



Bilkent University

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Department of Computer  
Engineering

# Internship Management System

## Project Name: InternHub

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Requirement Analyst Report

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## 1. Introduction

Our project is an Internship Management website that focuses on facilitating the jobs of students, evaluators and secretaries. In this project, we want everything to be in one place so that everyone can reach the necessary documents from our website. Some of these documents are internship reports written by students, evaluation forms of the student reports, companies' evaluation form and feedbacks given by instructors to students. Students will be able to upload their reports to our website. Instructors and secretaries will be able to handle them on our website so that they won't need to bother themselves about any other apps or emails.

Our website also contains additional features that will further facilitate the process. Students can see their internship reports' current states like "Under Evaluation", "Revision Requested" or "Satisfactory" so they won't worry about their reports which is not an option in Moodle. For the secretary part, she could easily assign instructors to the students according to their numbers so she won't bother herself with Excel and emails. Instructors and students will be able to deadline for each part so they don't miss the due date. These features will reduce the work and concerns for every user.

From the above required updates, it can be seen that the current Internship Management system requires the involvement of different apps, emails and paperwork. This situation makes things happen slower and more complex. Therefore, we intend to solve these issues by making a website that contains whole necessary things in just one place so that every user can easily do their part without the need for other apps.

## 2. Current System

Our project has attended the presentation that is given by the department chair, Selim Aksoy. According to him, a lot of tasks are done manually by the secretary. For example, evaluation forms are filled by the secretary step by step manually. Besides that, from Selim Aksoy's presentations current internship management system procedure is like that:

- The mfstaj system is used for company approvals. When a student finds a company, and if this company is not in mfstaj system, a student applies to mfstaj for registering this company to the system.
- When the company is in mfstaj, a student applies to this system to inform them that student will do internship in that company.
- The use of mfstaj ends once the student completes the internship program in this company.

- Students take the relevant course (XX299 or XX399) the following semester after the summer internship.
- The secretary assigns instructors to students for evaluating their reports. The secretary does this process manually.
- Instructors get an email from the secretary to learn who is assigned to them.
- Students upload their reports to the Moodle system and wait for feedback from their assigned instructor.
- Once the instructor reads and evaluate the reports, whether it gives a satisfactory score or gives feedback via Moodle or mail.
- If the student gets feedback from the instructor, the renewed report must be uploaded to Moodle system again. This process is repeated until the student gets a satisfactory or unsatisfactory result which depends on the instructor.
- After the report evaluation is done, instructors give the result of their students to the secretary.
- While this process is ongoing, the companies send an envelope to the Bilkent University which includes the evaluation of a student from a related person in the company.
- Secretary takes these envelopes and write the students' evaluation grades manually on the evaluation forms. Secretary fill all students' evaluation forms by herself.
- The current system uses a combination of Moodle/Google Drive/Email.
- In the current system, students are unaware of the status of their reports.
- Secretary does the most of this process and she must do it manually in the current system.
- The envelope coming from companies includes paperwork and a physical job so it could be digitalized.

### 3. Proposed System

#### 3.1. Overview

The current manual process for managing internship reports for CS299 and CS399 is not practical or efficient, and requires too much time and effort from academicians. To address this issue, we propose developing a web application that will benefit all parties involved in the internship report process.

The application will have a login and sign-up screen, and users will be provided with different aspects of the system depending on their roles. To give an example, instructors will be able to list, query, and approve submitted forms, as well as access student details such as their internship report status and their information. They will also be able to provide feedback to students, if desired. Moreover, the department secretary will also be able to easily assign students who need to be evaluated to instructors through InternHub. In addition, instead of paper files that will be created for each semester and each course, department secretary will be able to view all files on the system, accept or reject students' forms about companies and upload

companies that are not in the database to the company list. Also, s/he can make an announcement with dean and these announcements can be seen by all actors.

