

CENG 323 – PROJECT MANAGEMENT

Software Requirements Specification

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1. Introduction

This SRS provides an overview of the IYTERN (Internship Management) System and sets the stage for the detailed requirements that follow.

1.1 Purpose

This Software Requirements Specification (SRS) document serves as a definitive guide for the development and deployment of the Internship Management System (IYTERN). Its primary objective is to articulate, in a comprehensive manner, the specific requirements and functionalities that will govern the design and implementation of the IYTERN system.

1.2 Scope

The scope of the Internship Management System (IYTERN) project encompasses a set of well-defined functionalities crucial for the seamless operation of the system. These functionalities include:

1. **Opportunity Lister from Registered Companies:** The platform will provide a comprehensive list of internship opportunities sourced from registered companies, facilitating a transparent and accessible overview for students and coordinators.
2. **Announcer of the Summer Practice Guide:** The system will facilitate the publication and dissemination of the Summer Practice Guide to provide essential information to all stakeholders involved.
3. **Facilitator of Summer Practice Opportunities:** The platform will enable companies to announce summer practice opportunities, with a structured process involving company representatives, administrative approval, and subsequent communication to students.
4. **Automated Summer Practice Application Letter Filler:** Students will initiate the application process by entering the company's email address. The system will automatically populate the relevant information in the Summer Practice Application Letter (1).
5. **Automated Summer Practice Application Form Submitter:** Upon acceptance by the company, students will submit the Summer Practice Application Form (2), triggering a coordinated process involving the company representative, summer practice coordinator, and system verification through OBS API.
6. **Automated Student Document Handler:** Eligible students' information will be compiled into PDF documents and sent to the secretariat through the system.
7. **SSI Document Handler For Secretariat and Dean's Office:** The secretariat will manage document uploads from the deanery, including the SSI document. System tracking will display the current processing unit for each document.
8. **SSI Certificate Publisher:** The system will facilitate the upload and distribution of the SSI certificate to students.
9. **Post-Practice Evaluator:** The system will support the submission, review, and approval of the Summer Practice Report (4) and the Company Form (3) by students and

company representatives, respectively. Timely approvals will be monitored for compliance with CENG400 course deadlines.

10. **Coordinator Feedback Publisher:** The summer practice coordinator will review and provide feedback on the student's report and company form, with the flexibility to request additional information if needed.
11. **Report Evaluator:** The coordinator will enter the report grade into the system, allowing students to view their grades.
12. **Announcement Informer:** Announcements will be made through the system and communicated via MS Teams CENG400 Teams, General channel, leveraging the MS Teams API.
13. **OBS API Integrator:** Essential student information, including grades, names, TC IDs, and student IDs, will be retrieved from OBS when necessary, ensuring data accuracy and consistency.

Out of Scope:

The following aspects are explicitly excluded from the scope of the IYTERN project:

1. **SSI (Social Security Institution) Process:** The system will not be involved in the handling of Social Security Institution processes, ensuring a focused approach on internship management tasks.
2. **Internship Placement Services:** The system will not be responsible for the task of finding internships for students. Its primary function is to facilitate the management and coordination of internships once initiated by students.
3. **Limited to Computer Engineering Students:** The system's scope is specific to Computer Engineering students and does not extend to the entire university. The focus on a specific department ensures tailored functionality and a more targeted user experience.

1.3 Definitions, Acronyms, and Abbreviations

- **IYTERN:** Refers to the combination of the words IYTE (Turkish abbreviation for IZTECH) and intern.
- **Student:** This refers to individuals enrolled in the Computer Engineering program at IZTECH who are participating in the internship program.
- **Coordinator:** Refers to the internship coordinator that is responsible for overseeing and evaluating student internships.
- **Secretariat:** Refers to the administrative office responsible for managing administrative tasks related to the internship program.
- **Company:** Refers to external entities posting internship opportunities and engaging with the internship process.
- **Administrator:** Refers to system administrators responsible for managing user accounts and system configurations.

1.4 References

- ‘Summer Practice Guide’ announcement by Buket Oksuzoglu on Microsoft Teams Ceng 400 team
- [Mevzuat](#)
- [Mevzuat](#)
- 1_SummerPracticeApplicationLetter2023.docx
- 2_SummerPracticeApplicationForm2023.doc
- 3_FirmaFormu2023.docx
- 4_SummerPracticeReportTemplate_Word2023.docx
- 5_StajÖğrenciAnketi_Word2023.docx

1.5 Overview

This document’s main purpose is to explain the system's basic functionality and use cases for different users. SRS consists of 3 main parts: Introduction, Overall Description and Specific requirements.

2. Overall Description

Product Perspective, Product Functions

- **Product Perspective:** Describes the relationship and interactions of the IYTERN with other systems or components within the university's technological landscape.
- **Product Functions:** Provides a comprehensive list of functionalities and features that the IYTERN is designed to perform.

User Characteristics, Constraints

- **User Characteristics:** Defines the roles, expectations, and responsibilities of different users (students, faculty advisors, administrative staff, internship hosts) within the IYTERN.
- **Constraints:** Highlights limitations or restrictions (technological, financial, regulatory) that the IYTERN must adhere to during its operation.

Assumptions and Dependencies, Apportioning of Requirements

- **Assumptions and Dependencies:** Documents underlying assumptions made during system development and dependencies the IYTERN relies upon, including external services or infrastructure.

- **Apportioning of Requirements:** Explains the breakdown or prioritization of system requirements, delineating essential functionalities versus those for future phases.

3. Specific Requirements

Use Cases for Various Users

- **Use Cases:** Comprehensive breakdown of scenarios, actions, and system responses categorized by user types (User 1, User 2, etc.). Each use case details specific actions, preconditions, and postconditions involving different users within the IYTERN.

External Interfaces, Generic Performance/Software Requirements

- **External Interfaces:** Details interfaces, APIs, or interactions with external systems beyond user interfaces that the IYTERN relies upon.
- **Generic Performance/Software Requirements:** Encompasses overall performance and software quality requirements not directly tied to specific use cases.

Logical Database Requirements, Design Constraints, Other Requirements

- **Logical Database Requirements (ER Diagram):** Illustrates the logical structure of the IYTERN database through an Entity-Relationship (ER) diagram.
- **Design Constraints:** Lists limitations or constraints related to the design and architecture of the IYTERN.
- **Other Requirements:** Captures any additional specifications or requirements not covered in previous sections, providing a holistic view of the IYTERN system requirements.

