Agreement in the current semester.
- The Exchange Proposal Application period must be open.
- Actor should have an existing Exchange Application in the current semester.

Name: Create Exchange Learning Agreement

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks "Create" while on Exchange Learning Agreement page

Exit Conditions:

- Actor successfully creates their Exchange Learning Agreement or decides not to by exiting the process without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Learning Agreement".

4. Actor clicks on "Create" button.

5. Actor makes changes on the form.

6. Actor clicks on "Save Changes" button.

7. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should not already have an existing Exchange Learning Agreement in the current semester.
- The Exchange Learning Agreement period must be open.

Name: View Exchange Learning Agreement

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks on their own learning agreement while on Exchange Learning Agreement page.

Exit Conditions:

- Actor successfully edits their Exchange Learning Agreement or decides not to by without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Learning Agreement".

4. Actor clicks on their own learning agreement.

Special/Quality Requirements:

- Actor should already have an existing Exchange Learning Agreement in the current semester.

Name: Edit Exchange Learning Agreement

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks "Edit" while reviewing their Learning Preapproval Application

Exit Conditions:

- Actor successfully edits their Exchange Learning Agreement or decides not to by without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Learning Agreement".

4. Actor clicks on their own learning agreement.

5. Actor clicks on "Edit" button.

6. Actor makes changes on the form.

7. Actor clicks on "Save Changes" button.

8. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should already have an existing Exchange Learning Agreement in the current semester.
- The Exchange Learning Agreement period must be open.

Name: Review Other Exchange School Nominations

Participating Actors: Outgoing Exchange Student

Entry Condition: Actor clicks "Review Other Schools" while reviewing their Exchange Application

Exit Conditions:

- Actor successfully selects a school or clicks "Pick None" on "Review Other Schools" page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on their own exchange application

4. Actor clicks on "Review Other Schools" button.

5. Actor picks a school and clicks "Pick" button.

6. Actor clicks on "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should already have an existing Exchange Application.

Name: Create Erasmus Application

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks on "Create", while on Erasmus Program page

Exit Condition:

- Actor successfully creates their preapproval application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Create" button.

4. Actor fills the form.

5. Actor clicks "Save Changes".

6. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should not have an existing Erasmus Application in the current semester.
- Actor should satisfy the academic GPA requirements.

Name: View Erasmus Application

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks on their own application, while on Erasmus Program page

Exit Condition:

- Actor successfully views their preapproval application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on their own erasmus application

Special/Quality Requirements:

- Actor should not have an existing Erasmus Application in the current semester.
- Actor should satisfy the academic GPA requirements.

Name: Edit Erasmus Application

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks on "Edit" button while viewing their Erasmus Application

Exit Condition:

- Actor successfully edits their erasmus application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on their own Erasmus application.

4. Actor fills the form with new changes.

5. Actor clicks "Save Changes".

6. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should have an existing Erasmus Application in the current semester.

Name: Cancel Erasmus Application

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks on "Cancel" button while viewing their Erasmus Application

Exit Condition:

- Actor successfully edits their Erasmus application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on their own Erasmus application.

4. Actor clicks on "Cancel" button.

5. Actor clicks on "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should have an existing Erasmus Application in the current semester.

Name: Create Erasmus Preapproval Application

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks on "Create Erasmus Preapproval Application", fills the form and saves changes.

Exit Condition:

- Actor successfully creates their preapproval application or is redirected to an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Preapproval Applications" button.

4. Actor clicks on "Create" button.

5. Actor fills the form.

6. Actor clicks "Save Changes".

7. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should not already have an existing Erasmus Proposal Application in the current semester.
- Actor should have an existing Erasmus Application.

Name: View Erasmus Preapproval Application

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks on their own application at Erasmus Preapproval Application page.

Exit Condition:

- Actor successfully views their preapproval application or is prompted an error page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Preapproval Applications" button.

4. Actor clicks on their own preapproval application.

Special/Quality Requirements:

- Actor should already have an existing Erasmus Proposal Application.

Name: Cancel Erasmus Preapproval Application

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks "Cancel" while reviewing their Erasmus Preapproval Application, and clicks "Yes" on "Are you sure?" prompt.

Exit Condition:

- Actor successfully cancels their preapproval application or reverts their decision by clicking "No" on "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Preapproval Applications".

4. Actor clicks on their own preapproval application.

5. Actor clicks on "Cancel" button.

6. Actor clicks on "Yes" when prompted "Are you sure?"

Special/Quality Requirements:

- Actor should already have an existing Erasmus Proposal Application in the current semester.
- The Erasmus preapproval application period should not be over.

Name: Update Erasmus Preapproval Application

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks "Update" while reviewing their Erasmus Preapproval Application

Exit Conditions:

- Actor successfully updates their preapproval application or exits the page without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Preapproval Applications".

4. Actor clicks on their own preapproval application.

5. Actor clicks on "Update" button.

6. Actor makes changes on their application.

7. Actor clicks "Save Changes".

8. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should already have an existing Erasmus Proposal Application in the current semester.
- The Erasmus preapproval application period should not be over.

Name: Create Erasmus Learning Agreement

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks "Update" while reviewing their Erasmus Learning Agreement.

Exit Conditions:

- Actor successfully creates their Erasmus Learning Agreement or decides not to by without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Learning Agreement".

4. Actor clicks on "Create" button.

5. Actor fills the form.

6. Actor clicks on "Save Changes" button.

7. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should not already have an existing Erasmus Learning Agreement in the current semester.
- The Erasmus Proposal Application period must be open.
- Actor should have an existing Erasmus Application in the current semester.

Name: Create Erasmus Learning Agreement

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks "Create" while on Erasmus Learning Agreement page

Exit Conditions:

- Actor successfully creates their Erasmus Learning Agreement or decides not to by exiting the process without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Learning Agreement".

4. Actor clicks on "Create" button.

5. Actor makes changes on the form.

6. Actor clicks on "Save Changes" button.

7. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should not already have an existing Erasmus Learning Agreement in the current semester.
- The Erasmus Learning Agreement period must be open.

Name: View Erasmus Learning Agreement

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks on their own learning agreement while on Erasmus Learning Agreement page.

Exit Conditions:

- Actor successfully edits their Erasmus Learning Agreement or decides not to by without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Learning Agreement".

4. Actor clicks on their own learning agreement.

Special/Quality Requirements:

- Actor should already have an existing Erasmus Learning Agreement in the current semester.

Name: Edit Erasmus Learning Agreement

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks "Edit" while reviewing their Learning Preapproval Application

Exit Conditions:

- Actor successfully edits their Erasmus Learning Agreement or decides not to by without clicking "Save Changes" button.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Learning Agreement".

4. Actor clicks on their own learning agreement.

5. Actor clicks on "Edit" button.

6. Actor makes changes on the form.

7. Actor clicks on "Save Changes" button.

8. Actor clicks "Yes" on "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should already have an existing Erasmus Learning Agreement in the current semester.
- The Erasmus Learning Agreement period must be open.

Name: Review Other Erasmus School Nominations

Participating Actors: Outgoing Erasmus Student

Entry Condition: Actor clicks "Review Other Schools" while reviewing their Erasmus Application

Exit Conditions:

- Actor successfully selects a school or clicks "Pick None" on "Review Other Schools" page.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on their own Erasmus application

4. Actor clicks on "Review Other Schools" button.

5. Actor picks a school and clicks "Pick" button.

6. Actor clicks on "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- Actor should already have an existing Erasmus Application.