On the other hand, if the user is a student, various features will be available to him or her. Students will be able to submit any forms or documents entirely digitally, including firm approval forms and internship reports. They will be able to display the companies that have accepted interns. Students will be able to use InternHub to fill out a form requesting that a firm be added to the database if it is not mentioned in the company list at InternHub. Additionally, they will be able to monitor the progress of their application and any submitted forms (approved or rejected), as well as announcements. Additionally, instructors will be able to provide comments to students regarding their reports. Students can communicate with TA and ask their question anytime they want through InternHub. They can also comment their internship company and these comments will be listed companies' information page.

To sum up, InternHub proposes the development of a web application that will provide automated solutions for department secretaries, instructors, and students during the internship report application process. The application aims to streamline the process and reduce the amount of time and effort required by all parties involved.

### 3.2. Actors

After conducting the requirements analysis, we decided seven distinct categories of actors who are able to use InternHub application.

- **InternHub User:** The default actor type that serves as the basis for all other actor types is the InternHub User. If a user has not been assigned to a particular actor type during registration or later, they will be considered an InternHub User. However, if a user only has the InternHub User actor type, their access to the system will be restricted. They will only be able to see Login Page to login.
- **Super User:** Super User actor type is responsible for overseeing the privileged operations within the InternHub application. This role is typically fulfilled by the application's maintainers, who ensure that the system operates smoothly. As an example, they can create new user accounts within the system, but only privileged users such as dean, instructor can be registered by super users. Additionally, super users are responsible for managing firms in the database. An integrated super user's account is provided with the application, and super users are authorized to create additional super users accounts as needed.
- **Student:** A InternHub User gets the student role upon the registration process, or a privileged actor (i.e., Super User or Department Secretary) can manually grant this role to users. Students on InternHub can see their reports results, track their application status, submit firm approval and firm request forms, browse companies lists, message with TA and see feedback from instructors and announcements.

- **Dean:** A dean can only be registered to the system by super user. They can make announcements. They can also browse student list, companies list, and announcements.
- **Instructor:** A course coordinator/instructor can only be registered to the system by an super user. Their primary responsibility is to accept or reject students' internship reports. They can still view student list, give feedback to students and see announcements.
- **Department Secretary:** A department secretary can only be registered to the system by an super user. Their primary responsibility is to assign students' internship reports to instructors. They can still browse the decisions for previous forms, view and add student lists and companies lists, make an announcement.
- **TA:** TA can only be registered to the system by an super user. Their primary responsibility is to answer questions of students. They also communicate with instructors and preview students reports.

### 3.3. Functional Requirements

#### 3.3.1. Sign Up

While Selim Aksoy was presenting the current system and their expectations from the new system, he explained that the Internship Management System designed by students is not expected to be integrated with STARS, which is hard to achieve since BCC will possibly not let students to access and use the data in their servers. Hence, for sign up, the existence of super user is required. This role will be able to create profiles, assign these profiles to their roles. Profiles created only by super user has an access to system, which implies there will be no “Sign Up” button.

#### 3.3.2. Log In

Profiles created by super user will also be assigned to password and user name that is planned to be Bilkent email address of each profile. Once profiles were signed up to system with correct email address, password information of each profile will be conveyed to owners of those profiles via webmail system. Having their password information, system users will be able to enter the system provided that they accurately fill the user’s name and password boxes. Entering the system, users will view the screen in accordance with their roles.

#### 3.3.3. Views

Depending on users' role, different views will be appointed to each role. Prior to this report, there are six roles planned by our team including student, teacher assistant (TA), department secretary, dean, instructor and super user.

### **3.3.3.1. Student View**

Home page of student view includes announcements made by authorized roles. Additionally, this page contains a menu bar that is divided into sub-menus such as company approval validation application, company request application, feedbacks, profile, internship reports, ask question, evaluate company and notifications. In home page, students can also view a list of companies where they can do summer training and coming deadlines.

#### **3.3.3.1.1. Company Approval Validation Applications**

This page is a where students can upload a document proving they were received company approval for internship by a particular company to validate the document

#### **3.3.3.1.2. Company Request Applications**

Students who were pretty satisfied with their internships can request from authorized users the addition of the company where they completed summer training to the table of companies displayed in student home page. This page enables students to make such a request.

