SRS

for

Student Council Election System

Prepared by

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G03

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1. Introduction

1.1 Purpose

The purpose of this document is to set a basis of our team's project. It implies the procedures our team will follow. The SRS will be used by designers and developers to understand how the system works, furthermore it will inform the stakeholders of the project about software requirements.

1.2 Scope

A website will be presented to the students of IZTECH to vote for their representatives. The system will be used for communication, announcements, file transfers, approvals, voting, applying, the administration and observation processes. The system will hold the Department and Faculty Representative elections, and also selects a Student Council President according to the alphabetical order.

Out of scope:
- Department Student Representatives' campaign process.
- Performing the duties of the department student representative and faculty representative.
- Processes related to the national student council.
- Student council general assembly.
- Election of student council management and supervisory boards.

1.3 Definitions, acronyms, and abbreviations

- **Website:** Domain that hosts pages on the management and operation of the interrelated selection process.

- **System:** It is used as the user interface of the website. One that has a backend that executes logical operations behind it and is connected to a server. Integrated selection project system.

- **Student:** Users registered with the school and contributed to the election process by voting.

- **OBS authentication microservice:** API that allows us to check if students are associated with the school.

- **EBYS:** Elektronik Bilgi Yükleme Sistemi used for uploading, obtaining and validating legal documents

- **IZTECH OBS:** Öğrenci Bilgi Sistemi is a system which contains information we need such as full name, date of birth, major, faculty, year, GPA and etc. about the students of IZTECH

- **User**: Anyone who accesses website or the specific page of the website

1.4 References

- [Öğrenci İşleri Daire Başkanlığı](#)

- [IEEE Guide to Software Requirements](#)

1.5 Overview

The remainder of this document is divided into two main topics which are called Overall Description and Specific Requirement. The Overall Description provides a brief outline of the product's functionality. Required information for the next chapter is specified by this chapter in subheadings. Specific Requirements mostly include use cases, which are a diagram describing the situations that may be encountered by all users who will use this product, and some software related topics.

All use cases are briefly described below

(User logins to the System) : User who wants to access the system meets the login page where the user can login the system by typing his/her email and password

(Create a candidacy application): The student who wants to be a candidate can perform the necessary steps via the system such as uploading the required documents, and be informed by the department secretariat.

(Check a candidacy application): The Department Secretariat can check the candidacy application via the system.

(Approve Candidacy Application): Dean can confirm or reject the validated candidacy application via the system

(View/Read about 'How does the process work'):A Student can learn the the information about how does the process work can learn via the system

(Learn information from Frequently Asked Question):A Student can find an answer from Frequently Asked Question section where there are frequently asked and answered questions before

(Announcement of the election date via email to Students):System automatically sends the date of the elections to students via email.

(User views his/her profile):User clicks his/her name which is on the top left in the welcome menu.

(User logs out the System):User clicks the log out button which is in the menu button.

(Student casts a vote):Students cast their votes when the election time has come.

(Students view candidates): When the election time comes students must view and select their candidates in order to cast a vote.

(Sending a file to a staff member):Usage where a user in the administrative staff uploads a file to the system from his/her own local environment and sets the person to send the file to the system.

(Sending feedback on the candidacy application): The department secretary gives feedback to the students in case the documents related to the candidacy applications do not meet the necessary requirements through the system.

(Set Election Time):In line with the letter received from the Rectorate, the dates for the election should be set in the system. These dates include the election dates for the department representative, faculty representative, and student council president. The Dean's office sets the dates in the system to consist of day, month and time.

(Announce the department representatives via email):System automatically sends the mail about election results

(Announce the faculty representatives via email): System automatically sends the mail about election results.

(Inform the SKS via email): System automatically sends the mail about election results.

(Inform the Student Affair Department via email): System automatically sends the mail about election results.

(Inform the Faculty Department via email): System automatically sends the mail about election results.

(See faculty candidates):Department Representatives see candidate faculty representative candidates

(Confirming department representatives):Staff member confirms elected department representatives

(Confirming faculty representatives): Staff member confirms student elected faculty representatives

(Staff confirms appointment of the student council president):The student council president must be selected according to alphabetical order.

2. Overall description

2.1 Product perspective
This product is not totally independent. This is due to the fact that we need to use third party providers' information to authorize the users using our service. Other products such as Student Information System shall provide required information such as department, grade, GPA about the students in order to authorize their right of using our product in their desired manner.

2.2 Product functions

Student Candidate Election System shall provide these functions:

- Candidate application
- Validating candidate applications
- Voting for candidates
- Counting votes of each candidate
- Special voting environment for electing faculty representatives
- Announcing the result of voting process

2.3 User Characteristics

User: Anyone who is applying to IZTECH OBS system is a user in this system too.

Rectorate: Rectorate who is eligible to manage university related business and affiliated with IZTECH. Rectorate is expected to be Web-App literate and be able to send necessary information to related units via System.

Dean's Office: Dean's Office who is eligible to manage faculty related business and affiliated with IZTECH. Dean's Office is expected to be Web-App literate and be able to manage election related business, send necessary information to related units via System.

Faculty Secretariat: Faculty Secretariat who is eligible to manage faculty related business and affiliated with IZTECH. The Faculty Secretariat is expected to be Web-App literate and be able to manage election related business, send necessary information to related units via System.

Student Affairs Unit Staff: Student Affairs Unit Staff who is eligible to manage Student related business and affiliated with IZTECH. Student Affairs Unit Staff is expected to be Web-App literate and be able to manage election related business, send necessary information to related units via System.

OBS: OBS is the external system which provides Student authentication and information. OBS is expected to provide above functionalities.

EBYS : EBYS is the external system which provides document management and communication between units of IZTECH. EBYS is expected to provide above functionalities.

Head of Departments: Head of Departments who is eligible to manage department related business and affiliated with IZTECH. Head of Departments is expected to be Web-App literate and be able to manage election related business, send necessary information to related units via System.

Student: Student who is eligible to vote in an election and affiliated with IZTECH. Students are expected to be Web-App literate. Candidates and department representatives are also students.

Candidate: Candidate who has application for being representative and affiliated with IZTECH. Candidate is expected to be Web-App literate and be able to upload documents, create an application.

Department Representative: Department representative is a student who won the department representative elections.

Department Secretariat: Rectorate who is eligible to manage department related business and affiliated with IZTECH. Rectorate is expected to be Web-App literate and

be able to manage election related business, send necessary information to related units via System.

        Dean's Student Affairs Unit Staff: Dean's Student Affairs Unit Staff who is eligible to manage Student and Dean's office related business and affiliated with IZTECH. Dean's Student Affairs Unit Staff is expected to be Web-App literate and be able to manage election related business, send necessary information to related units via System.

        Staff: Staff is involved in the selection process, covering many roles. It takes place to create a general user structure. The roles which it covers: Dean's Student Affairs Unit Staff, Department Secretariat, Head of Departments, Faculty Secretariat, Student Affairs Unit Staff Dean's Office, Rectorate.

2.4 Constraints

- The program must use Internet connection.

- The system must be integrated into a web application.

- The system must be integrated to mobile phones.

- Every user must be affiliated with IZTECH.

- Every student must be registered to the system via OBS.

- YÖK must provide the election-related calendar to the Rectorate.

- Every candidate must upload related documents to the system.

- The system must contain login, main page, candidate application and vote interfaces for students.

- The system must contain login, main page, file sending and management interfaces for staff.

2.5 Assumptions and dependencies

- For the application, there is a need for the internet browser. It will be assumed that the users will possess decent internet connectivity.
- It's assumed that the server will be online uninterrupted during the election process.
- It's assumed that the system has sufficient infrastructure.

- In this application, the system requires OBS data. Until it's provided, the system will use test data.
- It's assumed that 6 people will work on this project.

2.6 Apportioning of requirements

The project will be done at once and there won't be any updates.