Name: Create the Exchange University List for Waiting List

Participating Actors: Department Exchange Coordinator

Entry Condition: Actor clicks on "Create Exchange University List for Waiting List" button while on Exchange Program page.

Exit Conditions:

- Actor successfully creates an Exchange university list or cancels on the prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Create Exchange University List for Waiting List" button

4. Actor clicks on "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- Current Exchange application period should be over.
- There should be at least one university in the Exchange program.
- There should be at least one student in the Exchange program.

Name: Create the Erasmus University List for Waiting List

Participating Actors: Department Erasmus Coordinator, Faculty Administration Board Member

Entry Condition: Actor clicks on "Create Erasmus University List for Waiting List" button while on Erasmus Program page.

Exit Conditions:

- Actor successfully creates an Erasmus university list or cancels on the prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Create Erasmus University List for Waiting List" button

4. Actor clicks on "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- Current Erasmus application period should be over.
- There should be at least one university in the Erasmus program.
- There should be at least one student in the Erasmus program.

Name: Review Exchange Preapproval Application

Participating Actors: Department Exchange Coordinator, Faculty Administration Board Member

Entry Condition: Actor clicks on "Review" button while browsing Exchange Preapproval applications.

Exit Conditions:

- Actor reviews an Exchange Preapproval application and provides a message as he/she accepts or rejects the application.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Preapproval Applications" button.

4. Actor clicks on "Review" button next to an application.

5. Actor enters an acceptance or rejection message.

6. Actor either clicks "Accept" or "Reject".

Special/Quality Requirements:

- There should be at least one preapproval application in the Exchange program.

- The selected preapproval application could be previously reviewed, but must not be deleted.

Name: Review Erasmus Preapproval Application

Participating Actors: Department Erasmus Coordinator

Entry Condition: Actor clicks on "Review" button while browsing Erasmus Preapproval applications.

Exit Conditions:

- Actor reviews an Erasmus Preapproval application and provides a message as he/she accepts or rejects the application.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Preapproval Applications" button.

4. Actor clicks on "Review" button next to an application.

5. Actor enters an acceptance or rejection message.

6. Actor either clicks "Accept" or "Reject".

Special/Quality Requirements:

- There should be at least one preapproval application in the Erasmus program.
- The selected preapproval application could be previously reviewed, but must not be deleted.

Name: Assign Exchange Student to a School

Participating Actors: Department Exchange Coordinator

Entry Condition: Actor clicks on "Review" button while browsing Exchange Preapproval applications.

Exit Conditions:

- Actor assigns an Exchange student to a school or cancels the process by exiting the system without clicking "Yes" at the "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on an existing application.

4. Actor clicks on "Assign to a School" button inside the application page.

5. Actor picks a school from the list.

6. Actor clicks "Assign Now" button.

7. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- The assigned school should have a quota for this Exchange student.
- Exchange student's preapproval application should be accepted.
- Exchange student's Exchange application should be accepted.

Name: Assign Erasmus Student to a School

Participating Actors: Department Erasmus Coordinator

Entry Condition: Actor clicks on "Review" button while browsing Erasmus Preapproval applications.

Exit Conditions:

- Actor assigns an Erasmus student to a school or cancels the process by exiting the system without clicking "Yes" at the "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on an existing application.

4. Actor clicks on "Assign to a School" button inside the application page.

5. Actor picks a school from the list.

6. Actor clicks "Assign Now" button.

7. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- The assigned school should have a quota for this Erasmus student.
- Erasmus student's preapproval application should be accepted.
- Erasmus student's Erasmus application should be accepted.

Name: Create New Erasmus Period

Participating Actors: Department Erasmus Coordinator

Entry Condition: Actor clicks on "Create Period" button on Erasmus Program page, enters details and clicks "Save Changes" button

Exit Conditions:

- Actor creates a new Erasmus period, or cancels until the last "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Create Erasmus Period" button.

4. Actor selects the dates, and fills details.

5. Actor clicks "Create Now" button.

6. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- There should not be a conflicting Erasmus period at the given dates with existing Erasmus periods.

Name: Create New Exchange Period

Participating Actors: Department Exchange Coordinator

Entry Condition: Actor clicks on "Create Period" button on Exchange Program page, enters details and clicks "Save Changes" button

Exit Conditions:

- Actor creates a new Exchange period, or cancels until the last "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Create Exchange Period" button.

4. Actor selects the dates, and fills details.

5. Actor clicks "Create Now" button.

6. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- There should not be a conflicting Exchange period at the given dates with existing Erasmus periods.

Name: Add New Erasmus School

Participating Actors: Department Erasmus Coordinator

Entry Condition: Actor clicks on "Add School" button on Erasmus Program page, enters details and clicks "Save Changes" button

Exit Conditions:

- Actor adds a new school to the Erasmus program, or cancels until the last "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on "Add School" button.

4. Actor fills the details about the school.

5. Actor clicks "Add Now" button.

6. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- There should not be a school with the same name.
- School name and location must be entered.

Name: Add New Exchange School

Participating Actors: Department Exchange Coordinator

Entry Condition: Actor clicks on "Add School" button on Exchange Program page, enters details and clicks "Save Changes" button

Exit Conditions:

- Actor adds a new school to the Exchange program, or cancels until the last "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Add School" button.

4. Actor fills the details about the school.

5. Actor clicks "Add Now" button.

6. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- There should not be a school with the same name.
- School name and location must be entered.

Name: View Erasmus Program Details

Participating Actors: Incoming Erasmus Student

Entry Condition: The actor clicks on the "profile" button on Erasmus Program page, then clicks the "View Details" button.

Exit Conditions:

- The actor clicks on the cross icon on the "Details" pop-up.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Erasmus Program" and enters the Erasmus Program page.

3. Actor clicks on the "Profile" button.

5. Actor clicks the "View Details" button.

Special/Quality Requirements:

- There should not be a school with the same name.
- School name and location must be entered.

Name: View Exchange Program Details

Participating Actors: Course Coordinator

Entry Condition: Actor clicks on "Select Student" button on Exchange Program page, then clicks "View Details" button.

Exit Conditions:

- Actor clicks on the cross icon on the "Details" pop up.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Select Student" button.

5. Actor clicks "View Details" button.

Special/Quality Requirements:

- There should not be a school with the same name.
- School name and location must be entered.

Name: Create New Exchange Period

Participating Actors: Department Exchange Coordinator

Entry Condition: Actor clicks on "Create Period" button on Exchange Program page, enters details and clicks "Save Changes" button

Exit Conditions:

- Actor creates a new Exchange period, or cancels until the last "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Exchange Program" and enters the Exchange Program page.

3. Actor clicks on "Create Exchange Period" button.

4. Actor selects the dates, and fills details.

5. Actor clicks "Create Now" button.

6. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

There should not be a conflicting Exchange period at the given dates with existing Erasmus periods.

Name: Create Course Transfer Form

Participating Actors: Faculty Administration Board Member

Entry Condition: Actor clicks on "Add Form" button on Course Transfer page, enters details and clicks "Save Changes" button

Exit Conditions:

- Actor adds a new Course Transfer Form, or cancels until the last "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Applications" buttons and enters the Applications page.

3. Actor clicks on "Add Course Transfer Form".

4. Actor fills the details in to the form.

5. Actor clicks "Save Changes" button.

6. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

- There should not be an open Course Transfer Form for the student in the same period.

Name: Sign Course Transfer Form

Participating Actors: Faculty Administration Board Member

Entry Condition: Actor clicks on "Sign" button on Course Transfer Form.