2. Overall Description

The overall description section provides a comprehensive view of the IYTERN (Internship Management) System, including its perspective, functions, user characteristics, constraints, assumptions, dependencies, and how requirements may be apportioned.

2.1 Product Perspective

The IYTERN System will function as a system within the university's existing IT infrastructure. It will interact with other systems, such as OBS, MS Teams and authentication services, to ensure seamless integration. While the IYTERN System is self-contained, its success depends on effective collaboration with other existing platforms of the university.

System receives student data from OBS, and makes announcements to MS Teams using its API.

System Interfaces: Our system has interfaces with OBS System and MS Teams.

User Interfaces: Our system will have interfaces with Computer Engineering students, Faculty Coordinator, Dean Secretariat and Company representative.

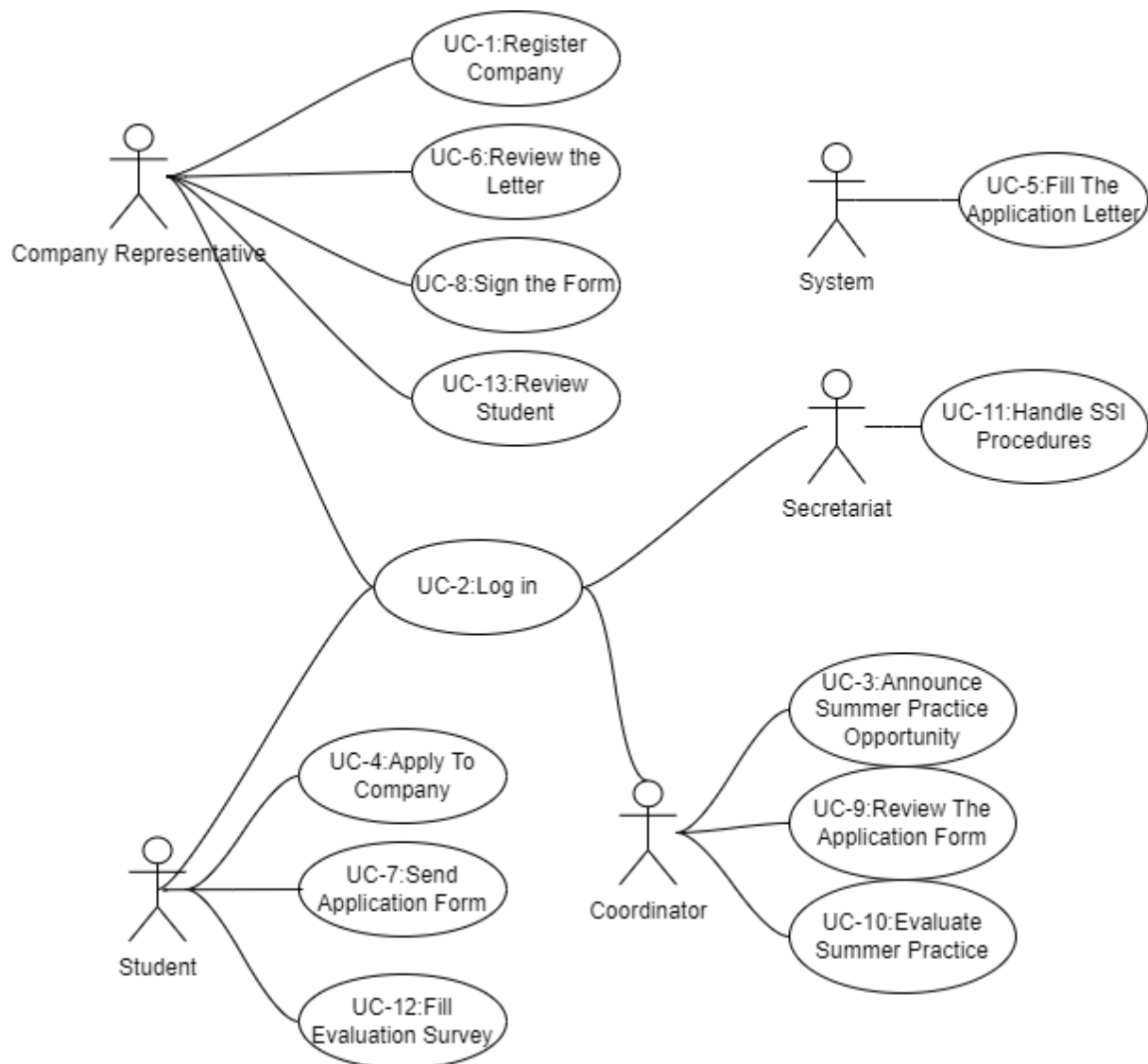
Hardware Interfaces: Our system will run through the internet so there will be no hardware interfaces.

Software Interfaces: Our system will have Log-in interface, Register interface, Announcement interface and document interfaces. Also the system will have an admin dashboard and company interface.

Communication Interfaces: Our system will communicate with OBS and will create communications between company representative, student, faculty coordinator and dean secretariat.

Memory: Our system will handle internship student's documents so, required memory for our system needs to fulfill the number of students that will do their internship that year.

2.2 Product Functions



2.3 User Characteristics

The primary users of the IYTERN System include:

- **Students:** Users seeking internships and submitting applications. Should be at least 3rd grade. Should know how to use a browser.
- **Faculty Coordinator:** Academic staff responsible for overseeing and evaluating student internships. Should know how to use a browser.
- **Administrators:** System administrators managing user accounts, configurations, and overall system functionality. Should know how to manage a database. Should be familiar with managing a system.
- **Industry Partners(Company Representative):** External entities posting internship opportunities and engaging with the internship process. Should be a verified company. Should know how to use a browser.

- **Secretariat:** Staff responsible for communication between the system and dean's office. Should know how to use a browser.

2.4 Constraints

- **Technology Stack:** The IYTERN System will be developed using the university's approved technology stack, adhering to compatibility and security standards.
- **Budgetary Constraints:** Development and maintenance costs should align with the allocated budget for the project.
- **Time Regulation Constraints:** A common time-related constraint in systems is the deadline. Deadlines impose a limitation on when a task, project, or action must be completed. Meeting deadlines is crucial for the overall functioning of the system and its efficiency. Missing deadlines could lead to cascading effects, impacting other interconnected tasks or components within the system.
- **Rules and regulations:** The rules and regulations which are coordinated by the university administration.