#### **3.3.3.1.3. Feedbacks**

This screen provides students to view the feedbacks given to them associated with specific report, feedbacks can be given by either instructor or TA.

#### **3.3.3.1.4. Profile**

Profile page shows student's name, Bilkent id, department, email address and internship related courses taken by student.

#### **3.3.3.1.5. Internship Reports**

This page shows submission boxes opened for particular report (i.e. CS299 Summer Training Report) and status of submission (i.e. Submitted or Not Submitted) If status of submission is "Submitted", then student can see the status of report (i.e. Revision Requested, Satisfactory or Unsatisfactory).

#### **3.3.3.1.6. Ask Questions**

In this page, students have a chance to direct their questions regarding Internship Report to TA appointed to them.

#### **3.3.3.1.7. Evaluate Company**

Assuming that a student wants to reveal something about a company, or s/he believes that there is something that needs to be known by other students or authorized users about this company, s/he can evaluate the company and post this form to department secretary by attaching a message to it.

#### **3.3.3.1.8. Notifications**

Notifications involve responses given to questions of student by TA and returns to applications by the secretary.

### **3.3.3.2. Teacher Assistant (TA) View**

In their home page, teacher assistants can view students appointed to them by authorized user, and the instructors under whom they are working. Home page includes announcements made by authorized users and a list of students appointed to them. They can view the existence of submissions for each student assigned to them (i.e. No Submission, Submission Open) and if Submission is open, then they can view the submission status. (i.e. Submitted, Waiting Submission) For submitted work, they can preview the submission, and if they find submission is worth to be evaluated by instructor, they can set the status of submission as previewed. Teacher assistant has also menu bar that involves questions, consult instructor, notifications.

#### **3.3.3.2.1. Questions**

When directed to this page, TA can view the questions and directed to them and also answer them, which is sent as notification to student.

#### **3.3.3.2.2. Consult Instructor**

If there is anything that needs clarification, TA can consult the instructor through this page.

#### **3.3.3.2.3. Notifications**

Notifications consist of responses given to TA by instructors.

### **3.3.3.3. Department Secretary View**

In department secretary's home page, there is an announcement segment similar to other roles and a list of students signed up to the system in that department with an option "Fill Company Evaluation Form". If secretary

fills the web-form, company point is appointed to student which is hidden from students but visible to instructor to whom student is assigned. This role has menu bar including student list, instructor list, assign students to instructors, make announcement, edit company list, respond company requests, respond company approvals and company list.

#### **3.3.3.3.1. Student List**

This page displays the list of students with taken course XX-299/XX-399, if student takes both of these courses, student will appear list in twice for double assignment.

#### **3.3.3.3.2. Instructor List**

This page displays the list of instructors with number of students assigned to them and the button "Submitted Reports" showing all final evaluation reports when clicked by secretary.

#### **3.3.3.3.3. Assign Students to Instructors**

This page initially asks secretary to choose instructor and then forces to choose students to be assigned. Finally asks for approval of process.

#### **3.3.3.3.4. Make Announcement**

Announcement can be created by secretary through this page.

#### **3.3.3.3.5. Edit company List**

Via this screen, secretary may delete a row from the company list or add a row.

#### **3.3.3.3.6. Respond Company Request**

When this page is opened, the list of company request will be visible to secretary with subject making the request. Secretary can respond these requests through that screen.

#### **3.3.3.3.7. Respond Company Approval**

When this page is accessed, the list of company approvals for internship will be visible to secretary with subject presenting the approval. Secretary can either validate these approvals or reject them.



#### 3.3.3.3.8. Company List

The same list with company list in student home page.

#### 3.3.3.4. Dean View

Similar to department secretary's home page, dean's home page also contains a list of students that are known to have taken either XX-299 or XX-399. However, this time students are displayed with the information of company evaluation form grade and instructor final evaluation form grade if it exists, otherwise labeled with "Not Available" tag. Dean's home page has also menu bar with sub-menus including instructor list, make announcements and statistics.