Exit Conditions:

- Actor adds a new Course Transfer Form, or cancels until the last "Are you sure?" prompt.

Flow of Events:

1. Actor logs in to the system.

2. Actor clicks "Applications" buttons and enters the Applications page.

3. Actor clicks on a course transfer form.

4. Actor clicks "Sign" button.

5. Actor clicks "Yes" for "Are you sure?" prompt.

Special/Quality Requirements:

There should be an open Course Transfer Form for the student in the same period.
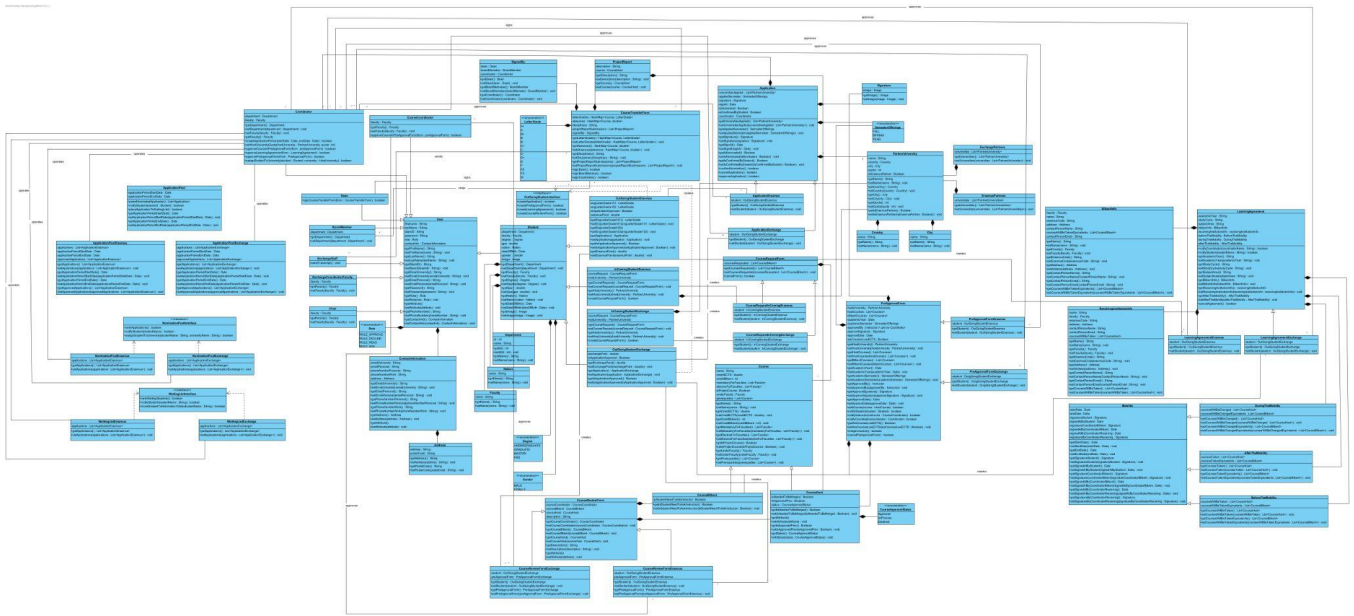
2.5.2 Object and Class Model

Fig. 2. Class Diagram (Click here for full size)

There are 5 main classes that play an important role in the operation of the program. The names of these classes are **User**, **Application**, **PreApproval**, **LearningAgreement**, and **CourseTransferForm**. Thanks to the User class, which is the class that all user types in the application extend, users' access to APIs is kept under control. The classes with the most interaction in the application are the other two classes inherited from the **Coordinator** and **OutGoingStudent** classes. The OutGoingStudent class, designed for students going to Erasmus and Exchange, allows students to create the necessary documents and follow the process. The coordinator class is designed for the Erasmus and exchange coordinator of the faculty of the students participating in the Erasmus and exchange program. Thanks to this class attributed to the Coordinator, it is ensured that the documents sent by the students are followed up, and the approval process is carried out. Thanks to the classes that extend the **InComingStudents** class created for exchange and Erasmus transactions of incoming students, students coming to Bilkent can find the necessary applications. Other User classes that do not have a very active role in the process but are necessary for successfully completing the process are **CourseCoordinator**, **Dean**, **BoardMember**, **ExchangeCoordinatorFaculty**, **Chair**, and **ExchangeStaff**. CourseCoordinator is designed to check the validity of the courses that students who are accepted to the exchange and Erasmus program will take at the school they will go to. These user types were created for signing documents and performing small-scale document transfers.

The **Application** class, which forms an important part of the program, acts as a super class for **ApplicationErasmus** and **ApplicationExchange** class. OutgoingStudents can apply to Erasmus or Exchange programs with the help of these classes. The tracking and evaluation of applications are carried out with the help of **ApplicationPoolExchange** and **ApplicationPoolErasmus** classes, which extend the ApplicationPool class. Thanks to these classes, applicants are ranked according to their scores and assigned to the universities they deserve. Assigned students are transferred to the **NominationPoolErasmus** and **NominationPoolExchange** classes that extend the **NominationPool** class, and it is controlled whether the students accept the school they are assigned to. In addition, the **WaitingListErasmus** and **WaitingListExchange** classes, which are extended from the **WaitingList** class, undertake the task of reassigning the schools that will be exposed in a possible case to the students. The **PartnerUniversity** class, on the other hand, is a class created to keep the information of Erasmus and exchange schools with which Bilkent has a contract and to update this information when necessary. Students can choose a school with the help of this class, and schools can be assigned to students with the help of this class.

After the students agree to participate in the desired program at the school assigned to them, they will use the **PreApprovalErasmus** and **PreApprovalExchange** classes, which are extended from the **PreApproval** class implemented in the program, to prepare the preapproval form. These classes, which follow the courses to be taken at the university and the processing of the equivalents of these courses in Bilkent into the system, will be used in the follow-up of the process with the help of the **CourseReviewForm**, which the students send to the course coordinators during this process. The CourseReviewForm is simply a class that allows the course coordinator to be informed about the content of the course to be taken at the university, and if the course coordinator approves, this course is processed into the preapproval form. After the preapproval form is created successfully and signed by the coordinator, it is time for the student to create the learning agreement and have it signed by the coordinator.

The **LearningAgreementErasmus** and **LearningAgreementExchange** classes, which extend the **LearningAgreement** class, enable students to create learning agreements and have them signed by the necessary people. The process is completed by processing the transcript sent by the host school when the students return to Bilkent after completing the Erasmus or Exchange program. This process is carried out thanks to the **CourseTransferForm** class. After the necessary members sign this document, the process is completed successfully.

Since other classes that are not mentioned in the explanation are added to implement the java OOP architecture and adopt a more systematic structure on the development

side, they will be used to control users' access to APIs in the general operational structure of the application.

2.5.3 Dynamic Models

2.5.3.1 Sequence Diagram

Scenario: Outgoing student makes an application after the application period starts. If the student is eligible, he or she it placed either in Waiting List or Nomination Table according to the success rating of the student. If nominated student confirms the host university, the student creates a Preapproval Form and starts selecting courses. If the selected course is taken previously by another student, the course for Preapproval Form is approved by the coordinator. If the selected course is not taken previously by another student but it is similar enough with another course in local university after the approval of the relevant instructor, the course for Preapproval Form is approved. After the approval of Preapproval Form, student needs to create a Learning Agreement which is expected to be resend until it is satisfactory and approved by the coordinator. At last, exchange staff creates the Course Transfer Form of the student and board member, chair and dean sign the Course Transfer Form. Student always has the right to cancel his or her application by informing the coordinator which is followed by the replacement of the student with another student in the Waiting List.