2.5 Assumptions and Dependencies

- **Data Accuracy:** It is assumed that the data provided by students, faculty supervisors, and industry partners is accurate and up-to-date.
- **Network Availability:** The IYTERN System relies on network availability for real-time communication and data exchange.
- **Integration with University Systems (OBS):** Successful integration with OBS is a dependency for seamless operation.

2.6 Apportioning of Requirements

In the event of resource constraints or changing priorities, requirements may be apportioned as follows:

- In the near future, we aim to enhance operational efficiency and reduce error rates by implementing an automated document control system.
- In the near future, we aim to enhance user experience and functionality by creating a mobile app.
- In the near future, we aim to enhance customer service by adding support chat to improve interactions and increase engagement.
- In the near future, we aim to integrate AI-supported chat to elevate customer service, providing intelligent assistance and enhancing overall user interactions.

- In the near future, we aim to develop an AI-powered recommendation robot that offers internship opportunities based on students' grades and skills. This system will suggest the most suitable internship options for students according to their academic performance and abilities.
- In the future, we plan to introduce a feature where you can evaluate and rate companies.
- Ultimately, our goal is to transform the app into a super app where you can do everything.

The apportioning strategy allows for the incremental development and deployment of the IYTERN System, ensuring that essential functions are prioritized in the initial phases and more advanced features for making the internship process more detailed are added in later phases.

3. Specific Requirements

This section provides detailed requirements for the IYTERN (Internship Management) System, outlining specific use cases, external interfaces, performance requirements, logical database requirements, and design constraints.

3.1 Use Cases

3.1.1 Use Cases For Student

3.1.1.1 Use Case 4

3.1.1.1.1 Use Case

Use Case ID:	UC-4		
Use Case Name:	Apply To Company		
Created By:	Group 11	Last Updated By:	Group 11
Date Created:	18.11.2023	Date Last Updated:	24.11.2023

Actor:	Student
Secondary Actor(s):	IYTERN system
Description:	Student applies to the company via system.
Preconditions:	Student must be at least third grade. Student must be registered and logged into the IYTERN system. Company must be registered into the IYTERN system.
Postconditions:	Document is sent to the company successfully.
Priority:	High
Frequency of Use:	At most seven times per student
Normal Course of Events:	1-Student enters the company's e-mail to the system. 2-System fills the application letter with the student's information which is taken from the OBS system. 3-System sends the application letter to the company. 4-The system will display a message to the user: 'Letter successfully sent.'
Alternative Courses:	1a-Student cannot enter an e-mail. 1-Student enters an invalid e-mail. 1a-System notifies the user to enter a valid e-mail. 2-'Apply' button doesn't work. 2a-User should send an email to the administrator about the error. 3a-System cannot send the application letter. 1-An unexpected error occurs. 1a-The system will try again later when possible and add it to the queue to be sent.
Exceptions:	-
Includes:	UC-1 Login
Special Requirements:	-System will display the message at most five seconds after the user clicked the 'Apply' button.
Assumptions:	-
Notes and Issues:	-For the issue at exception 2a, the relevant backend manager will resolve the problem as soon as possible.

3.1.1.1.2 User Interface

UC-4 Apply to Company

IYTERN

Home About Opportunities Profile

Enter company email

APPLY

Acme Corp.

info@acme.com

Company opportunity details.
Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Cras tincidunt iaculis elit, vel dignissim tortor ornare eu.

Bros Corp.

mail@bros.com

Company opportunity details.
Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Cras tincidunt iaculis elit, vel dignissim tortor ornare eu.

Footer Section

3.1.1.2 Use Case 7

3.1.1.2.1 Use Case

Use Case ID:	UC-7		
Use Case Name:	Send Application Form		
Created By:	Group 11	Last Updated By:	
Date Created:	24.11.2023	Date Last Updated:	

Actor:	Student
Description:	Student sends their application documents via system.
Preconditions:	Company must have approved the student's application.
Postconditions:	Summer Practice Application Form is handled.
Priority:	Medium.
Frequency of Use:	At most two times per student
Normal Course of Events:	1-Student finds and clicks to 'Fill Summer Practice Application Form' button at the system. 2-Student fills 'Summer Practice Application Form'. 3-Student sends 'Summer Practice Application Form' to the company. 4-System display the message 'The Form Is Sent Successfully'.
Alternative Courses:	1a-Student could not find the form. 1-Coordinator did not upload the document yet. 1a-Student should warn the maintain team. 3a-Student could not receive the form to the company. 1-An error occurs at the system. 1a-Student should send an email about the error to the maintain team.
Exceptions:	-
Includes:	-
Special Requirements:	System should display the message about 15 second after student clicked 'Send Form' button.
Assumptions:	-
Notes and Issues:	-

3.1.1.2.2 User Interface

UC-7 Send Application form

IYTERN

Home About Application Profile

Application Form

Dear XYZ Corp,

I'm applying for the Data Analyst position. With a marketing background and strong communication skills, I believe I can contribute effectively to your team. Excited about the opportunity, I look forward to discussing my application further.

Sincerely,
Alex Johnson

SEND

Footer Section

3.1.1.3 Use Case 12

3.1.1.3.1 Use Case

Use Case ID:	UC-12		
Use Case Name:	Fill Evaluation Survey		
Created By:	Group 11	Last Updated By:	Group 11
Date Created:	25.11.2023	Date Last Updated:	25.11.2023

Actor:	Student
Description:	Student fills the evaluation survey and sends it to the coordinator.
Preconditions:	1-Student has signed-in to the system . 2-Student has finished the internship.
Postconditions:	Evaluation Survey has been send by student.
Priority:	Medium
Frequency of Use:	Once per Student
Normal Course of Events:	1- Student goes to survey interface . 2- Student opens the survey of the internship he/she finished. 3- If there is an already sent survey, previous answers are retrieved. 4- Student fills all the empty spaces beneath the questions. 5- Student sends the Form.
Alternative Courses:	-
Exceptions:	If student missed the due of the Survey, Student needs to inform admin to gain access. If intership is still going on, survey form is not clickable.
Includes:	UC-2 Login
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

3.1.1.3.2 User Interface

UC-12 Fill Evaluation Survey

IYTERN

Home About Evaluation Survey Profile

1

Yaptığınız staj size matematik, fen ve mühendislik bilgilerini kullanma becerisi kazandırmıştır.