3. Specific requirements

3.1 Use Cases

3.1.1 Use Cases for User:
　　3.1.1.1 Use Case 1 for User:
　　3.1.1.1.1 Use Case Template:

Use Case ID:	UC-1		
Use Case Name:	User logins to the System		
Created By:	G03	Last Updated By:	G03
Date Created:	5.12.2022	Date Last Updated:	5.12.2022

Actor:	User **Secondary Actor:** System, IZTECH Webmail, OBS
Description:	User who wants to access the system meets the login page where the user can login the system by typing his/her email and password
Preconditions:	PRE-1: User is a member of the IZTECH
Postconditions:	POST-1: User logs in to the system
Priority:	High
Frequency of Use:	The peak usage load for this use case is between the start and end date in the election calendar.
Normal Course of Events:	**1.0 Login to system** 　1. The user types his/her own IZTECH mail and password in the section named 'Mail' and 'Password' respectively. 　2. The user clicks the 'Login' button. 　3. The user logs in to the system.
Alternative Courses:	None

Exceptions:	**1.0 E1 Information doesn't match with IZTECH database** 1. System prints a message that information sent by the user is wrong. 2a. User enters the correct information and returns to step 2 of the normal flow. 2b. User cancels the process. Exception ekleme
Includes:	None
Special Requirements:	None
Assumptions:	The user has a good internet speed // assumption internet baglı olması
Notes and Issues:	None

3.1.1.1.2 Performance/Software Quality Requirements
- After clicking the 'Login' button, the user should be directed to the main page at most 5 second.

3.1.1.1.3 User Interface

3.1.2 Use Cases for Student:
3.1.2.1 Use Case 1 for Student:
3.1.2.1.1 Use Case Template:

Use Case ID:	UC-2		
Use Case Name:	Create a candidacy application		
Created By:	G03	Last Updated By:	G03
Date Created:	5.12.2022	Date Last Updated:	5.12.2022

Actor:	Student **Secondary Actor**: System
Description:	The student who wants to be a candidate can perform the necessary steps via the system such as uploading the required documents, and be informed by the department secretariat.
Preconditions:	PRE-1: Student logged in to the system
Postconditions:	POST-1: The system sends all document which is uploaded to the Department Secretariat
Priority:	High
Frequency of Use:	Every time up to 1 week before the election
Normal Course of Events:	**1.0 Student creates a candidacy application** 1. Student clicks the 'BE CANDIDATE' button 2. System displays the all section which is needed to be filled with documents (Criminal Report, Transcript, Political Party Membership Report, Petition) to the student 3. Student uploads the documents. The size of the document to be uploaded can be up to 1 GB 4. When the student wants to send the documents to be checked, clicks the 'Submit' button to submit
Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

3.1.2.1.2 Performance/Software Quality Requirements
- After the user clicks the 'Submit' button, user is redirected to main page at most 5 seconds.

3.1.2.1.3 User Interface

3.1.3 Use Cases for Department Secretariat:
3.1.3.1 Use Case 1 for Department Secretariat:
3.1.3.1.1 Use Case Template:

Use Case ID:	UC-3		
Use Case Name:	Check a candidacy application		
Created By:	G03	Last Updated By:	G03
Date Created:	5.12.2022	Date Last Updated:	5.12.2022

Actor:	Department Secretariat **Secondary Actor:** System
Description:	The Department Secretariat can check the candidacy application via the system.
Preconditions:	PRE-1: Department Secretariat logged in to the system.
Postconditions:	POST-1: The system holds the information of validated candidate application POST-2: The system sends the information to the Dean
Priority:	High
Frequency of Use:	Every time up to 1 week before the election.

Normal Course of Events:	**1.0 Department Secretariat checks the candidacy applications** 1. System shows the all candidate application to Department Secretariat 2. The Department Secretariat clicks 'See Details' button to check all documents 3. The Department can confirm the applications by clicking the 'Confirmation' button. 4. Department secretariat clicks the 'Submit' button to send all valid candidates to Dean.
Alternative Courses:	**4.0.E1 When the candidate application is not valid** 1. System shows the at least one of the documents is not valid to Department Secretariat 2. The Department Secretariat fills the feedback section about those issues to the relevant student and returns to step 4 of the normal flow.
Exceptions:	None
Includes:	None
Special Requirements:	When the Department Secretariat wants to inform the student who sent the candidacy application about some issues, they can contact them via the system.
Assumptions:	None
Notes and Issues:	None

3.1.3.1.3 Performance/Software Quality Requirements

- When the Department Secretariat logins to the system, the Department Secretariat is redirected to a page named as 'Candidate Application' at most 5 seconds.
- When the Department Secretariat clicks the 'Submit' button, Department Secretariat is redirected to the 'Candidate Application' page   at most 5 seconds.

3.1.3.1.3 User Interface

3.1.4 Use Cases for Dean:
3.1.4.1 Use Case 1 for Dean:
3.1.4.1.1 Use Case Template:

Use Case ID:	UC-4		
Use Case Name:	Approve Candidacy Application		
Created By:	G03	Last Updated By:	G03
Date Created:	5.12.2022	Date Last Updated:	5.12.2022

Actor:	Dean **Secondary Actor:** System
Description:	Dean can confirm or reject the validated candidacy application via the system.
Preconditions:	PRE-1: Dean logged in to the system PRE-1: Department Secretariat checked all applications and at least there is one application in the system.
Postconditions:	POST-1: The system holds the information of confirmed and rejected applications POST-2: The student sees whether his application has been approved or not.
Priority:	High
Frequency of Use:	Every time up to 1 week before the election
Normal Course of Events:	**1.0 Department Secretariat checks the candidacy applications**

	1. System shows all validated candidate application to the Dean 2. Dean clicks the file under the 'Student Info' section to check the documents in pdf format 3. Dean can confirm the applications by clicking the 'Confirmation' button or reject by clicking the 'Rejection' button 4. After the deadline for the confirmation validated application process, all undetermined validated applications will be marked as 'rejected' by the system.
Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	After the deadline for the confirmation validated application process, all undetermined validated application will be marked as 'rejected' by the system
Notes and Issues:	None

3.1.4.1.2 Performance/Software Quality Requirements

- When the Dean logins to the system, Dean is redirected to a page named as 'Candidate Application' at most 5 seconds.
- When the Dean clicks the 'Confirmation' or 'Rejection' button, Dean is redirected to the same page at most 5 seconds.

3.1.4.1.3 User Interface

3.1.2 Use Cases for Student:
3.1.2.2 Use Case 2 for Student:
3.1.2.2.1 Use Case Template:

Use Case ID:	UC-5		
Use Case Name:	View/Read about 'How does the process work'		
Created By:	G03	Last Updated By:	G03
Date Created:	5.12.2022	Date Last Updated:	5.12.2022

Actor:	Student **Secondary Actor:** OBS,System
Description:	A Student can learn the the information about how does the process work can learn via the system
Preconditions:	PRE-1: Student logged in to the system
Postconditions:	
Priority:	Low
Frequency of Use:	Every time during the election process

Normal Course of Events:	**1.0 Students can learn information about the process**
	  1. Student logins to the system
	  2. Student clicks the 'How does the process work' button

	3. The system shows the information about the process to the student
Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	Information on how the process works is available in the system.
Notes and Issues:	None

3.1.2 Use Cases for Student:
3.1.2.3 Use Case 3 for Student:
3.1.2.3.1 Use Case Template:

Use Case ID:	UC-6		
Use Case Name:	Learn information from Frequently Asked Question		
Created By:	G03	Last Updated By:	G03
Date Created:	5.12.2022	Date Last Updated:	5.12.2022

Actor:	Student Secondary Actor: System
Description:	A Student can find an answer from Frequently Asked Question section where there are frequently asked and answered questions before
Preconditions:	PRE-1: Student logged in to the system
Postconditions:	
Priority:	Low
Frequency of Use:	Every time during the election process
Normal Course of Events:	**1.0 Students can find an answer from FAQ** 1. Student clicks the 'FAQ' button. 2. The system shows some questions and its answers to the student.
Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

3.1.2.3.2 Performance/Software Quality Requirements

- When the Student clicks the 'FAQ' button, Student is redirected to a page named as 'FAQ' at most 5 seconds.