Fig. 3. Sequence Diagram (Click here for full size)

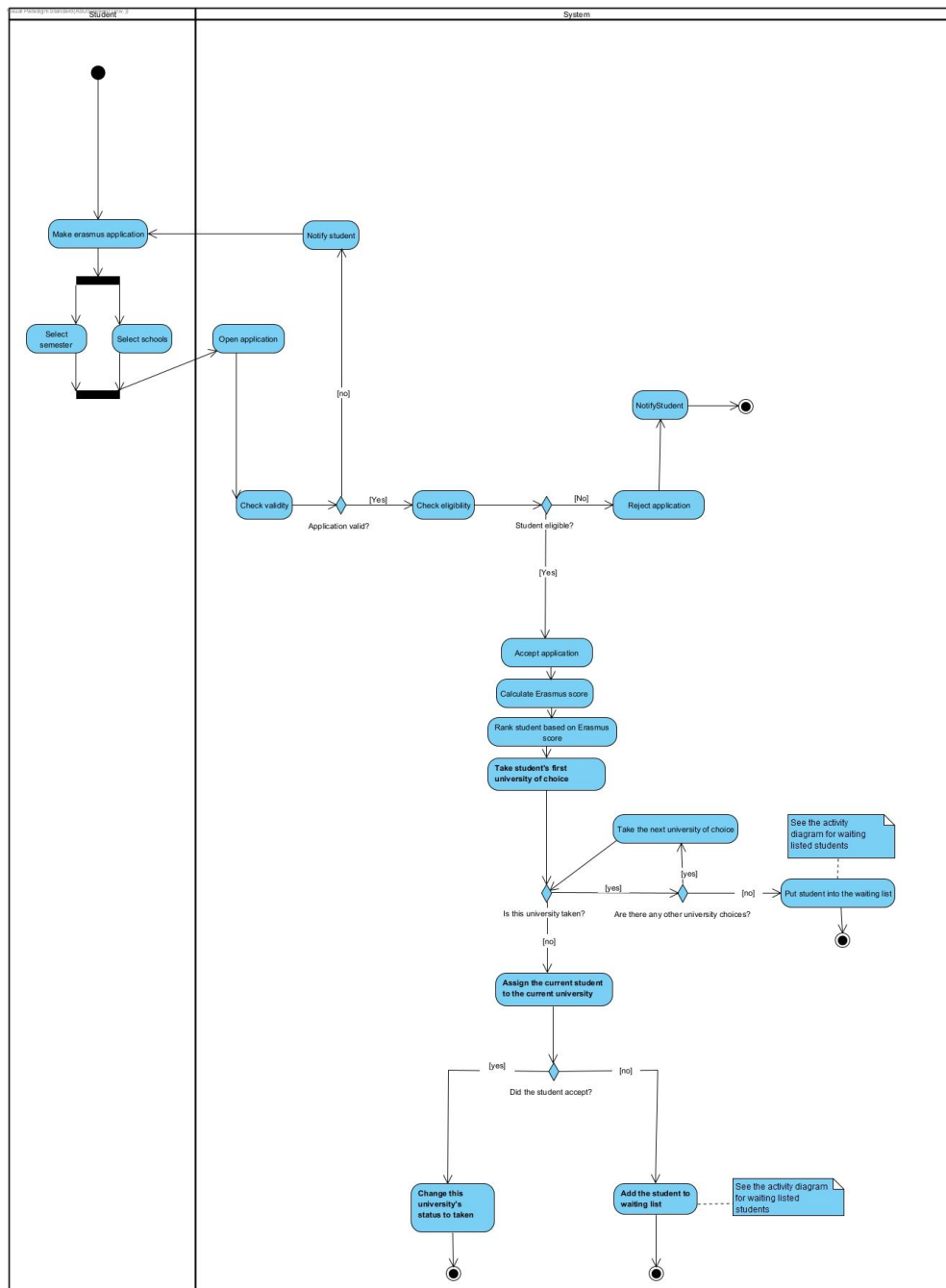## 2.5.3.2 Activity Diagrams
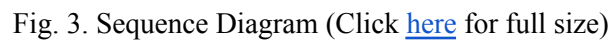
2.5.3.2.1 Application Process

Fig. 4. Activity Diagram for Application Process (Click here for full size)

This activity diagram explains the application process for Erasmus from the creation of the application to evaluation of it. The application process is initiated by the student who choses a school and a semester. After the application is submitted it is checked for validity (if it has empty fields that must be filled, if the selected schools

offer Erasmus for the selected semester etc.). If the form has errors the student is notified and can re-apply, otherwise the student is checked for eligibility. If not eligible, the student is notified and the process ends. Else the system calculates the students Erasmus score and ranks them. After the process in which the students are placed to universities begins. For each student, their first choice of university is evaluated. If the quota of that school is full, the next university of choice is evaluated in the same manner. If there are no more university choices, the student is placed in the waiting list. If the school has an available quota, the university is assigned to the student. If the student does not cancel their application (i.e. accepts the school) the quota is updated, otherwise if the student cancels (i.e. doesn't accept) he is placed in the waiting list.
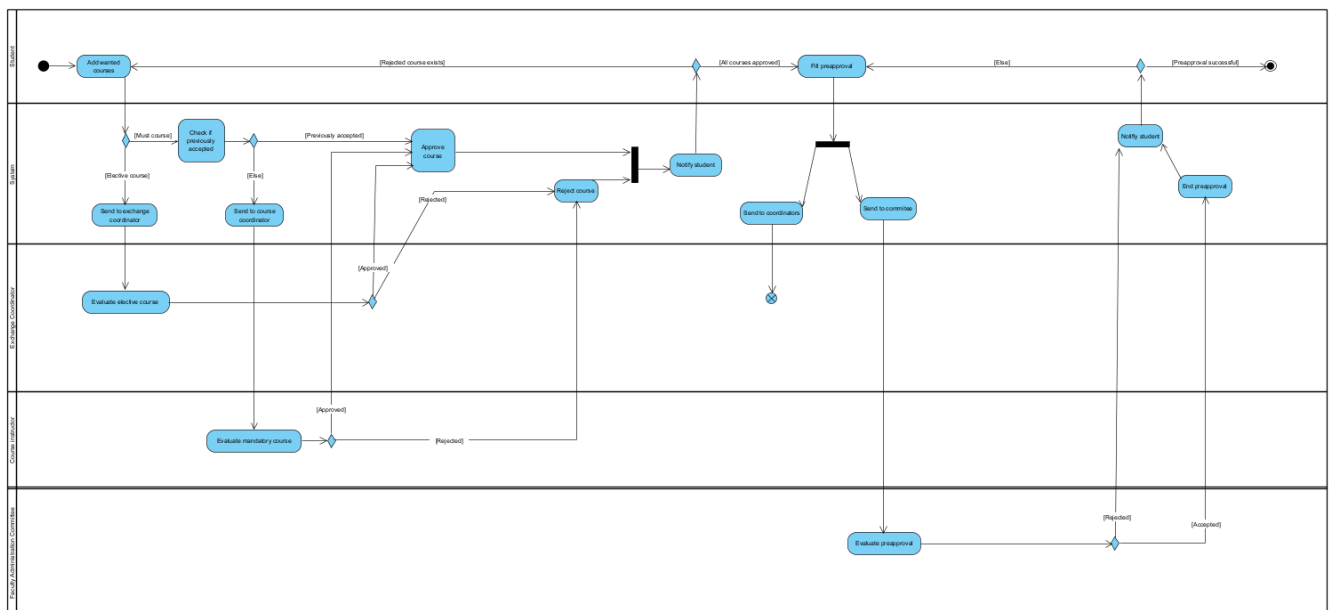
2.5.3.2.2 Preapproval