2

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5

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Finish

Footer Section

3.1.2 Use Cases For Company

3.1.2.1 Use Case 1

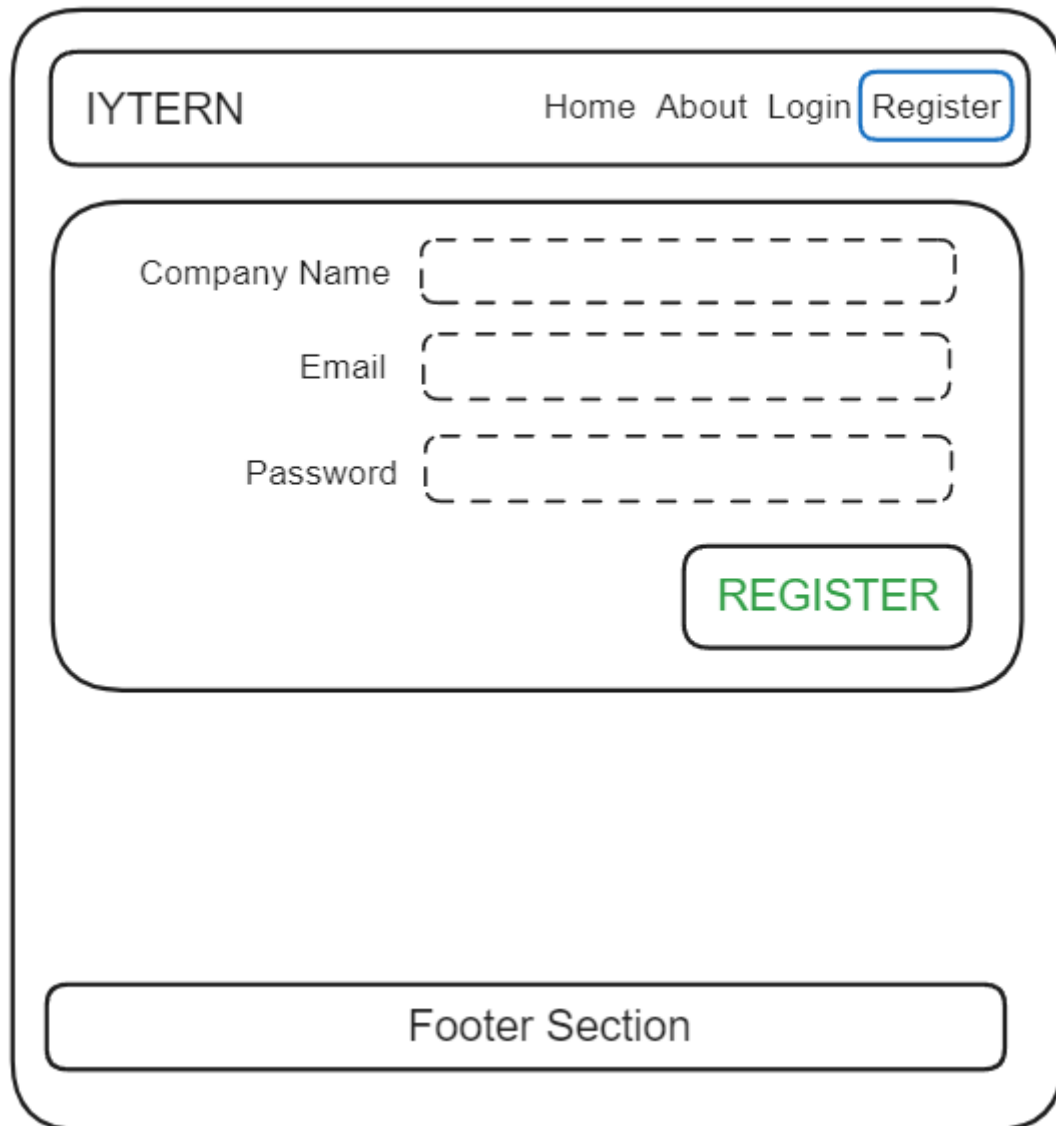
3.1.2.1.1 Use Case

Use Case ID:	UC-1		
Use Case Name:	Register Company		
Created By:	Group 11	Last Updated By:	Group 11
Date Created:	25.11.2023	Date Last Updated:	3.12.2023

Actor:	Company representative
Secondary Actors(s):	Admin of the system
Description:	Company representative registers to the system.
Preconditions:	Company must not be registered to the system.
Postconditions:	Company representative registered successfully.
Priority:	Medium
Frequency of Use:	Once per company
Normal Course of Events:	1- Company representative enters the register page. 2- Fills the form with valid data. 3- System saves the information to database. 4- System notifies with success message, now after the admin confirmation, can post internship opportunities. 5- Admin controls the company data and confirms the registration.
Alternative Courses:	2a- Representative fills the form with invalid data. 1- System notifies with warning message. 1a- Front-end renders a warning message to correct. 3a- Saving the information of database fails. 1- System logs the failure and tries again. 1a- System logs the failure. 1b- System tries again. 5a- Company info is invalid and admin does not confirm the registration. 1- The registered user stays inactive. 1a- The registered user stays inactive and cannot post.
Exceptions:	-
Includes:	-
Special Requirements:	- System must reply to use in 1 minutes.
Assumptions:	- Company is a valid organization to do internship.
Notes and Issues:	-

3.1.2.1.1 User Interface

UC-1 : Register Company



The image shows a user interface for a 'Register Company' feature. It is enclosed in a rounded rectangle. At the top, there is a header bar with the text 'IYTERN' on the left and navigation links 'Home', 'About', 'Login', and 'Register' on the right. The 'Register' link is highlighted with a blue border. Below the header, there is a registration form area. This area contains three input fields: 'Company Name', 'Email', and 'Password', each with a dashed border. To the right of the 'Password' field is a green button labeled 'REGISTER'. At the bottom of the main content area, there is a footer bar with the text 'Footer Section'.

IYTERN Home About Login Register

Company Name

Email

Password

REGISTER

Footer Section

3.1.2.2 Use Case 6

3.1.2.2.1 Use Case

Use Case ID:	UC-6		
Use Case Name:	Review The Letter		
Created By:	Group 11	Last Updated By:	
Date Created:	24.11.2023	Date Last Updated:	

Actor:	Company
Description:	Company reviews the application letter and answer it.
Preconditions:	Company must be registered. Student must be sent the application letter.
Postconditions:	Company delivered the response successfully.
Priority:	Medium
Frequency of Use:	Could be for all students.
Normal Course of Events:	1-Company reviews the application letter. 2- The company employee responsible for this matter will review the letter. 3-Company sends the response.