##### 3.3.3.4.1. Instructor List

It is a screen that has similar features with that of department secretary.

##### 3.3.3.4.2. Make Announcement

This screen is a page resembling that of department secretary.

##### 3.3.3.4.3. Statistics

It is a view that demonstrates statistics regarding confidential company evaluation forms submitted by companies and final evaluation forms submitted by instructors for ABET documentation. It also involves statistics regarding distribution of grades assigned to student (i.e. Satisfactory, Unsatisfactory)

#### 3.3.3.5. Instructor View

For this actor, main page involves announcements and list of students assigned to instructor. Students are visible to instructor with information of company evaluation grades and "Open Submission" button if there is no submission box yet. Otherwise, status of submission will be displayed such as "Waiting for Submission", "Waiting for Prerevision" or "Pre-reviewed". There will be button called "Set Deadline", after submission box is opened. If "Pre-reviewed" is submission status, then "Give Feedback" button is activated, using this button instructor can give feedback and mark the report status as "Revision Requested, Unsatisfactory or Satisfactory". Instructor main page has menu bar with sub-menus involving create summer training grading form, create student

work evaluation form, submit student work evaluation form, submit summer training grading form and questions.

#### **3.3.3.5.1. Create Student Summer Training Grading Form**

Summer Training grading form can be created from this page, and the required areas for this report can be filled for particular students. These forms can be saved to continue where instructor left or can be exported. In this page, instructor can view previously created forms.

#### **3.3.3.5.2. Create Student Work Evaluation Form**

In the final stage of Summer Training grading form (Part-C), instructors are expected to fill work evaluation forms regarding some criteria. This page aims to provide this functionality to instructors, they can save their evaluations to continue where they remained, or these forms can be exported.

#### **3.3.3.5.3. Submit Student Summer Training Grading Form**

This page is to submit summer training grading forms.

#### **3.3.3.5.4. Submit Student Evaluation Form**

This page is to submit student evaluation forms.

#### **3.3.3.5.5. Questions**

This screen is where instructors can see the questions coming from TAs and respond them.

### **3.3.3.6. Super User**

As stated in the beginning of this section, the main use of this user is to create profiles and assign their roles to them. In the main page of super user, there is an announcement screen and a button to create profiles by providing necessary information such as user name, password and role etc. The main page of super user also includes company list similar to student's home page. Super user home page has also sub-menus to edit company list and delete profiles.

#### **3.3.3.6.1. Edit Company List**

This screen is to add or delete a company from company table, similar functionality for what it has in department secretary and dean view.

### 3.3.3.6.2. Delete Profiles

Super user is also authorized to delete existing profiles by providing necessary information such as user name and role of user.

### 3.3.4. Announcements

By careful reading, how announcement system works in InternHub can be understood from above. Nonetheless, summarizing the design choice for announcements will be appropriate. Announcements are visible to all roles of InternHub in their home pages, chronologically ordered. Yet, announcement can only be made by department secretary or dean related to topics requiring urgent action or found important.

### 3.3.5. Track of Reports

Track of reports can be done by three roles which are instructor, TA, and student. Instructors can see the submission status as “Waiting Submission, Waiting Prerevision or Pre-reviewed”. For pre-reviewed ones, they can give their feedback since initial check of report by TA is complete.

Students can track the status of their report as “No submission (starting state, no submission box is available), Waiting Submission (if they did not submit), Waiting Prerevision (if they submit, but pre-check is not made), Under Evaluation (if pre-revision is made but instructor does not evaluate the report), Revision Requested (if another iteration is asked by instructor), Satisfactory (if report is found sufficient) and Unsatisfactory (if report found insufficient)”

TA can track the status of report as “No submission (starting state, no submission box is available), Waiting Submission (if they did not submit) or Submitted” to prereview.