Fig. 5. Activity Diagram for Preapproval (Click here for full size)

This activity diagram explains the preapproval process for Erasmus. It begins when a student adds the courses they want to take. Then the system checks for every course whether the course is a must course or an elective course. If the course is a mandatory

course, it is checked if this course was previously approved. If it was previously approved, it is directly approved. If not, it is sent to the course coordinator for evaluation. Course coordinator can approve or reject the course. If the course is an elective one, it is directly sent to the Erasmus coordinator for evaluation. Again, the coordinator can approve or reject the course. After this process is repeated for all courses on the students wishlist, the student is notified. If there are rejected courses, the student can rearrange their wishlist and if all the courses were approved, they can fill the preapproval form. After the preapproval form is submitted, it is sent to both Erasmus coordinator and the Faculty Administration Committee. The Committee can approve or reject the preapproval. After they evaluate it, the student is notified about the status of their preapproval form. If it is rejected, they can refill the form. Else the preapproval process is completed.
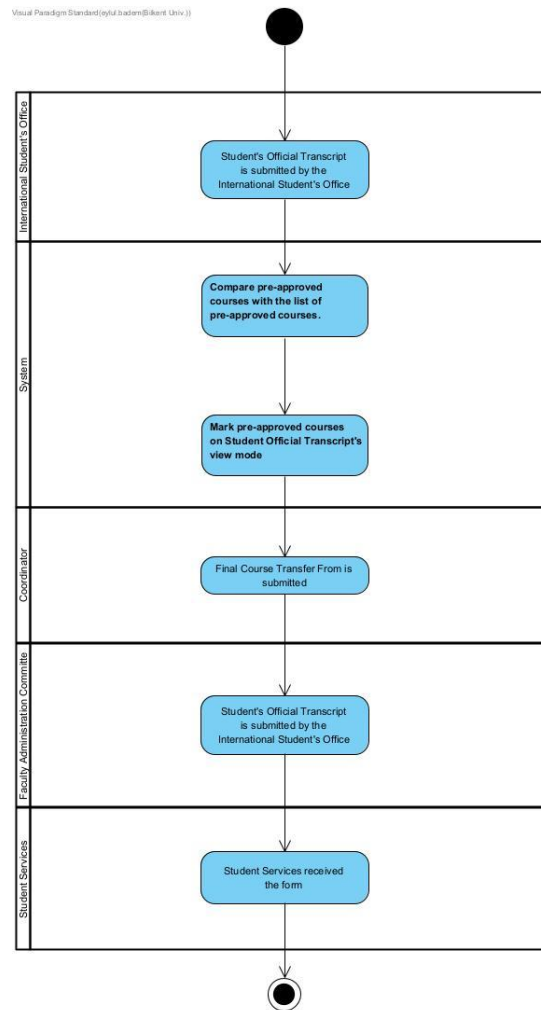
2.5.3.2.3 Course Transfer

International Student's Office: Student's Official Transcript is submitted by the International Student's Office

System: Compare pre-approved courses with the list of pre-approved courses.

Mark pre-approved courses on Student Official Transcript's view mode

Coordinator: Final Course Transfer From is submitted

Faculty Administration Committe: Student's Official Transcript is submitted by the International Student's Office

Student Services: Student Services received the form

Fig. 6. Activity Diagram for Course Transfer (Click here for full size)

This activity diagram explains the course transfer process for the outgoing Erasmus students.

The course transfer process is the process in which the courses that are taken at the host university are presented in a form by the coordinator and the form is evaluated by the authorized people at Bilkent University.

The diagram starts when the official transcript of the student from the host university is sent to Bilkent International Students Office. Bilkent International Students Office

sends this transcript, which covers only the semester the outgoing student studied there, to Erasmus coordinators.

Then the system compares the courses taken by the student to pre-approved courses list to mark the pre-approved courses in the transcript. This marking stage helps the coordinator to prepare the final course transfer form by saving the time lost while checking the courses taken one by one from the list of pre-approved courses.

The coordinator then submits the final version of the course transfer form which is ready for approval. The Faculty Administration Committee receives the submitted course transfer form, evaluates it and sends it to the Student Services after the signing process.

2.5.3.2.4 Waiting List
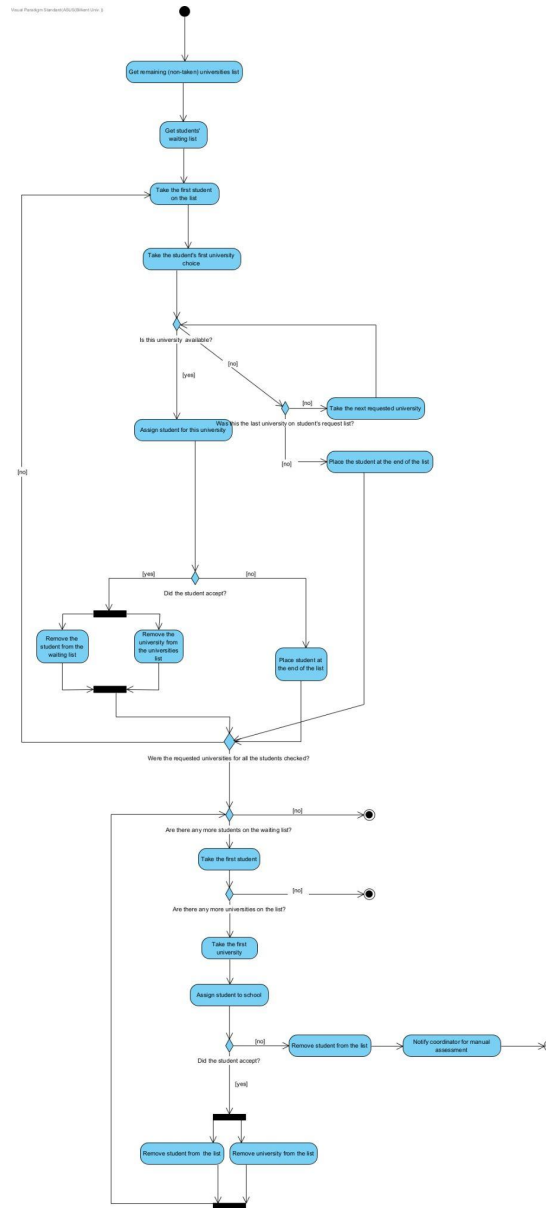
Fig. 7. Activity Diagram for Waiting Listed Students (Click here for full size)

This activity diagram explains how we have integrated the evaluation process determined by the school for the students on the waiting list into our system. The information we used in creating this diagram was taken from the presentation made by Can Alkan and the interview we made with Yelda İrem Ateş (see Appendix A for interview details).