3.1.2.3.3 User Interface
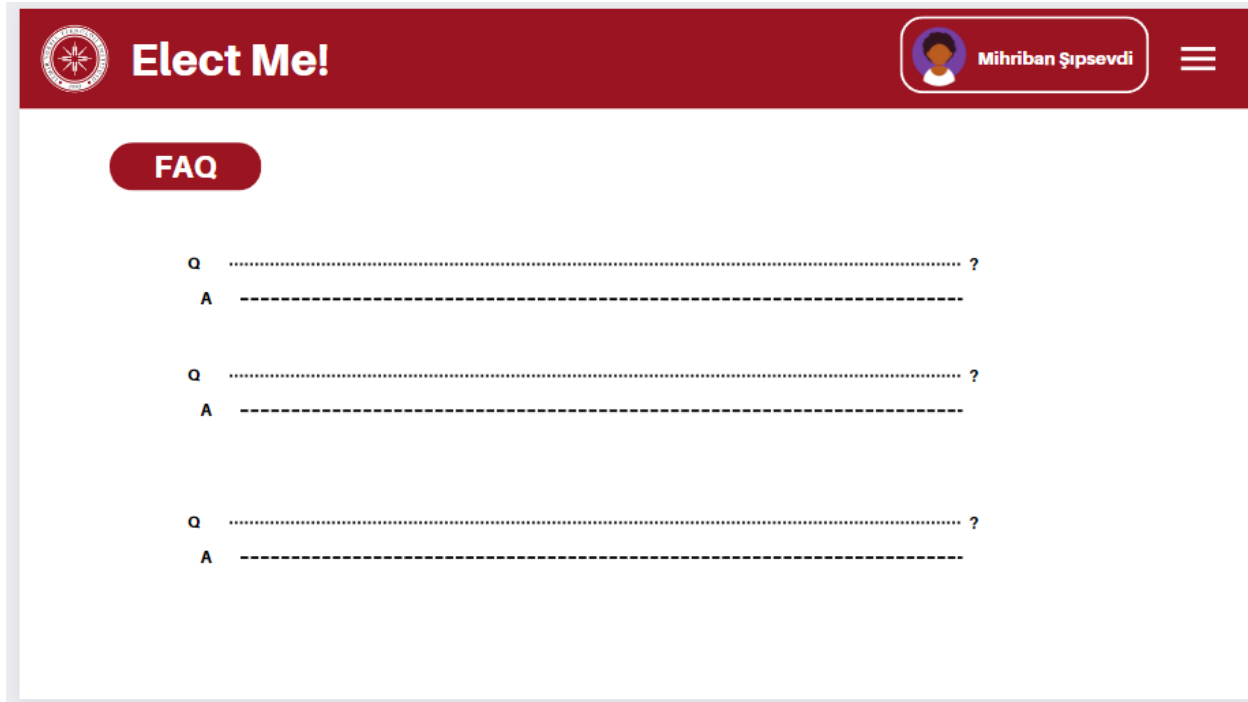
3.1.4 Use Cases for Dean:
3.1.4.2 Use Case 2 for Dean:
3.1.4.2.1 Use Case Template:

Use Case ID:	UC-7		
Use Case Name:	Announcement of the election date via email to Students		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	Dean **Secondary Actor:** System, IZTECH Webmail
Description:	System automatically sends the date of the elections to students via email.
Preconditions:	PRE-1: Dean must be logged into the system.
Postconditions:	POST-1: The election date is sent to every IZTECH student.
Priority:	High
Frequency of Use:	Once before election process starts
Normal Course of Events:	**1.0 Announce the department representatives via email** 1. Dean clicks the Announce Election Date button on the left menu. 2. System redirected to Announce Election Date page. 3. Dean fills the Subject, Text, Date sections. 4. Dean clicks the submit button.

	5. The system automatically sends mail containing the election dates to students. 6. The system automatically changes the main page that includes the defined election date.
Alternative Courses:	None

Exceptions:	**EX.1 System request to webmail not respond.**
	   1. System displays an error under the submit button to inform Student Affairs Unit Staff.
	   2a. Student Affairs Unit Staff try again to click 'Submit' button to submit, and return to step 5 of normal flow
	   2b. Student Affairs Unit Staff cancels the submitting process, then system terminate the use case

Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	Users don't have to be logged in to the system to see the dates of the election.

3.1.4.2.2 User Interface

3.1.4.2.3 Performance/Software quality requirements:

- After the Dean sets the date, mails should be sent to IZTECH students in 10 minutes.

3.1.1 Use Cases for User:
3.1.1.2 Use Case 2 for User:
3.1.1.2.1 Use Case Template:

Use Case ID:	UC-8		
Use Case Name:	User views his/her profile		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	User
Description:	User clicks his/her name which is on the top left in the welcome menu.
Preconditions:	PRE-1: User must be logged into the system..
Postconditions:	POST-1: User sees his/her profile.
Priority:	High
Frequency of Use:	Whenever the user wants.
Normal Course of Events:	**1.0 User views his/her profile** 1. User clicks the 'Profile' button 2. User sees the information about himself/herself .
Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	- If the user is a student, his/her name, faculty name, department name, year and gpa will be shown. - If a student applies for candidacy, his/her application status will be shown additionally. - If the user is a staff, his/her name and title will be shown.

3.1.2.2.2 Performance/Software quality requirements:

- After a user clicks, the profile should be opened within 2 seconds.
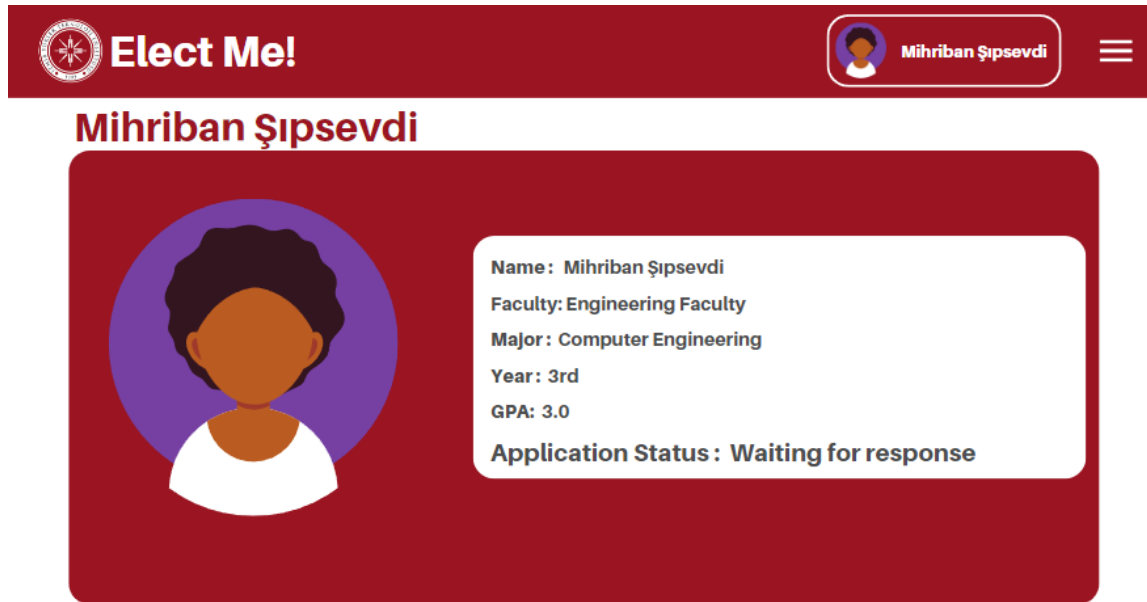
3.1.1 Use Cases for User:
3.1.1.3 Use Case 3 for User:
3.1.1.3.1 Use Case Template:

Use Case ID:	UC-9		
Use Case Name:	User logs out the System		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