### 3.3.6. Communication

Communication is available between following pairs (=> denotes one directional communication, and <=> denotes bidirectional communication):

- **(Student <=>TA):** Students can ask their questions to TAs and TAs can respond them.
- **(Student <= Instructor):** Student can view feedback given by instructor from the appropriate menu.
- **(TA <=> Instructor):** TAs can ask their questions and instructors can respond them.

- **(Student  $\Leftrightarrow$  Secretary):** Students can apply for company approval validations or company request and secretary may either accept or reject them.

### 3.3.7. Forms

Through InternHub, students can send three (3) forms involving company approval validation application form, company evaluation form and company request form, all of which are posted to secretary.

Instructors can submit two forms for each student onto the system including Student Summer Training Grading Form and Student Evaluation Form. These forms can be viewed by the dean and the department secretary.

## 3.4. Non-functional Requirements

### 3.4.1. Usability

Usability is a crucial aspect of the InternHub project, as it aims to enhance the internship report process experience. The system must offer a clear and comprehensible interface, especially for the instructors, and enable students to carry out their tasks smoothly via a user-friendly digital platform. To achieve this:

- Key attributes, such as uploading a firm-approval form or internship report, can be done through a single button click.
- The coloring of form statuses will be consistent, to give an example, if the form is rejected, it will appear as red, and if it is accepted, it will appear green.
- A responsive design approach will be used to ensure that InternHub fits the screen size of various devices used by the users (i.e., 1024x768, 1920x1080, and more).
- Company lists and student lists can be easily scrolled to see each of them.
- InternHub will be in a simple design for each user, as each user will only see the necessary tabs for him/her.

### 3.4.2. Reliability

Reliability is a critical non-functional requirement for InternHub due to the importance of managing the internship report process without any errors. Therefore, the system must function reliably and meet all user expectations. To achieve this:

- InternHub will have a minimum uptime rate of 95%, which can be measured and tracked through insights provided by the cloud provider, such as AWS.
- Due to the importance of the reports for InternHub, database backups will be taken every 12 hours to prevent any potential data loss.

### 3.4.3. Security/Safety

The system contains confidential personal information about students, and it is imperative to ensure that it is kept private and safeguarded from unauthorized access.

- To maintain the privacy of students, only other privileged users will have access to limited information of students, such as names, departments, student IDs, and email addresses.
- To protect student passwords, they will be encrypted using the “BCrypt” hashing algorithm and stored in the database after encryption.
- Each student is permitted to register only one account in the system, which is verified against their Bilkent University email address.
- During sign-up, email authentication will be sent to students to verify their true identity. This process ensures that students cannot sign up on behalf of others.

### 3.4.4. Performance

The goal of InternHub project is to make Bilkent Internship system easier and faster for all users.

- The system will be developed using modern web development technologies. These technologies are optimized for performance. For instance, Django has a fast-templating engine to generate HTML that will help us keep server response faster as possible.
- The report uploads will take few seconds.
- Sign in and sign-up functions including email verification for sign up will take few seconds.