The process generally works in the form of placing the most suitable student from the waiting list in the gaps of universities with vacant quotas. For this, starting from the student at the top of the waiting list, it is checked to see if there are any open quotas among the universities that the student has written on their wish list. If there is a quota, this university is offered directly to this student. If the student cancels, the student is considered to have canceled the Erasmus process since the university rejected by this student was on the student's wish list. If there is no open quota in any of the universities on the student's list, the student is sent to the end of the waiting list to be re-evaluated later. After checking the request university lists of all students that have not been checked before, the students who follow the list become students who do not have any vacancies in the requested universities. If there are still universities with vacancies, these universities are offered to students starting from the top. If students cancel this time, the student drops from the list and is reported to the coordinator (so that he/she can initiate a manual assigning process if necessary). The process continues this way until students or university quotas come to an end.

2.5.3.3 State Diagrams

2.5.3.3.1 Outgoing Student State Diagrams / 2.5.3.3.2 Erasmus/Exchange Coordinator State Diagrams

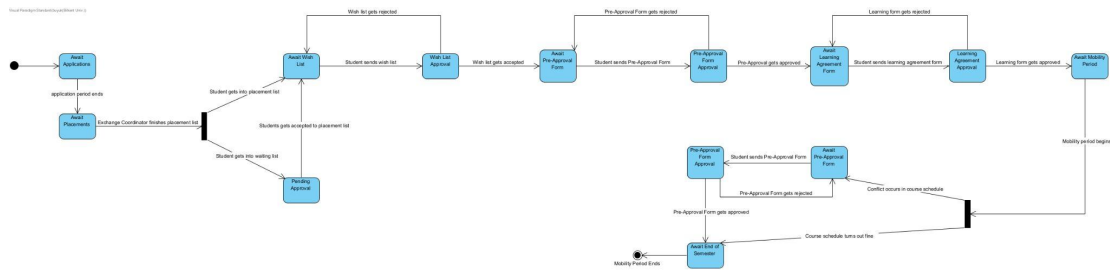Fig. 8. State Diagram For Outgoing Erasmus Students (Click here for full size)

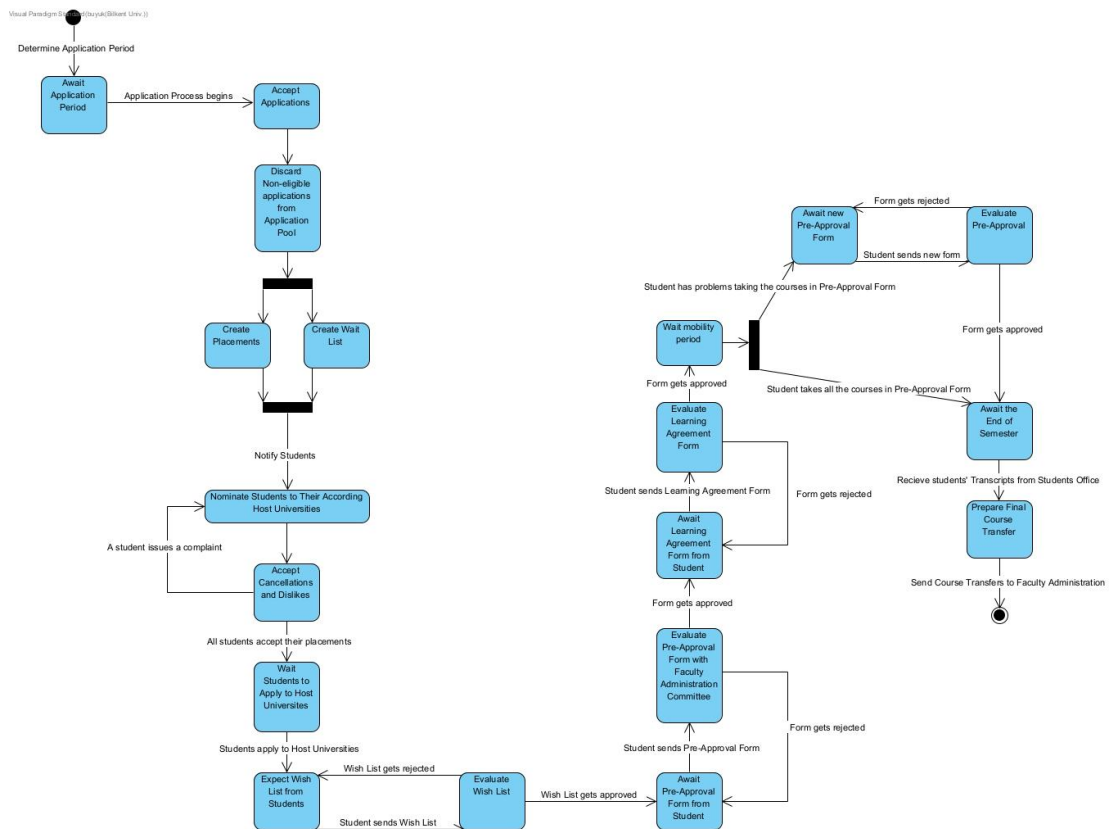Fig. 9. State Diagram For Outgoing Exchange Students (Click here for full size)

Fig. 10. State Diagram For Erasmus/Exchange Coordinator Students (Click here for full size)

Erasmus/Exchange Coordinators determine the application process and then wait for the application period to be opened. They evaluate the applications and accepted applications by coordinators are taken into a list called applications pool. After the application period ends, responsible Erasmus/Exchange coordinator eliminates the applications that are not qualified. students whose applications have been accepted are then sorted according to their CGPA and ENG101/102 grades. Then a placement list

and a waiting list is created according to students preferences and the available quota in the host universities. Then system notifies the students of their status. If a student in the placement list cancels their preference or changes their university preferences, that university is offered to the next person who is eligible to go.

This process continues until students in the placement list are either assigned to a host university or wait-listed.

Then the student sends a wish list to their Erasmus/Exchange coordinator which contains the courses they wish to take in their semester at the host university. At this point, if a student has chosen mandatory courses that were not taken before at that host university, that student must send a copy of that course's syllabus to the coordinator of that corresponding course in Bilkent University for approval. Approvals for any other course is in the responsibility of the Erasmus/Exchange Coordinator. This process continues until the entire wish list gets approved by the Erasmus/Exchange coordinator.

The Erasmus/Exchange coordinator then expects a Pre-Approval Form which is a more formal format of the wish list. This Pre-Approval form is evaluated with the Faculty Administration Committee. When it gets approved and signed by the committee, it is finally signed by the Erasmus/Exchange Coordinator.

Then another form called Learning Agreement is expected from the student. This form consists information about the approved courses the students want to take and information about their host university. Until the Learning Agreement gets approved, Erasmus/Exchange Coordinator keeps requesting a Learning Agreement Form from students. After this there is no other form for the student to submit.

These processes should be done before the mobility period so that students have time to prepare. When mobility period begins, students get enrolled to courses they want to take and if they somehow cannot take a course they were expected to take, then they

must notify the Erasmus/Exchange Coordinator and send another Pre-Approval until it gets approved and student has no problem taking those courses.

When the semester ends, Erasmus/Exchange Coordinator receives students' transcripts and prepares a Course Transfer from. This form is sent to Faculty Administration for approval, and Erasmus/Exchange Coordinator's job is done.