Alternative Courses:	1a-The viewer software program could not open the letter. 1-Viewer software program is not up to date. 1a-Company employee should update his/her viewer software program. 3a-Company could not send the response. 1-An error occurs. 1a-Company employee should send an email to the coordinator according to the error.
Exceptions:	-
Includes:	-
Special Requirements:	Company should response the application in two weeks.
Assumptions:	System works flawlessly.
Notes and Issues:	-

3.1.2.2.2 User Interface

UC-6 : Review the Application Letter

IYTERN

Home About Applications Profile

X

ADI - SOYADI	
FAKÜLTESİ	Mühendislik Fakültesi
BÖLÜMÜ	Bilgisayar Mühendisliği
SINIFI	
OKUL NUMARASI	
T.C. KİMLİK NO	
CEP TELEFONU	
E-POSTA	

ACCEPTREJECT

Footer Section

3.1.2.3 Use Case 8

3.1.2.3.1 Use Case

Use Case ID:	UC-8		
Use Case Name:	Sign The Form		
Created By:	Group 11	Last Updated By:	
Date Created:	24.11.2023	Date Last Updated:	

Actor:	Company
Description:	Company reviews the 'Summer Practice Application Form' and sign it. After that company send it to the coordinator.
Preconditions:	Student must have sent the 'Summer Practice Application Form'.
Postconditions:	Company sends the form to the coordinator successfully.
Priority:	Low
Frequency of Use:	Once for each student.
Normal Course of Events:	1-Company employee downloads the form. 2-Company employee reviews and signs the form. 3-Company employee uploads the form into system 4-Company employee sends the form to the coordinator. 5- System display the message 'The Form Is Sent Successfully'.
Alternative Courses:	1a-Company employee could not download the form. 1-An error occurred. 1a-Company employee should send an email to the coordinator about the error. 4a-Company employee could not send the form. 1-An error occurred. 1a-Company employee should send an email to the coordinator about the error.
Exceptions:	-
Includes:	-
Special Requirements:	System should display the message about 15 second after student clicked 'Send Form' button.
Assumptions:	The company employee successfully completes tasks such as printing, signing, and scanning/uploading the document.
Notes and Issues:	-

3.1.2.3.2 User Interface

UC-8 Sign Application form

IYTERN

Home About Application Profile

Application Form:

DOWNLOAD

Signed Application Form:

UPLOAD

The form is sent successfully.

Footer Section

3.1.2.4 Use Case 13

3.1.2.4.1 Use Case

Use Case ID:	UC-13		
Use Case Name:	Review Student		
Created By:	Group 11	Last Updated By:	Group 11
Date Created:	25.11.2023	Date Last Updated:	25.11.2023

Actor:	Company Representative
Description:	Company representative reviews the student's internship that has been done at the company.
Preconditions:	Student has completed their internship.
Postconditions:	Company representative sends their review of the student to the coordinator from the system.
Priority:	Medium
Frequency of Use:	Once per internship.
Normal Course of Events:	1-Company representative reviews the students work at the company. 2-Company representative sends their review about the student to the coordinator through the system by clicking the "Send Review".
Alternative Courses:	-
Exceptions:	2a-Company representative couldn't send the review to the coordinator through the system. 1- "Send Review" button is not functioning. 1a- Company representative reports this issue to the admin.
Includes:	UC-2
Special Requirements:	-
Assumptions:	-System is working properly
Notes and Issues:	-

3.1.2.4.2 User Interface

UC-13 Review Summer Practice Report

IYTERN

Home

About

Evaluate Practice Report

Profile

Summer Practice Report

Tasks Undertaken

Task 1: Assisted in [description of task].

Task 2: Conducted research on [topic/task].

Task 3: Participated in [activity/task].

Challenges Faced

Challenge 1: Balancing multiple tasks simultaneously.

Challenge 2: Learning curve for C#.

Challenge 3: Adapting to team dynamics.

Approve

Reject

Footer Section

3.1.3 Use Cases For User

3.1.3.1 Use Case 2

3.1.3.1.1 Use Case

Use Case ID:	UC-2		
Use Case Name:	Login		
Created By:	Group 11	Last Updated By:	Group 11
Date Created:	24.11.2023	Date Last Updated:	24.11.2023

Actor:	User (Admin, Internship Coordinator, Secretariat, Company Representative)
Description:	Login to the system
Preconditions:	User must have an account to login to the system. Login permission must be given by admin.
Postconditions:	User logged into the system.
Priority:	High
Frequency of Use:	Once every enter to the system.
Normal Course of Events:	<ol style="list-style-type: none"> 1. User enters their e-mail and password. 2. Clicks "Login" button. 3. User enters the system.
Alternative Courses:	<ol style="list-style-type: none"> 1a. User cannot login to system. <ol style="list-style-type: none"> 1. User entered a wrong email or password. <ol style="list-style-type: none"> 1a. System shows an error message explaining the issue. 2a. User cannot click "Login" button. <ol style="list-style-type: none"> 1. Button is not functioning. <ol style="list-style-type: none"> 1a. User emails this issue to the admin. 2b. User clicks the "Login" button but doesn't get a response. <ol style="list-style-type: none"> 1. System servers are down. <ol style="list-style-type: none"> 1a. User emails this issue to the admin.
Exceptions:	<ol style="list-style-type: none"> 1a. User enter a different user's information by mistake and enters the system. <ol style="list-style-type: none"> 1a. User sends a report to the admin. 1b. User tries to login to the system. <ol style="list-style-type: none"> 1. User is not registered in the system. <ol style="list-style-type: none"> 1a. User emails this issue to the admin.
Includes:	-
Special Requirements:	System response time should be faster or equal to 5 seconds
Assumptions:	<ul style="list-style-type: none"> - System is working fine - System can access to the OBS information.
Notes and Issues:	-For the issue at alternative courses 2a, the relevant backend manager will resolve the problem as soon as possible.

3.1.3.1.2 User Interface

UC-2 : Log in

The mockup shows a web page layout for a login page. At the top, there is a navigation bar with the text 'IYTERN' on the left and a list of links 'Home About Login Register' on the right. The 'Login' link is highlighted with a blue border. Below the navigation bar is a large rounded rectangle containing the login form. The form has two input fields: 'E-mail:' and 'Password:', each followed by a dashed rectangular input box. Below these fields is a green button with the text 'LOGIN'. At the bottom of the page, there is a footer section with the text 'Footer Section (Contact info + Copyright section)'.