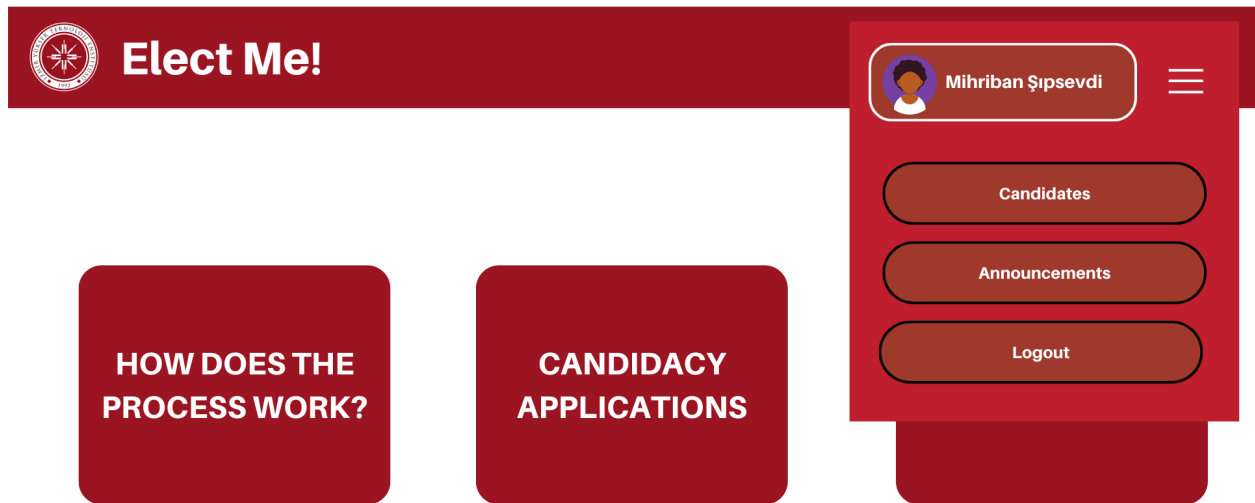|	
Actor:	User
Description:	User clicks the log out button which is in the menu button.
Preconditions:	PRE-1: User should be logged in.
Postconditions:	POST-1: User won't be logged in anymore.
Priority:	High
Frequency of Use:	The number of times the user logs in.

Normal Course of Events:	1.0. User logs out the System
	  1. User clicks the log out menu on the top right of the website
	  2. He/she will be logged out.
	  3. User will be redirected to the main page.

Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None

Notes and Issues:	Menu button is on the top right of the screen.

3.1.2 Use Cases for Student:

3.1.2.4 Use Case 1 for Department Secretariat:

3.1.2.4.1 Use Case Template:

Use Case ID:	UC-10		
Use Case Name:	Student casts a vote		
Created By:	G03	Last Updated By:	G03
Date Created:	22.11.2022	Date Last Updated:	05.12.2022

Actor:	Students
Description:	Students cast their votes when the election time has come.
Preconditions:	PRE-1. The election time has come PRE-2. Candidacy applications are approved

	PRE-3. Student must be logged in
Postconditions:	POST-1. Vote is cast
Priority:	High
Frequency of Use:	Every student votes once for each department election.
Normal Course of Events:	**1.0 Students cast a vote** 1. Student clicks on the "see details" button below the chosen candidate. 2. Student clicks the vote button 3. Student is greeted with a confirmation pop-up informing that this action cannot be undone. 4. Student clicks the submit button.
Alternative Courses:	**AC.1 User changes his/her candidate** 1. Student clicks the cancel button 2.Return to 1st step of normal flow
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

3.1.2.4.2 User Interface
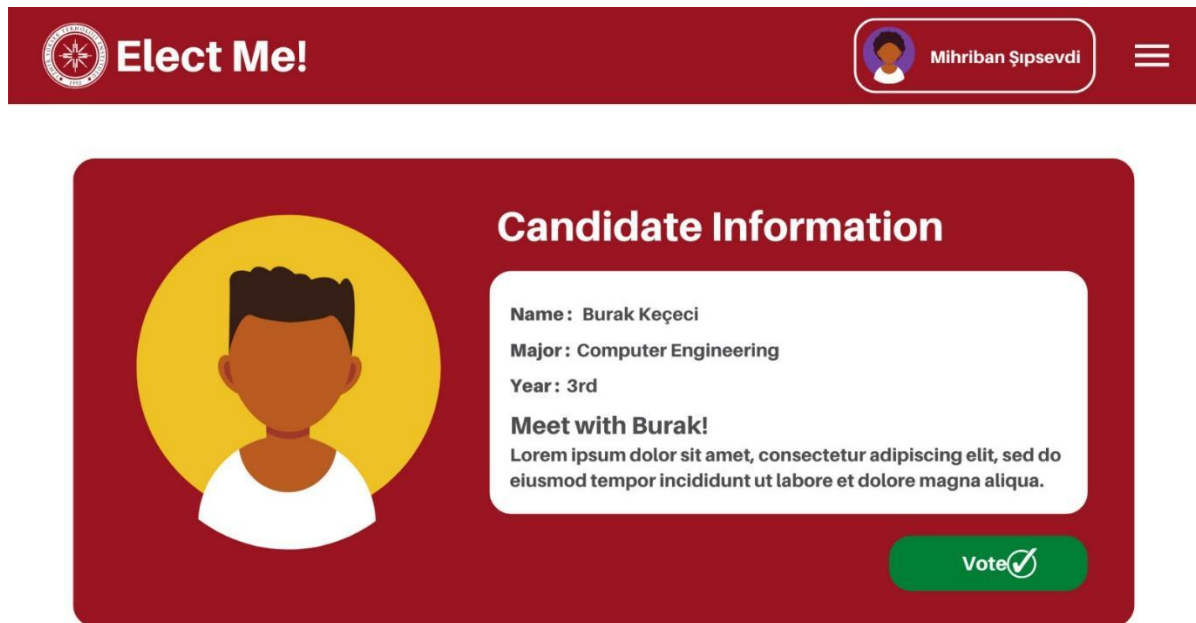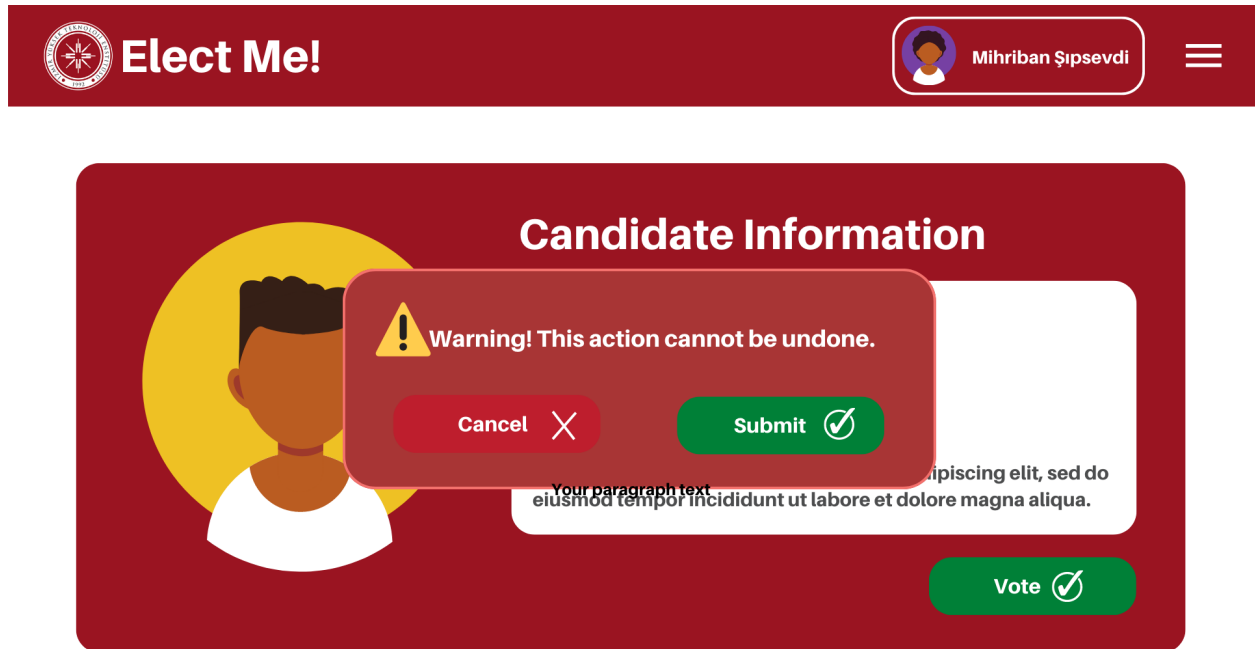
- After a user clicks, the pop-up box should be opened within 3 seconds.