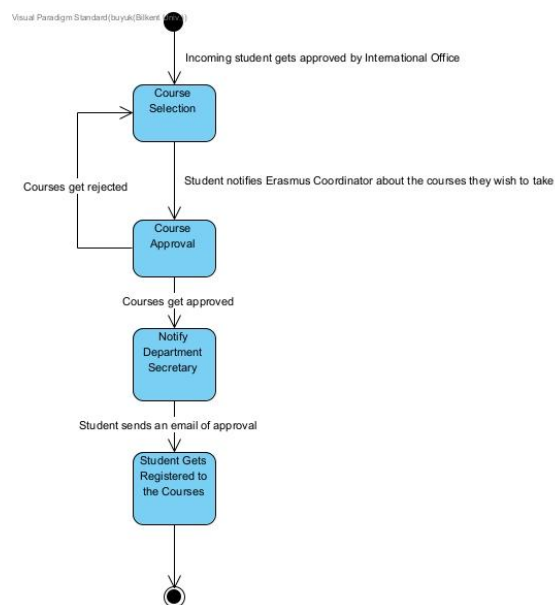**2.5.3.3.3 Incoming Student State Diagrams**

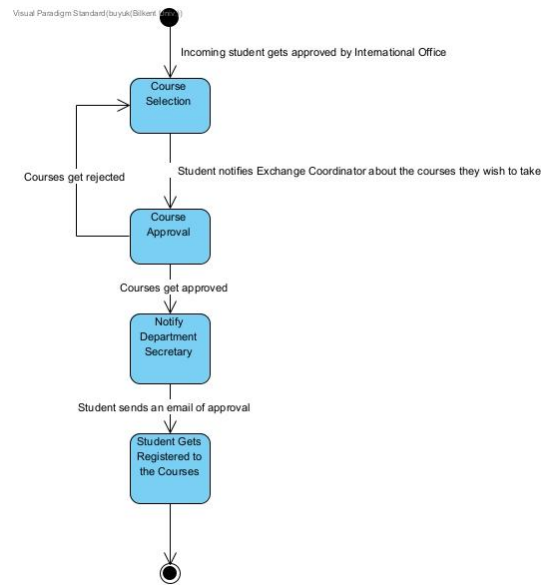Fig. 11.State Diagram For Incoming Erasmus Students (Click here for full size)

Fig. 12. State Diagram For Incoming Exchange Students (Click here for full size)

Incoming students have a less complicated process compared to outgoing students. They notify the Erasmus/Exchange Coordinator about the courses they want to take during their semester. If it seems fit to Erasmus/Exchange Coordinator, the courses get accepted. If not, the coordinator notifies the student and requests another set of courses. When all of the courses are finally accepted, the student notifies the Department Secretary. And finally the Department Secretary registers them to the courses via the STARS system.
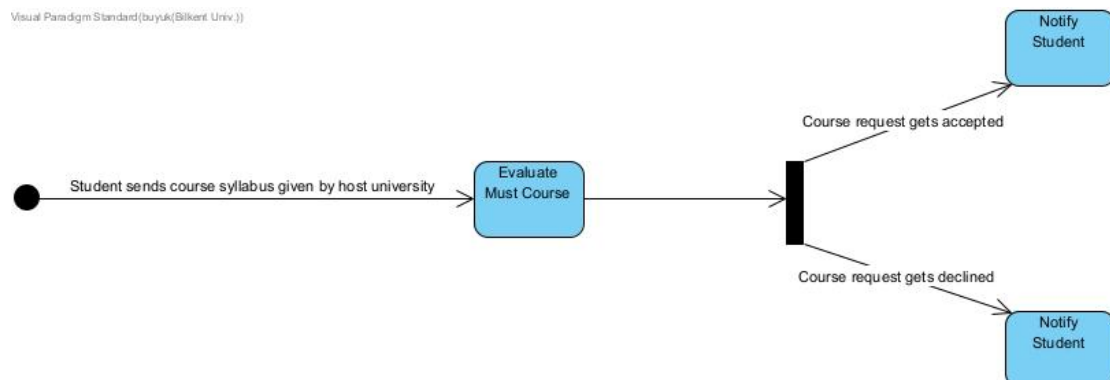
2.5.3.3.4 Course Coordinator State Diagram

Fig. 12. State Diagram For Course Coordinator (Click here for full size)

The Course Coordinator has limited responsibilities to the system, that is evaluating the course syllabus. If a student requests a mandatory course that is not a previously accepted course of that university, they send the course syllabus to the coordinator of the corresponding course in Bilkent. Then the Course Coordinator evaluates the course, informs the student and the Erasmus/Exchange Coordinator. Students do not send social science, arts core elective courses to Course Coordinators since it is Erasmus/Exchange Coordinator's job to approve them.

2.5.4 User Interface

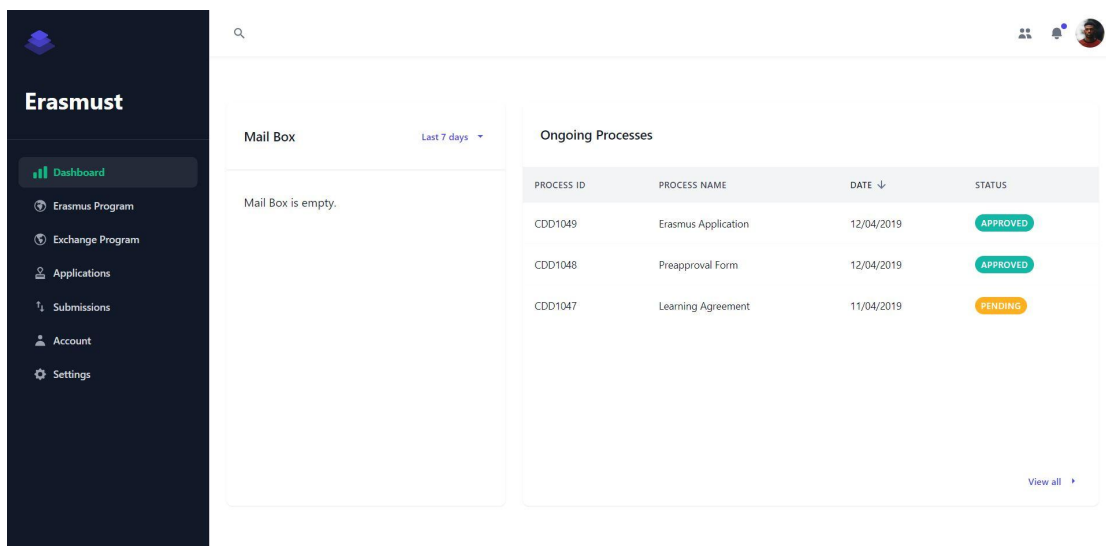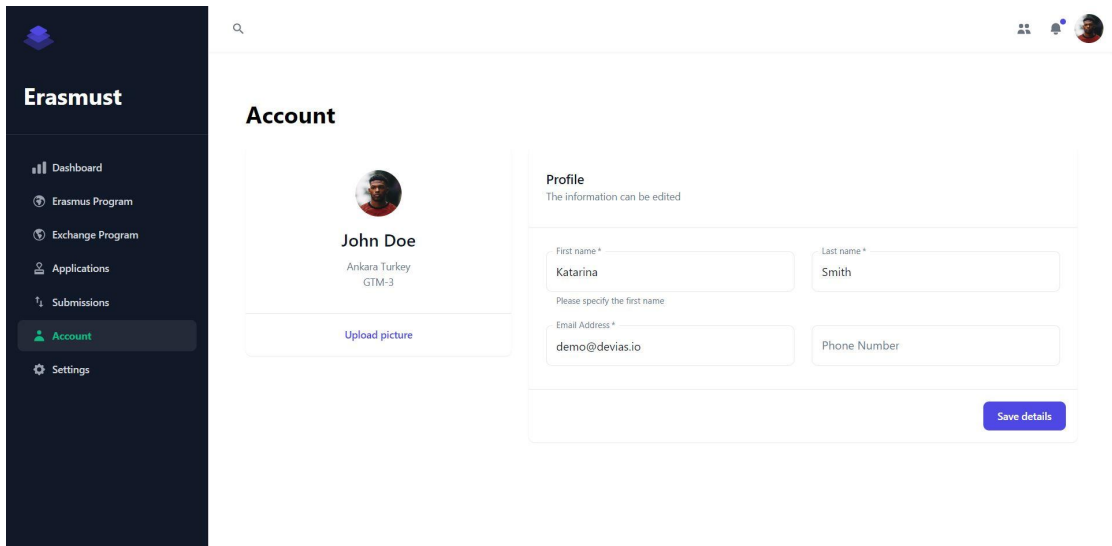#### 2.5.4.1 Screen Mock-ups
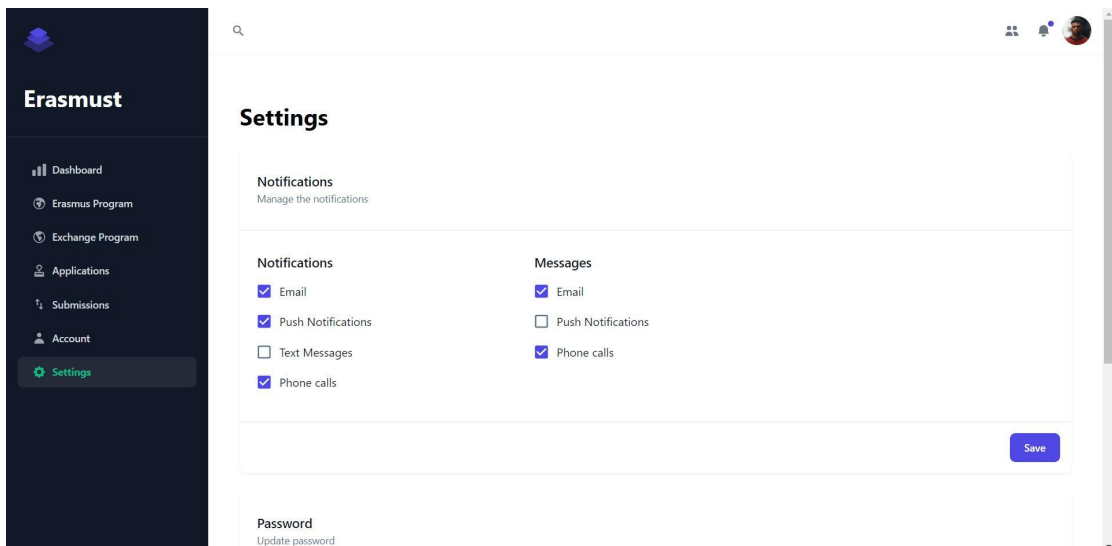