IYTERN Home About Login Register

E-mail:

Password:

LOGIN

Footer Section
(Contact info + Copyright section)

3.1.4 Use Cases For Admin

3.1.4.1 Use Case 3

3.1.4.1.1 Use Case

Use Case ID:	UC-3		
Use Case Name:	Announce Summer Practice Opportunity		
Created By:	Group 11	Last Updated By:	
Date Created:	24.11.2023	Date Last Updated:	03.12.2023

Actor:	Admin
Secondary Actors:	Company
Description:	Admin receives and announces the opportunity.
Preconditions:	PRE-1: Admin is signed into the system. PRE-2: Company is registered and signed into the system.
Postconditions:	POST-1: Summer practice opportunity is announced.
Priority:	Medium
Frequency of Use:	For each summer practice opportunity.
Normal Course of Events:	1-Company sends the summer practice opportunity through the system. 2-Admin receives the summer practice opportunity through the system. 3-Admin reviews the summer practice opportunity. 4-Admin approves the summer practice opportunity through the system. 5-Admin announces the summer practice opportunity through the system.
Alternative Courses:	-
Exceptions:	4a- Admin rejects the summer practice opportunity. 1.Admin gives feedback to the company through the system. 1a. Admin is willing to accept the summer practice opportunity with some editing. 1. Company edits the document and resends the summer practice opportunity to admin. 1b. Admin is not willing to accept the summer practice opportunity.
Includes:	UC-1 Register (if the company is not already registered) UC-2 Log in
Special Requirements:	-
Assumptions:	The system is operational without any errors.
Notes and Issues:	-

3.1.4.1.1 User Interface

UC-3 Announce Summer Practice Opportunity

IYTERN

Home About Opportunities Profile

Download Summer Practice Opportunity

Approve

Reject

Announce the Summer Practice Opportunity

Upload feedback file

Footer Section

3.1.4.2 Use Case 9

3.1.4.2.1 Use Case

Use Case ID:	UC-9		
Use Case Name:	Reviewing The Application		
Created By:	Group 11	Last Updated By:	
Date Created:	24.11.2023	Date Last Updated:	

Actor:	Coordinator
Description:	Coordinator reviews the 'Summer Practice Application Form' and sends feedback to the student or company if necessary.
Preconditions:	Company must have sent the 'Summer Practice Application Form'
Postconditions:	Coordinator Approves <u>The Application</u> .
Priority:	Low
Frequency of Use:	All students for each plus feedback for each if happened.
Normal Course of Events:	1- Coordinator finds the application form. 2- Coordinator reviews the application. 3- Coordinator approves the application.
Alternative Courses:	-
Exceptions:	3a- Coordinator did not approve the application. 1- Coordinator found some errors made by student at the form. 1a- Coordinator provides feedback to the student and asks them to correct it. 2- Coordinator found some errors made by company employee at the form. 2a- Coordinator provides feedback to the company employee and asks them to correct it.
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

3.1.4.2.2 User Interface

UC-9 : Reviewing the Application

IYTERN

Home About Applications Profile

Bölüm Staj Koordinatörü Onayı

Buket ERŞAHİN

Tarih: ... / ... / 20...

X

Kurum/Kuruluş/Firma Adı	Adresi ve İrtibat Numarası	Stajın Başlangıç Tarihi	Stajın Bitiş Tarihi	Staj Süresi (İş Günü)
		... / ... / 20...	... / ... / 20...	

İşveren veya Yetkili Kişinin	Adı Soyadı	Görevi ve Unvanı	İmza, Kaşe ve Tarih

Cumartesi günleri çalışıyor musunuz? Evet () Hayır ()
Resmî/Dini Bayram/Tatil, Arefe Çalışıyor mu? Evet () Hayır () Çalışıyor mu Gün ayın ()
Sigorta yapılmasını istemiyorum. Evet () Hayır ()

ACCEPT

REJECT

Footer Section

3.1.4.3 Use Case 10

3.1.4.3.1 Use Case

Use Case ID:	UC-10		
Use Case Name:	Evaluate Summer Practice		
Created By:	Group 11	Last Updated By:	Group 11
Date Created:	24.11.2023	Date Last Updated:	24.11.2023

Actor:	Internship Coordinator
Secondary Actor(s):	IYTERN System, Student
Description:	Coordinator evaluates the summer practice.
Preconditions:	Student must finish their internship and send their required documents before deadline.
Postconditions:	Faculty coordinator reviews the summer practice documents and evaluates the summer practice.
Priority:	High
Frequency of Use:	After every internship.
Normal Course of Events:	<ol style="list-style-type: none"> 1. Student sends their documents to Faculty Coordinator. 2. Faculty Coordinator reviews the student's documents and evaluates them. 3. Clicks "Send Feedback" to send the evaluation to student through the System. 4. Coordinator enters the student's grade through OBS.
Alternative Courses:	<ol style="list-style-type: none"> 2a. Faculty Coordinator couldn't review the document. <ol style="list-style-type: none"> 1. Documents are corrupted. <ol style="list-style-type: none"> 1a. Faculty Coordinator reports this issue to the student. 2. Documents are wrong. <ol style="list-style-type: none"> 1a. Faculty Coordinator reports this issue to the student. 3a. "Send Feedback" button doesn't work. <ol style="list-style-type: none"> 1. Button is not functioning. <ol style="list-style-type: none"> 1a. Coordinator reports this issue to admin. 3b. Coordinator clicks the "Send Feedback" button, but system doesn't respond. <ol style="list-style-type: none"> 1. System servers are down. <ol style="list-style-type: none"> 1a. Coordinator reports this issue to admin.
Exceptions:	<ol style="list-style-type: none"> 1a. Student doesn't send the required documents before due date. <ol style="list-style-type: none"> 1. Student fails the CENG400 course.
Includes:	UC-2
Special Requirements:	
Assumptions:	<ul style="list-style-type: none"> - System is working properly. - System can access to OBS.
Notes and Issues:	- For the issue at alternative courses 3a, the relevant backend manager will resolve the problem as soon as possible.