3.1.2 Use Cases for Student:

3.1.2.5 Use Case 5 for Student:

3.1.2.5.1 Use Case Template:

Use Case ID:	UC-11		
Use Case Name:	Students view candidates		
Created By:	G03	Last Updated By:	G03
Date Created:	22.11.2022	Date Last Updated:	05.11.2022

Actor:	Student **Secondary Actor:** System
Description:	When the election time comes students must view and select their candidates in order to cast a vote.
Preconditions:	PRE-1: Student must be logged into the system PRE-2: Candidate applications has been approved

Postconditions:	POST-1: Student is ready to cast his/her vote
Priority:	Low
Frequency of Use:	Students can view the candidates as many times as they want. Multiple times per student

Normal Course of Events:	1.0 Students view the candidates
	    1. The student clicks the candidates page from the triple line menu.
	    2. The system displays the candidate list.
	    3. The student clicks the "see details" below the chosen candidate.

Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	1. Student is at the candidate's page
Notes and Issues:	None

3.1.2.5.2 User Interface

3.1.2.5.3 User Interface
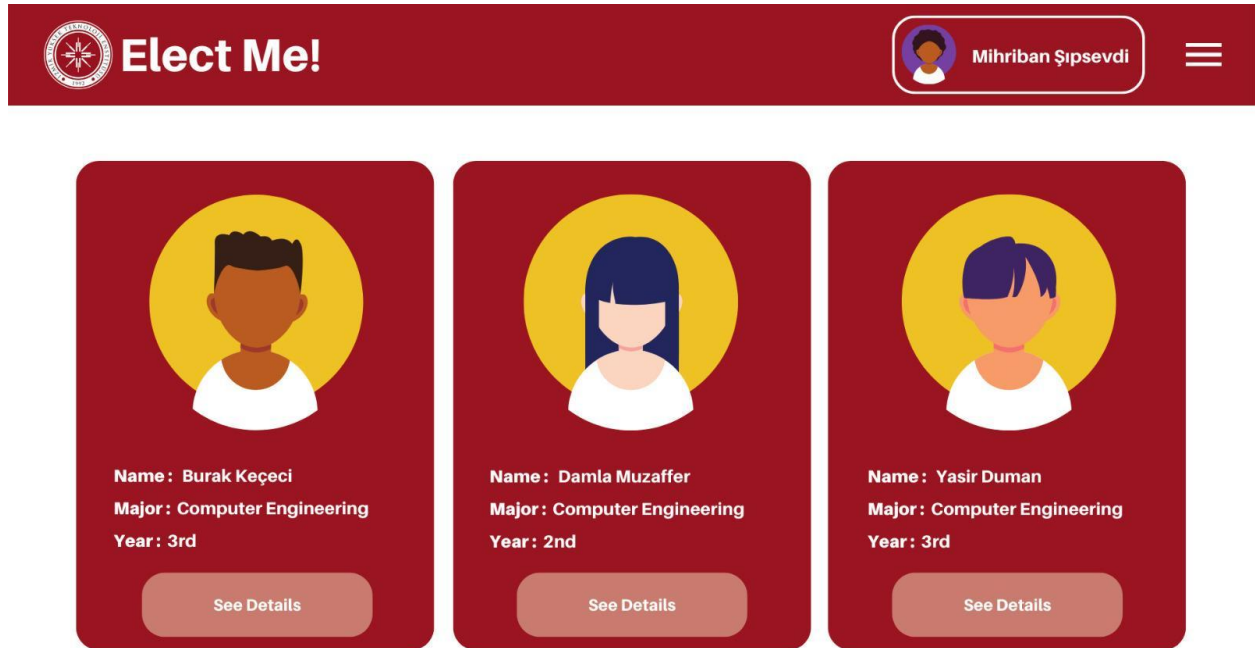
<mark>3.1.2.5.4 Performance/Software quality requirements:</mark>

<mark>- After a user clicks, the candidate list should be opened within 2 seconds.</mark>
<mark>- After the user clicks "See Details" button, the details page should be opened within 3 seconds.</mark>

3.1.5 Use Cases for Staff:
3.1.5.1 Use Case 1 for Staff:
3.1.5.1.1 Use Case Template:

Use Case ID:	UC-12		
Use Case Name:	Sending a file to a staff member		
Created By:	G03	Last Updated By:	G03
Date Created:	22.11.2022	Date Last Updated:	05.12.2022

Actor:	Staff member **Secondary Actor:** System
Description:	Usage where a user in the administrative staff uploads a file to the system from his/her own local environment and sets the person to send the file to the system.
Preconditions:	PRE-2: Staff user must be logged into the system

	PRE-1: Having a file in local environment which has a format that can be uploaded to the system
Postconditions:	POST-1: A notification that the file has been sent appears on the user interface. POST-2: The file is viewable in the list of files of the sent user
Priority:	Medium
Frequency of Use:	Although it varies according to the user's task, it is between 1-5 on average. No more than 50 in total are expected throughout the process.

Normal Course of Events:	1.0 Sending a file to a staff user
	    1. Click on the menu button on the top right of the homepage.
	    2. The menu opens vertically.
	    3. Staff User clicks on the send file option.
	    4. The system redirects the user to a send file page.
	    5. The staff user writes the e-mail address of the staff user to be sent to the "Send To" section.
	    6. Click the select file button.
	    7. It loads the desired file with the .pdf extension with a limited 50 megabyte from the window that opens.
	    8. Click the send file button.

Alternative Courses:	None

Exceptions:	**EX.1 File size is more than 50 mb.**
	    1. System displays an error and doesn't start the file upload process.
	    2a. Staff member choose the file whose size is less than 50 mb, then return to step 7 of normal flow
	    2b. Staff member cancels the loading process then, system terminate the use case

Includes:	None
Special Requirements:	None
Assumptions:	1. The e-mail address of the person to be sent must be registered in the system.
Notes and Issues:	None

3.1.5.1.2 Performance/Software quality requirements:

-    When the Department Secretariat clicks the buttons mentioned in the system above must direct the user in 2 two seconds.

3.1.3 Use Cases for Department Secreteriat:
3.1.3.2 Use Case 2 for Department Secreteriat:
3.1.3.2.1 Use Case Template:

Use Case ID:	UC-13		
Use Case Name:	Sending feedback on the candidacy application		
Created By:	G03	Last Updated By:	G03
Date Created:	22.11.2022	Date Last Updated:	05.12.2022

Actor:	Department Secretariat **Secondary actor:** System
Description:	The department secretary gives feedback to the students in case the documents related to the candidacy applications do not meet the necessary requirements through the system.
Preconditions:	PRE-1. Department Secretariat must be logged into the system PRE-2. Candidacy application documents are uploaded.
Postconditions:	POST-1. The feedback is sent to the student.
Priority:	Low
Frequency of Use:	One time per student applying for candidacy

Normal Course of Events:	**1.0 Sending feedback on the candidacy application** 1. Department Secretariat clicks on the Candidacy Applications option. 2. Department Secretariat directed to a page where applicants are listed. 3. Click on the "see details" button next to the applications. 4. Redirected to a different page with application files and a feedback form. 5. Fills the Feedback form with text. 6. For the submission he/she clicks the submit button.
Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

3.1.3.2.2 User Interface

3.1.3.2.3 Performance/Software quality requirements:

- When the Department Secretariat clicks the buttons mentioned in the system above must direct the user in 2 two seconds.