Fig. 13. Dashboard

Fig. 14. User Profile

Fig. 15. Settings

3   Appendices

Appendix A - Interview with Yelda İrem Ateş

Here is a translated section of our interview with Yelda İrem Ateş who is the exchange coordinator responsible for the Faculty of Engineering. Our group members will be mentioned collectively as "interviewer".

Interviewer: First of all, can we ask what kind of communication method you prefer in the current system regarding the Erasmus-related processes?

Yelda Ateş: If I need to communicate directly with students or coordinators, I usually prefer sending an e-mail. I also send forms/documents through e-mail, but I can upload them to the system from time to time.

Interviewer: In this case, if our site included an instant messaging feature, would you prefer this feature for faster communication?

Yelda Ateş: It wouldn't be a bad feature, of course, but I don't know how useful it would be since we have phones which are highly effective devices for fast communication.

Interviewer: Is there an obligation to have a hard copy of the documents that need to be signed or forwarded regarding Erasmus processes, or is the process carried out in a virtual environment?

Yelda Ateş: Hard copy requirements are obsolete, now we run the process entirely from our computers.

Interviewer: In which form do the applications reach you? Are the applications sent to you in forms or directly as a table?

Yelda Ateş: Applications are delivered directly to me in the form of an excel spreadsheet. I don't need to tabulate them again.

Interviewer: Is there an extra form for students who come to our school with exchange?

Yelda Ateş: I usually deal with outgoing student transactions. However, as far as I know, incoming students contact the coordinators via e-mail after filling out the forms created by their schools.

Interviewer: How do pre-approval processes work? In what order exactly does the form reach authorized persons?

Yelda Ateş: The form filled out by the students first reaches the coordinators, and after the coordinators communicate with the course instructors, they send it to me to handle the course substitution. The form is sent to the faculty administrative board after me and the form is approved if a unanimous is reached.

Interviewer: Can we learn about the members of the faculty board of directors?

Yelda Ateş: Members of the faculty board of directors can change spontaneously. As far as I know, they have members such as doctoral lecturers, professors, vice-rector and dean. The final signing authority belongs to the dean.

Interviewer: How is the quota of students accepted by universities from our school determined? How often can it change?

Yelda Ateş: Whichever school requests an agreement with the other school, that school offers a quota in the agreement it takes. This quota generally does not change for long periods such as 5-7 years, but in extreme cases, universities may want to renew the agreement to update their quotas.

Interviewer: What do you mean by extreme situations? For example, how did the quotas change during the Covid period?

Yelda Ateş: The Covid period was a rarer period than the others. During this period, changes were stopped and student departures were paused. Normally, such sharp quota changes do not occur.

Interviewer: Are there any scenarios where students are left out in terms of the school they will go to? Is there any action taken in this situation?

Yelda Ateş: From time to time, students can be left out. In these cases, we sometimes choose to take the initiative. For example, 4 of our students were left out this year, and we were able to include these students in the programs by requesting some of the universities with which we have an agreement.

Interviewer: What kind of process is followed for students who are placed on the waiting list? How are the students on the waiting list matched with the quota remaining schools?

Yelda Ateş: If there are students who have written the university with the quota remaining university among their university preferences, then these students are offered a choice first. After this process, the universities remaining with an available quota are offered to the wait-listed students starting from the highest-scoring student.

Interviewer: In the presentation we listened to by one of the Erasmus coordinators of our department, Can Alkan, he mentioned that having a to-do list on the application would be a useful feature. Would such a feature be useful to you as well?

Yelda Ateş: Of course, it would be useful. but there are other platforms that I use for this. The real life-saving feature for me would be a feature that would remind me of the application deadlines of schools. Because researching and following these deadlines is a subject that costs me a lot of time and effort.

Appendix B - Interview with Eray Tüzün

Here is a translated section of our interview with Eray Tüzün who was applied to as a course coordinator. Our group members will be mentioned collectively as "interviewer".

Interviewer: As Can Alkan explained in his presentation, we are considering assigning a to-do list to users. Would this feature work for you as a course instructor?

Eray Tüzün: Of course it would be a nice feature. But if there will be a to-do list, I would like the items to be clickable. It would be nice to be able to go to the pages I need to go to make those items.

Interviewer: Should course coordinators receive notifications?

Eray Tüzün: Yes, they should receive notifications from the applications and should be able to set daily emails on and off as they wish.

Interviewer: Should we send all courses in a students wishlist to the course coordinator?

Eray Tüzün: No, the system should check if the courses were previously approved or not before they are sent to the course coordinator.

Interviewer: Are there any feature suggestions that you would like to add, or that you think would be useful for this project as a course instructor?

Eray Tüzün: The course information sent to me can sometimes be incomplete or may not contain all the information I want. So it would be nice to have a field where I can write my requests clearly before filling out the form

4 References

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