3.1.4.3.2 User Interface

UC-10 Evaluate Summer Practice

IYTERN

[Home](#) [About](#) [Opportunities](#) [Profile](#)

Evaluation for Student

Download Student Documents

Write Evaluation Form

Internship Evaluation Form for Student

1. Job Performance:
Lorem ipsum dolor sit amet...

2. Communication Skills:
Lorem ipsum dolor sit amet...

3. Teamwork and Collaboration:
Lorem ipsum dolor sit amet...

4. Professionalism:
Lorem ipsum dolor sit amet...

Report Issue

Send Evaluation

Footer Section

3.1.5 Use Cases For System

3.1.5.1 Use Case 5

3.1.5.1.1 Use Case

Use Case ID:	UC-5		
Use Case Name:	Fill The Application Letter		
Created By:	Group 11	Last Updated By:	Group 11
Date Created:	24.11.2023	Date Last Updated:	25.11.2023

Actor:	System
Secondary Actor(s):	OBS
Description:	System fills the application letter with Student's data that is taken from OBS API.
Preconditions:	-
Postconditions:	POST1: System sent HTTP request to OBS API. POST2: OBS API replied with student's data.
Priority:	High
Frequency of Use:	Once per application
Normal Course of Events:	1- System sends HTTP Request to OBS API with student number. 2- OBS API replies with student's necessary data. 3- System fills the document with student's data.
Alternative Courses:	1a- System cannot send HTTP request at that time. 1- System tries again in specified time. 1a- System re-sends HTTP request to OBS API. 2a- OBS cannot reply to the sent request. 1- System tries again in specified time. 1a- System re-sends HTTP request to OBS API. 3a- System document filler program fails. 1- System logs the failure and tries again. 1a- System logs the failure. 1b- System tries again.
Exceptions:	-
Includes:	-
Special Requirements:	System must reply to use in 3 minutes.
Assumptions:	- OBS API must be working.
Notes and Issues:	Once in a week there will be maintenance check.

3.1.6 Use Cases For Secretariat

3.1.6.1 Use Case 11

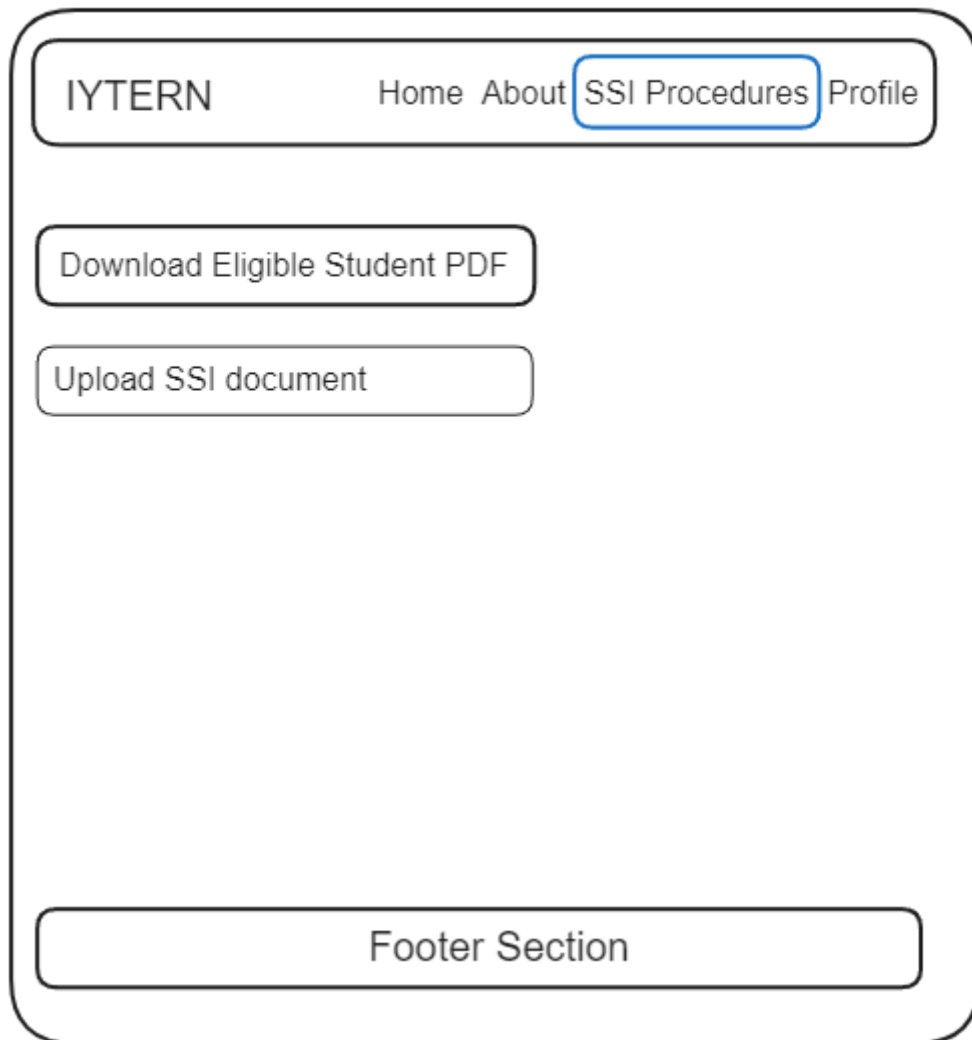
3.1.6.1.1 Use Case

Use Case ID:	UC-11		
Use Case Name:	Handle SSI Procedures		
Created By:	Group 11	Last Updated By:	
Date Created:	24.11.2023	Date Last Updated:	24.11.2023

Actor:	Secretariat
Secondary Actors:	Student, Dean's office
Description:	SSI procedures of student is handled.
Preconditions:	The secretariat is signed into the system. Student is signed into the system. Application process of student is finished.
Postconditions:	SSI procedures of student is finished.
Priority:	High
Frequency of Use:	Once per student.
Normal Course of Events:	1-The system checks whether the student will do their internship abroad or not. 2-The system found out that the student will do their internship in Turkey. 3-The secretariat downloads the pdf of eligible students from the system. 4-The secretariat uploads the SSI document which is issued by the Dean's office. 5-The student downloads the SSI document through the system.
Alternative Courses:	3a-The secretariat couldn't find the name of the student in pdf. 1.The student does not want SSI issued for them. 1a- The system does not do any SSI procedures for the student.
Exceptions:	2a-Student is not going to their internship in Turkey. 1-System gives feedback about the situation. 1a- The student handles the SSI procedures by communicating with the company.
Includes:	UC-1 Log in
Special Requirements:	-
Assumptions:	Dean's office will issue the SSI document without any errors. The documents that is transferred are correct and accurate. The system will work flawlessly without any errors.
Notes and Issues:	-

3.1.6.1.2 User Interface

UC-11 Handle SSI Procedures (Secretariat)



The mockup shows a web interface for the 'IYTERN' system. At the top, there is a navigation bar with the system name 'IYTERN' on the left and four links: 'Home', 'About', 'SSI Procedures' (which is highlighted with a blue border), and 'Profile'. Below the navigation bar, there are two main action buttons: 'Download Eligible Student PDF' and 'Upload SSI document'. At the bottom of the interface is a 'Footer Section'.