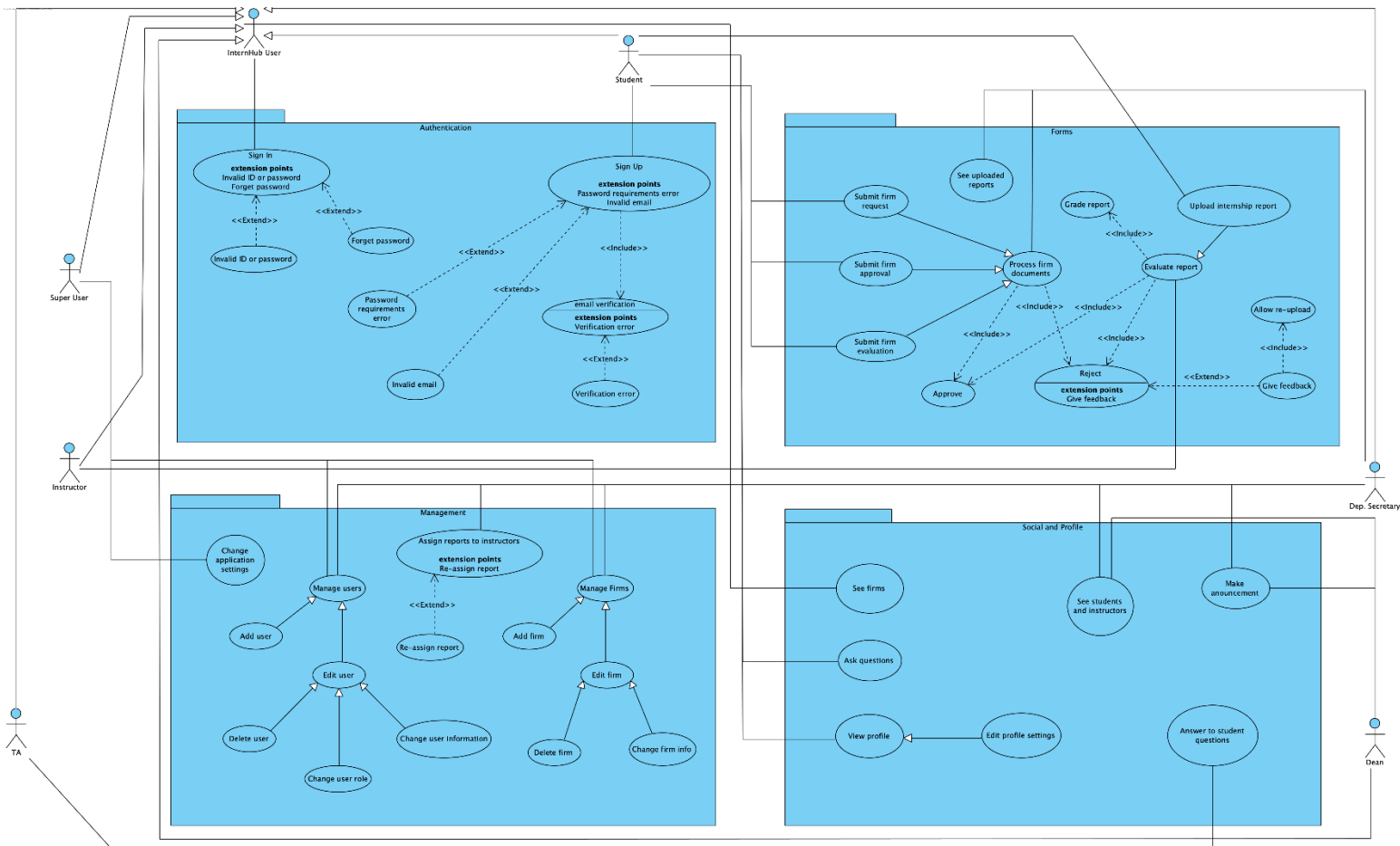
### 3.4.5. Maintainability

Maintainability is a crucial aspect of software projects, and the InternHub will be designed with maintainability.

- The diagrams provide a clear and concise representation of the system with all functionalities and makes it even easier to modify when needed.
- Also, for maintainability reasons InternHub will have good modular design, clear code documentation and version controls to provide system maintainability and possible updates in the future.
- The variation of user types makes it simpler to detect and solve problems specific to those types.
- Finally, the use of modern and enhanced programming languages and frameworks will help ensuring that system is maintainable in the future.

## 3.5. System Models

### 3.5.1. Use Case Model



## Authentication

User chooses sign up on the sign in page.

User fills the sign-up requirements — Bilkent email and password.

If the passed email is not a valid Bilkent email address,

3.1 “Invalid email address” message is displayed.

If the chosen password does not fulfill the requirements,

4.1 Password requirements are displayed.

Else, verification is sent to the email address and sign up is successful.

## **Forms**

### **Submit Firm Request**

**Actor:** Student

**Entry condition:** Choosing Submit Firm Request option.

**Exit condition:** Completing (submitting the request) or canceling the process.

**Flow of events:**

User presses the “Submit Firm Request” button.

User fills the required fields for a new firm request.

User presses the “Submit” button to complete the request.