3.1.6 Use Cases for Dean's Office:
3.1.6.1 Use Case 1 for Dean's Office:
3.1.6.1.1 Use Case Template:

Use Case ID:	UC-14		
Use Case Name:	Set Election Time		
Created By:	G03	Last Updated By:	G03
Date Created:	22.11.2022	Date Last Updated:	05.11.2022

Actor:	Dean' Office **Secondary actor:** System
Description:	In line with the letter received from the Rectorate, the dates for the election should be set in the system. These dates include the election dates for the department representative, faculty representative, and student council president. The Dean's office sets the dates in the system to consist of day, month and time.
Preconditions:	PRE-1) Dean's office must be logged in to the system PRE-2) Date and time must be sent to the Dean's office PRE-3) All department head's have to be informed about the dates
Postconditions:	POST-1) The set dates must be viewable by the Dean's office. POST-2) Students should be informed of the election dates by email. POST-3) Users can view the specified date/time on the homepage
Priority:	High
Frequency of Use:	Once at before the election starts
Normal Course of Events:	1. Set Election Time 2. The Dean' Office clicks on the "Set Election Time" option. 3. Directed to Set Election Time page. 4. The Dean' Office selects the selection type (department representative, faculty representative, student council president). 5. Enter the day, month and year in the specified format. 6. Selection time is set. 7. Click the Confirm button.
Alternative Courses:	None
Exceptions:	EX-1. Invalid date. 1. The day which is set is before the current day, system displays an error and user resets the date
Includes:	None
Special Requirements:	None
Assumptions:	1.Date set should be made before the election dates announced by the Rectorate. 2.The adjusted days must be in accordance with the announced election calendar.
Notes and Issues:	None

- When the Dean's Office clicks the buttons mentioned in the system above must direct the user in 2 two seconds.

3.1.7 Use Cases for Student Affair Unit Staff:
      3.1.7.1 Use Case 1 for Student Affair Unit Staff:
      3.1.7.1.1 Use Case Template:

Use Case ID:	UC-15		
Use Case Name:	Announce the department representatives via email		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	Student Affairs Unit Staff **Secondary Actors:** System, IZTECH Webmail
Description:	System automatically sends the mail about election results.
Preconditions:	PRE-1: The Student Affairs Unit Staff logged into the system

	PRE-2: The department representatives are selected with department representative elections.
Postconditions:	POST-1: System send an email to Students to inform them about the department representatives.
Priority:	Medium
Frequency of Use:	Once after department representative election process
Normal Course of Events:	**1.0 Announce the department representatives via email** 1. Student Affairs Unit Staff clicks the Election Results button on the left menu. 2. Student Affairs Unit Staff clicks the Announce Result button on the left menu below the Election Results menu as a submenu to open the Announce Result page. 3. Student Affairs Unit Staff fill the Subject, Text, Date sections. 4. Student Affairs Unit Staff clicks the submit button. 5. System automatically sends mail containing the department representatives to students.
Alternative Courses:	None

Exceptions:	**EX.1 System request to webmail not respond.**
	    1. System displays an error under the submit button to inform Student Affairs Unit Staff.
	    2a. Student Affairs Unit Staff try again to click 'Submit' button to submit, and return to step 5 of normal flow
	    2b. Student Affairs Unit Staff cancels the submitting process, then system terminate the use case

Includes:	None
Special Requirements:	None
Assumptions:	Student Affair Unit Staff has an Internet connection.
Notes and Issues:	None

3.1.7.1.2 User Interface

3.1.7.1.3 Performance/Software quality requirements:

- When the Student Affair Unit Staff clicks the submit button, the system should send emails to students that should be sent in at most 5 seconds.

3.1.7 Use Cases for Student Affair Unit Staff:

      3.1.7.2 Use Case 2 for Student Affair Unit Staff:

      3.1.7.2.1 Use Case Template:

Use Case ID:	UC-16		
Use Case Name:	Announce the faculty representatives via email		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	Student Affairs Unit Staff **Secondary Actors:** System, IZTECH Webmail
Description:	System automatically sends the mail about election results.
Preconditions:	PRE-1: The Student Affairs Unit Staff logged into the system PRE-2: The faculty representatives are selected with faculty representative elections.
Postconditions:	POST-1: System send an email to Students to inform them about the faculty representatives.
Priority:	Medium
Frequency of Use:	Once after faculty representative election process
Normal Course of Events:	**1.0 Announce the department representatives via email** 1. Student Affairs Unit Staff clicks the Election Results button on the left menu. 2. Student Affairs Unit Staff clicks the Announce Result button on the left menu below the Election Results menu as a submenu to open the Announce Result page. 3. Student Affairs Unit Staff fill the Subject, Text, Date sections. 4. Student Affairs Unit Staff clicks the submit button. 5. System automatically sends mail containing the faculty representatives to students.
Alternative Courses:	None

Exceptions:	**EX.1 System request to webmail not respond.**
	    1. System displays an error under the submit button to inform Student Affairs Unit Staff.
	    2a. Student Affairs Unit Staff try again to click 'Submit' button to submit, and return to step 5 of normal flow
	    2b. Student Affairs Unit Staff cancels the submitting process, then system terminate the use case

Includes:	None
Special Requirements:	None
Assumptions:	Student Affair Unit Staff has an Internet connection.
Notes and Issues:	None

3.1.7.2.2 User Interface

3.1.7.2.3 Performance/Software quality requirements:

- When the Student Affair Unit Staff clicks the submit button, the system should send emails to students that should be sent in at most 5 seconds.

3.1.7 Use Cases for Student Affair Unit Staff:
      3.1.7.3 Use Case 3 for Student Affair Unit Staff:
      3.1.7.3.1 Use Case Template:

Use Case ID:	UC-17		
Use Case Name:	Inform the SKS via email		
Created By:	G03	Last Updated By:	G03

Date Created:	05.12.2022		Date Last Updated:	05.12.2022

Actor:	Student Affair Unit Staff **Secondary Actors:** SKS, System, IZTECH Webmail
Description:	System automatically sends the mail about election results.
Preconditions:	PRE-1: The Student Affairs Unit Staff logged into the system. PRE-2: Any election process has finished
Postconditions:	POST-1: System send an email to SKS to inform them about the election results.
Priority:	Medium
Frequency of Use:	Once after any election process is finished.
Normal Course of Events:	**1.0 Inform the SKS via email** 1. Student Affairs Unit Staff clicks the Election Results button on the left menu. 2. Student Affairs Unit Staff clicks the Announce Result button on the left menu below the Election Results menu as a submenu to open the Announce Result page. 3. Student Affairs Unit Staff fill the Subject, Text, Date sections. 4. Student Affairs Unit Staff clicks the submit button. 5. System automatically sends mail containing the election results to SKS.
Alternative Courses:	None

Exceptions:	**EX.1 System request to webmail not respond.**
	    1. System displays an error under the submit button to inform Student Affairs Unit Staff.
	    2a. Student Affairs Unit Staff try again to click 'Submit' button to submit, and return to step 5 of normal flow
	    2b. Student Affairs Unit Staff cancels the submitting process, then system terminate the use case

Includes:	None
Special Requirements:	None
Assumptions:	Student Affair Unit Staff has an Internet connection.
Notes and Issues:	None

<mark>**3.1.7.3.2 User Interface**</mark>

3.1.7.3.3 Performance/Software quality requirements:

- When the Student Affair Unit Staff clicks the submit button, the system should send emails to students that should be sent in at most 5 seconds.

3.1.7 Use Cases for Student Affair Unit Staff:

      3.1.7.4 Use Case 4 for Student Affair Unit Staff:

      3.1.7.4.1 Use Case Template:

Use Case ID:	UC-18		
Use Case Name:	Inform the Student Affair Department via email		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	Student Affair Unit Staff **Secondary Actors:** Student Affair Department, System, IZTECH Webmail
Description:	System automatically sends the mail about election results.