IYTERN Home About **SSI Procedures** Profile

Download Eligible Student PDF

Upload SSI document

Footer Section

UC-11 Handle SSI Procedures (Student)

IYTERN

[Home](#) [About](#)

[SSI Procedures](#)

[Profile](#)

The state that the process is in is
stated here

[Download the SSI Document](#)

Footer Section

3.2 External Interfaces

Name of Item: OBS

Description Purpose: Checking the student information.

Source of input: IYTERN System

Destination of Output: IYTERN System

Timing: Approximately 10 seconds.

Relation to Other Input/Outputs: Application letter, Checking for eligible students.

Data Format: JSON

Name of Item: Microsoft Teams

Description Purpose: Announcing progress to Students and other users.

Source of input: IYTERN System

Destination of Output: Microsoft Teams Internship CENG400 Group

Timing: Approximately 3-4 seconds.

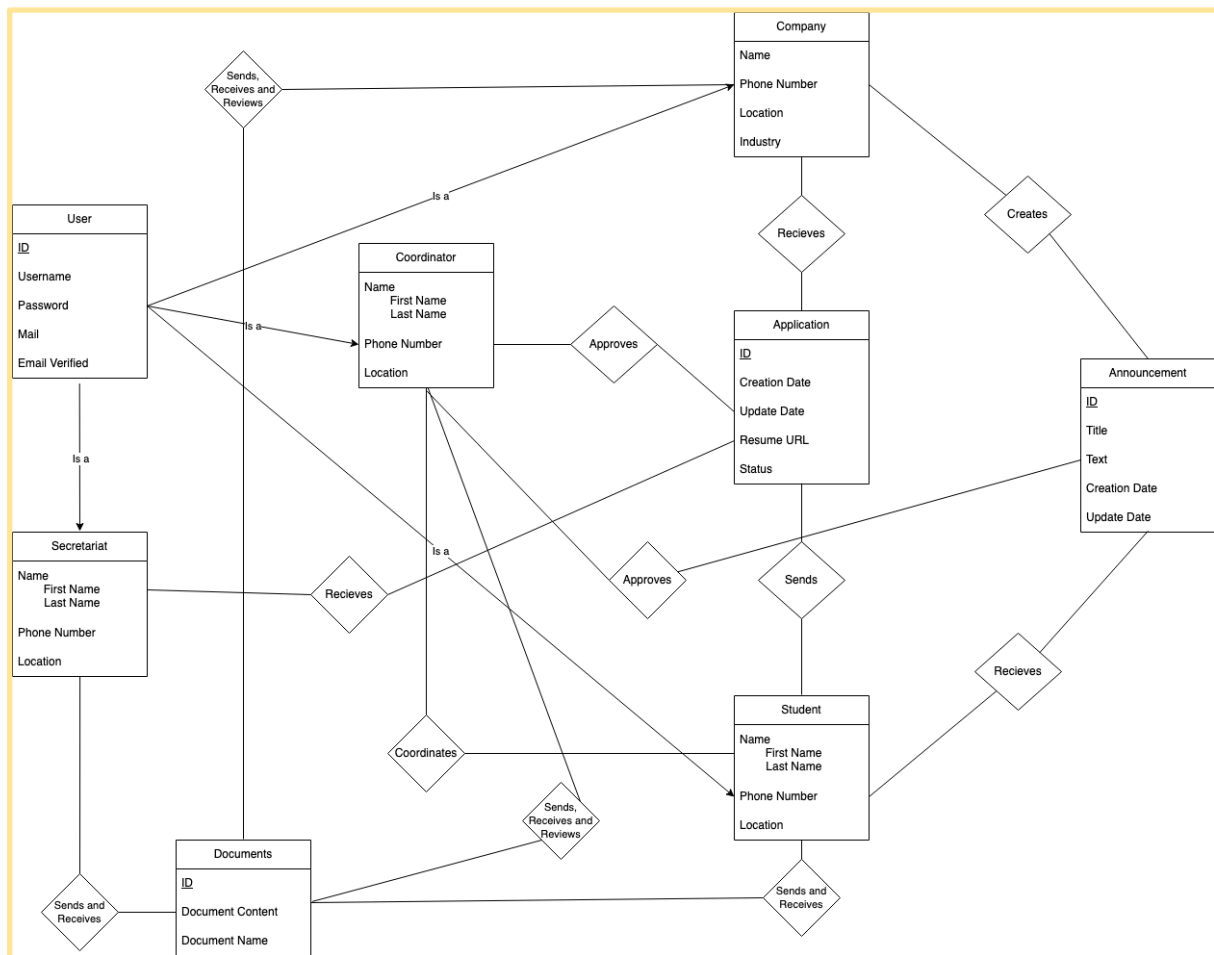
Relation to Other Input/Outputs: All documents and processes that work with deadlines.

Data Format: JSON

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

- The system's maximum response time should not be more than 30 seconds.
- The system should be able to handle 200 users using the system at the same time without significant slowdowns.

3.4 Logical Database Requirements



3.5 Design Constraints

The report format is done according to the given template by the instructors.
The system should be compatible with the OBS API.

3.6 Other Requirements

1. Functional Suitability

- 1.1. The system should send and receive the documents with %99 accuracy.
- 1.2. The system is adequate for the %90 of the current processes
- 1.3. The System is %99 equivalent to the current processes

2. Performance Efficiency

- 2.1. The System is able to handle and store all of the documents of the users.

3. Usability

- 3.1. %99 of users should be able to finish their process without any confusion.
- 3.2. The System has a 3 minute learning phase for most of the users.

4. Reliability

- 4.1. The system should be able to be up for %90 of the time on weekdays, %95 up for the weekends.
- 4.2. The System is %85 Fault Tolerant of the user mistakes

5. Security

- 5.1. Only the administrator should be able to grant privileges to users.
- 5.2. The system should be able to fend off %99.99 of malicious users from disrupting the system.
- 5.3. The System's database is %100 able to store confidential data and efficient

6. Maintainability

- 6.1. Any maintenance should not last longer than 2 hours
- 6.2. The System is %85 Testable
- 6.3. The System's working software pieces are modular enough that they can be replaced with other software pieces that use the same input and output formats

7. Portability

- 7.1. The System's installation process is quite easy (30 minutes) for experienced staff