### **Submit Firm Approval**

**Actor:** Student

**Entry condition:** Choosing Submit Firm Approval option.

**Exit condition:** Completing (submitting the form) or canceling the process.

**Flow of events:**

User presses the “Submit Firm Approval” button.

User fills the required fields of the form for a firm approval process.

User presses the “Submit” button to submit the approval form.

### **Submit Firm Evaluation**

**Actor:** Student

**Entry condition:** Choosing Submit Firm Evaluation option.

**Exit condition:** Completing (submitting the evaluation) or canceling the process.

**Flow of events:**

User presses the “Submit Firm Evaluation” button.

User fills the required fields of the form for the firm evaluation.

User presses the “Submit” button to submit the evaluation form.

### **Process Firm Documents**

**Actor:** Dep. Secretary

**Entry condition:** Choosing Firm Documents option.

**Exit condition:** Returning to the main page.

**Flow of events:**

User chooses to evaluate firm documents.

User chooses which type of document to evaluate — firm request, firm approval, firm evaluation.

User rejects the form.

3.1 User gives feedback for the cause of rejection.

3.1.1 User allows a re-upload after feedback.

User approves the form.

### **See Uploaded Reports**

**Actor:** Dep. Secretary

**Entry condition:** Choosing Uploaded Reports option.

**Exit condition:** Returning to the main page.

**Flow of events:**

User presses the “Uploaded Reports” button.

A page with all uploaded reports is loaded.

User chooses the one to analyze.

### **Upload Internship Report**

**Actor:** Student

**Entry condition:** Choosing Upload Internship Report option.

**Exit condition:** Completing (uploading the report) or canceling the process.

**Flow of events:**

User presses the “Upload Internship Report” button.

User fills the required fields of the form for an Internship Report.

User presses the “Submit” button to submit the report.

### **Evaluate Reports**

**Actor:** Instructor

**Entry condition:** Choosing Evaluate Reports option.

**Exit condition:** Returning to the main page.

**Flow of events:**

User chooses to Evaluate Reports option.

A page with all reports assigned to the user is loaded.

User rejects the form.

3.1 User gives feedback for the cause of rejection.

3.1.1 User allows a re-upload after feedback.

User approves the form.



User grades the report.

## **Management**

### **Change Application Settings**

**Actor:** Super User

**Entry condition:** Choosing Evaluate Reports option.

**Exit condition:** Returning to the main page.

**Flow of events:**

User presses "Settings" button.

User changes the settings as desired.

User presses "Save" button to save the altered settings.

### **Add User**

**Actor:** Super User & Dep. Secretary

**Entry condition:** Choosing Manage Users option.

**Exit condition:** Returning to the main page or canceling the process.

**Flow of events:**

User presses "Add New User" button.

User fills the required information (name, surname, Bilkent ID, mail address, application role) for the new user to be added.

User presses "Add" button to add the new user into the system.

### **Delete User**

**Actor:** Super User & Dep. Secretary

**Entry condition:** Choosing Edit User option on Manage Users Menu.

**Exit condition:** Returning to the main page or canceling the process.

**Flow of events:**

User chooses a user to delete.

User presses "Delete" button to remove the user from the system permanently.

### **Change User Role**

**Actor:** Super User & Dep. Secretary

**Entry condition:** Choosing Edit User option on Manage Users Menu.

**Exit condition:** Returning to the main page or canceling the process.

**Flow of events:**

User chooses a user to change its application role.

User presses "Change Role" button to change the user's role.

A drop-down menu is displayed with the available roles on.

User chooses the new role from the drop-down menu.

User presses "Save" button to save the new role.

#### **Change User Information**

**Actor:** Super User & Dep. Secretary

**Entry condition:** Choosing Edit User option on Manage Users Menu.

**Exit condition:** Returning to the main page or canceling the process.

**Flow of events:**

User chooses a user to change its information.

User presses "Edit" button to change the user's information.

User makes the desired alterations of the user's information.

User presses "Save" button to save the changes.