Preconditions:	PRE-1: The Student Affairs Unit Staff logged into the system. PRE-2: Any election process is ended.
Postconditions:	POST-1: System send an email to the Student Affair Department to inform them about the election results.
Priority:	Medium
Frequency of Use:	Once after any election process is finished.
Normal Course of Events:	**1.0 Inform the SKS via email** 1. Student Affairs Unit Staff clicks the Election Results button on the left menu. 2. Student Affairs Unit Staff clicks the Announce Result button on the left menu below the Election Results menu as a submenu to open the Announce Result page. 3. Student Affairs Unit Staff fill the Subject, Text, Date sections. 4. Student Affairs Unit Staff clicks the submit button. 5. System automatically sends mail containing the election results to the Student Affair Department.
Alternative Courses:	None

Exceptions:	**EX.1 System request to webmail not respond.**
	    1. System displays an error under the submit button to inform Student Affairs Unit Staff.
	    2a. Student Affairs Unit Staff try again to click 'Submit' button to submit, and return to step 5 of normal flow
	    2b. Student Affairs Unit Staff cancels the submitting process, then system terminate the use case

Includes:	None
Special Requirements:	None
Assumptions:	Student Affair Unit Staff has an Internet connection.
Notes and Issues:	None

3.1.7.4.2 User Interface

3.1.7.4.3 Performance/Software quality requirements:

- When the Student Affair Unit Staff clicks the submit button, the system should send emails to students that should be sent in at most 5 seconds.

3.1.7 Use Cases for Student Affair Unit Staff:
      3.1.7.5 Use Case 1 for Student Affair Unit Staff:
      3.1.7.5.1 Use Case Template:

Use Case ID:	UC-19		
Use Case Name:	Inform the Faculty Department via email		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	Student Affair Unit Staff
	Secondary Actors: Faculty Department, System, IZTECH Webmail

Description:	System automatically sends the mail about election results.
Preconditions:	PRE-1: The Student Affairs Unit Staff logged into the system. PRE-2: Any election process is ended.
Postconditions:	POST-1: System send an email to the Faculty Department to inform them about the election results.
Priority:	Medium
Frequency of Use:	Once after any election process is finished.
Normal Course of Events:	**1.0 Inform the SKS via email** 1. Student Affairs Unit Staff clicks the Election Results button on the left menu. 2. Student Affairs Unit Staff clicks the Announce Result button on the left menu below the Election Results menu as a submenu to open the Announce Result page. 3.Student Affairs Unit Staff fill the Subject, Text, Date sections. 4.Student Affairs Unit Staff clicks the submit button. 5.System automatically sends mail containing the election results to the Faculty Department.
Alternative Courses:	None

Exceptions:	**EX.1 System request to webmail not respond.**
	     1. System displays an error under the submit button to inform Student Affairs Unit Staff.
	     2a. Student Affairs Unit Staff try again to click 'Submit' button to submit, and return to step 5 of normal flow
	     2b. Student Affairs Unit Staff cancels the submitting process, then system terminate the use case

Includes:	None
Special Requirements:	None
Assumptions:	Student Affair Unit Staff has an Internet connection.
Notes and Issues:	None

3.1.7.5.2 User Interface

3.1.7.5.3 Performance/Software quality requirements:

- When the Student Affair Unit Staff clicks the submit button, the system should send emails to students that should be sent in at most 5 seconds.

3.1.8 Use Cases for Department Representative:
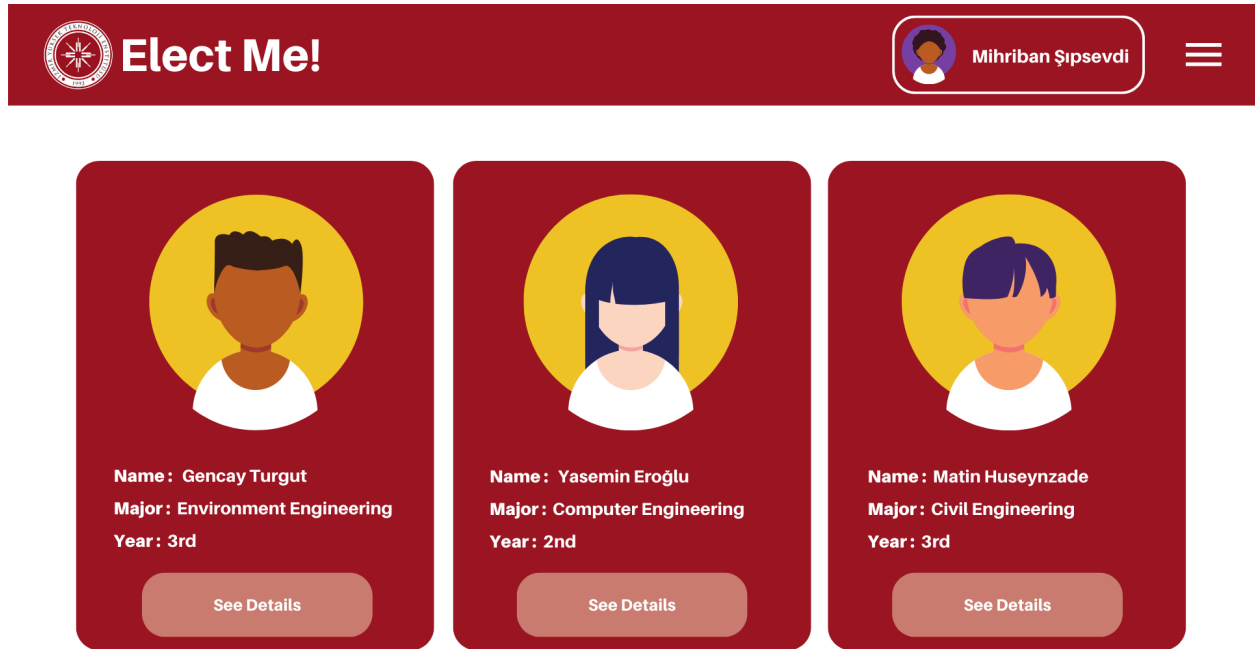 3.1.8.1 Use Case 1 for Department Representative:
  3.1.8.1.1 Use Case Template:

Use Case ID:	UC-20

Use Case Name:	See faculty candidates		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	Department Representative
Description:	Department Representatives see candidate faculty representative candidates
Preconditions:	PRE1: All department representatives are elected PRE2: Faculty Representative Candidates are defined
Postconditions:	POST1: Department Representative is provided a UI with a list of representative candidates
Priority:	High
Frequency of Use:	Frequently for a short amount of time and by small number of people

Normal Course of Events:	**1.0 Department Representatives can see candidate faculty representative candidates**
	    1. Department Representative logs into the system
	    2. System shows the all faculty candidates to the Department Representatives

Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	Department Representative's browser supports technology needed for displaying UI components
Notes and Issues:	None

3.1.8.1.2 User Interface

3.1.8.1.3 Performance/Software quality requirements:

- The system shows query at most 2 seconds.

3.1.5 Use Cases for Staff:
3.1.5.2 Use Case 2 for Staff:
3.1.5.2.1 Use Case Template:

Use Case ID:	UC-21		
Use Case Name:	Confirming department representatives		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	Staff
Description:	Staff member confirms elected department representatives
Preconditions:	PRE1: All department representatives are elected
	PRE2: Staff member logged into the system.
Postconditions:	POST1: Department Representatives are attained to their positions
Priority:	High
Frequency of Use:	At least once every election

Normal Course of Events:	**1.0 Staff member confirms elected department representatives** 1. Staff picks the student to be confirmed in the left 2. Staff approves the elected student
Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	Staff member browser supports technology needed for displaying UI components
Notes and Issues:	None

3.1.5.2.2 Performance/Software quality requirements:

- Web Page should be simplistic as the source files should not take more than 250 ms in a low-end device (intel i3 5th gen or equivalent)

3.1.5.2.3

3.1.5 Use Cases for Staff:

       3.1.5.3 Use Case 3 for Staff:

       3.1.5.3.1 Use Case Template:

Use Case ID:	UC-22		
Use Case Name:	Confirming faculty representatives		
Created By:	G03	Last Updated By:	G03
Date Created:	05.12.2022	Date Last Updated:	05.12.2022

Actor:	Staff
Description:	Staff member confirms student elected faculty representatives
Preconditions:	PRE1: All faculty representatives are elected PRE2: Staff member logged into the system.
Postconditions:	POST1: Faculty Representatives are attained to their positions
Priority:	High
Frequency of Use:	At least once every election

Normal Course of Events:	**1.0 Staff member confirms student elected faculty representative**
	  1. Staff picks the student to be confirmed in the left
	  2. Staff approves the elected student

Alternative Courses:	None
Exceptions:	None
Includes:	None
Special Requirements:	None
Assumptions:	Staff member's browser supports technology needed for displaying UI components
Notes and Issues:	None

3.1.5.2.2 Performance/Software quality requirements:

- Web Page should be simplistic as the source files should not take more than 250 ms in a low-end device (intel i3 5th gen or equivalent)

3.1.5.2.3 User Interface

Elect Me!		Ahmet Karakartal ☰
Student Name	**Faculty**	**Approval**
Matin Huseynzade ⌄	**Engineering**	✓ ✗
Yasir Duman ⌄	**Architecture**	**Approved**
Burak Keçeci ⌄	**Science**	✓ ✗

3.1.5 Use Cases for Staff:

      3.1.5.3 Use Case 3 for Staff:

      3.1.5.3.1 Use Case Template:

Use Case ID:	UC-23		
Use Case Name:	Staff confirms appointment of the student council president		
Created By:	G03	Last Updated By:	G03
Date Created:	22.11.2022	Date Last Updated:	05.12.2022

Actor:	Staff
Description:	The student council president must be selected according to alphabetical order.
Preconditions:	PRE-1: Student council president must be appointed PRE-2: Stuff must be logged into to system.
Postconditions:	POST-1: Student Council President is appointed
Priority:	High
Frequency of Use:	Once every two years

Normal Course of Events:	**1.0 Stuff confirms appointment of the student council president**
	  1. System shows the representatives according to alphabetical order
	  2. The stuff selects the next student council president

Alternative Courses:	None
Exceptions:	None
Includes:	None

Special Requirements:	None
Assumptions:	None
Notes and Issues:	None

- When the Student Affair Unit Staff clicks the submit button, the system should send emails to students that should be sent in at most 5 seconds.

3.2 External Interfaces
3.2.1 Hardware interfaces

- Since the application must run over the internet, all the hardware required to connect to the internet will be a hardware interface for the system. As for e.g. Modem, WAN – LAN, Ethernet Cross-Cable.
- The system is developed for Windows 32-bit or 64-bit.
- The system is developed for android, ios, windows 7, windows 8, windows 10 and 11.

3.2.2 Software interfaces
- The documents will be transferred through EBYS.
- Authentication will be made through OBS.User's information will be received from OBS to the system.
- IZTECH Webmail is used in the system for announcements and informing about results.

3.2.3 <mark>Communications interfaces</mark>

- The system shall use the HTTP protocol for communication over the internet and for the intranet communication will be through TCP/IP protocol suite.
- System use the Internet to communicate between Windows and Android devices.

3.3 Generic performance/software requirements(other than those related with use cases)

- System is assumed to be used by a maximum of 10,000 people.
- <mark>Software shall support Android 8+, Windows 7+ and Ubuntu 3+.</mark>
- <mark>The system should have a response time no longer than 500ms to have a smooth experience.</mark>
- <mark>The system should be able to handle around 10,000 user specific information such as permissions and roles.</mark>

3.4 Logical database requirements (ER Diagram)
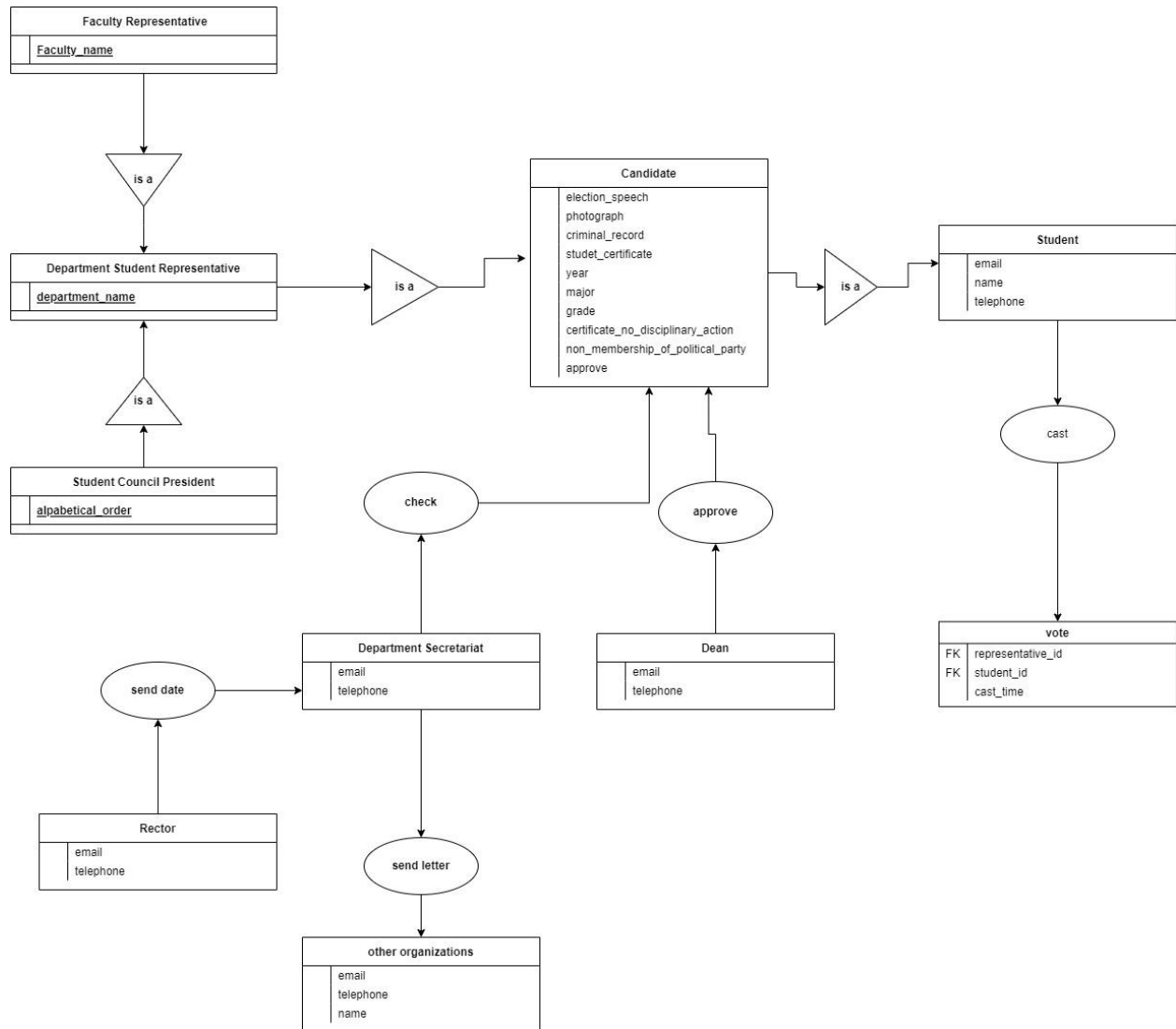
3.5 Design Constraints

Design constraints may change in duration of the implementation. These are the known design constraints that we have to deal with.

Accessibility: People with vision and hearing disabilities should be able to vote

Platform Specificity: Programming languages that are supported by Google Chrome, Firefox, Safari will be used

Universal Device Support: UI/UX should support

3.6 Other Requirements

OBS Authentication: Permission of OBS should be granted to access students' information needed to validate both voters and candidates.

Language Support: The system shall support both English and Turkish to provide usability for foreign students.

Security and Integrity: The system shall have a secure session for every user. Corresponding roles and permissions must be assigned accordingly. Internet security protocols and a secure data storage area should be used in the transfer of documents containing sensitive information during the nomination process.