#### **Add Firm**

**Actor:** Super User & Dep. Secretary

**Entry condition:** Choosing Add Firm option on Manage Firms Menu.

**Exit condition:** Returning to the main page or canceling the process.

**Flow of events:**

User presses "Add New Firm" button.

User fills the required information (firm name, address, contact information, offered internship positions/fields) for the firm to be added.

User presses "Add" button to add the firm into the system.

#### **Delete Firm**

**Actor:** Super User & Dep. Secretary

**Entry condition:** Choosing Delete Firm option on Edit Firm Menu.

**Exit condition:** Returning to the main page or canceling the process.

**Flow of events:**

User chooses a firm to delete from the system.

User presses "Delete" button to remove the firm from the system permanently.

#### **Change Firm Information**

**Actor:** Super User & Dep. Secretary

**Entry condition:** Choosing Change Firm Info option on Edit Firm Menu.

**Exit condition:** Returning to the main page or canceling the process.

**Flow of events:**

User chooses a firm to change its information.

User presses "Edit" button to change the firm's information.

User makes the desired alterations of the firm's information.

User presses "Save" button to save the changes.

### **Assign Reports to Instructors**

**Actor:** Dep. Secretary

**Entry condition:** Choosing Assign Reports option.

**Exit condition:** Returning to the main page, completing or canceling the process.

**Flow of events:**

User sees the total count of all reports and the count of instructors/graders.

User presses "Assign" button which will distribute all reports to available instructors randomly and equally as possible.

User sees which report assigned to which specific instructor.

3.1 User may choose to compute the process one or more times with another button "Re-Assign" that will be available each time an assignment process held, and repeat it, again randomly and equally as possible

User presses "Save" button to complete the distribution.

### **Social and Profile**

#### **See Firms**

**Actor:** InternHub User

**Entry condition:** "Choosing Firms " option on the main page.

**Exit condition:** Returning to the main page.

**Flow of events:**

User presses the "Firms" button.

A page with all firms in the system is loaded.

User chooses a firm to see details about the firm.

#### **Ask Questions**

**Actor:** Student

**Entry condition:** Choosing Ask Question option on the main page.

**Exit condition:** Returning to the main page or canceling.

**Flow of events:**

User presses the "Ask Question" button.

User writes the question onto the given box.

User presses "Send" button to complete the process.

#### **View Profile**

**Actor:** Student

**Entry condition:** Choosing Profile option on the main page.

**Exit condition:** Returning to the main page.

**Flow of events:**

User presses the "Profile" button.

A page with the recorded information of the user is loaded.

2.1 User may choose to edit its information in the system.

## **See Students and Instructors**

**Actor:** Dean & Dep. Secretary

**Entry condition:** Choosing Students and Instructors option on the main page.

**Exit condition:** Returning to the main page.

**Flow of events:**

User presses the "Students and Instructors" button.

A page with the all students and instructors in the system is loaded.

## **Make Announcements**

**Actor:** Dean & Dep. Secretary

**Entry condition:** Choosing Make Announcement option on the main page.

**Exit condition:** Returning to the main page or canceling.

**Flow of events:**

User presses the "Make Announcement" button.

User writes the announcement onto the given box.

User presses "Send" button to make the announcement that will be visible by everyone.

## **Answer to Student Question**

**Actor:** TA (Teaching Assistant)

**Entry condition:** Choosing Questions option on the main page.

**Exit condition:** Returning to the main page or canceling.

**Flow of events:**

User presses the "Questions" button.

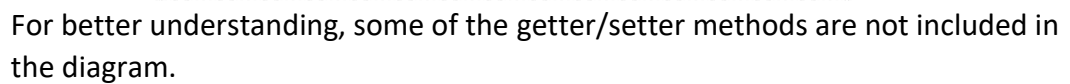
A page with the all questions asked by students is loaded.

User chooses a question to answer.

User writes the answer onto the given spot.

User presses "Send" button to answer the question.

Visual Paradigm Standard (Anil Ilaga (Bilkent Univ.))

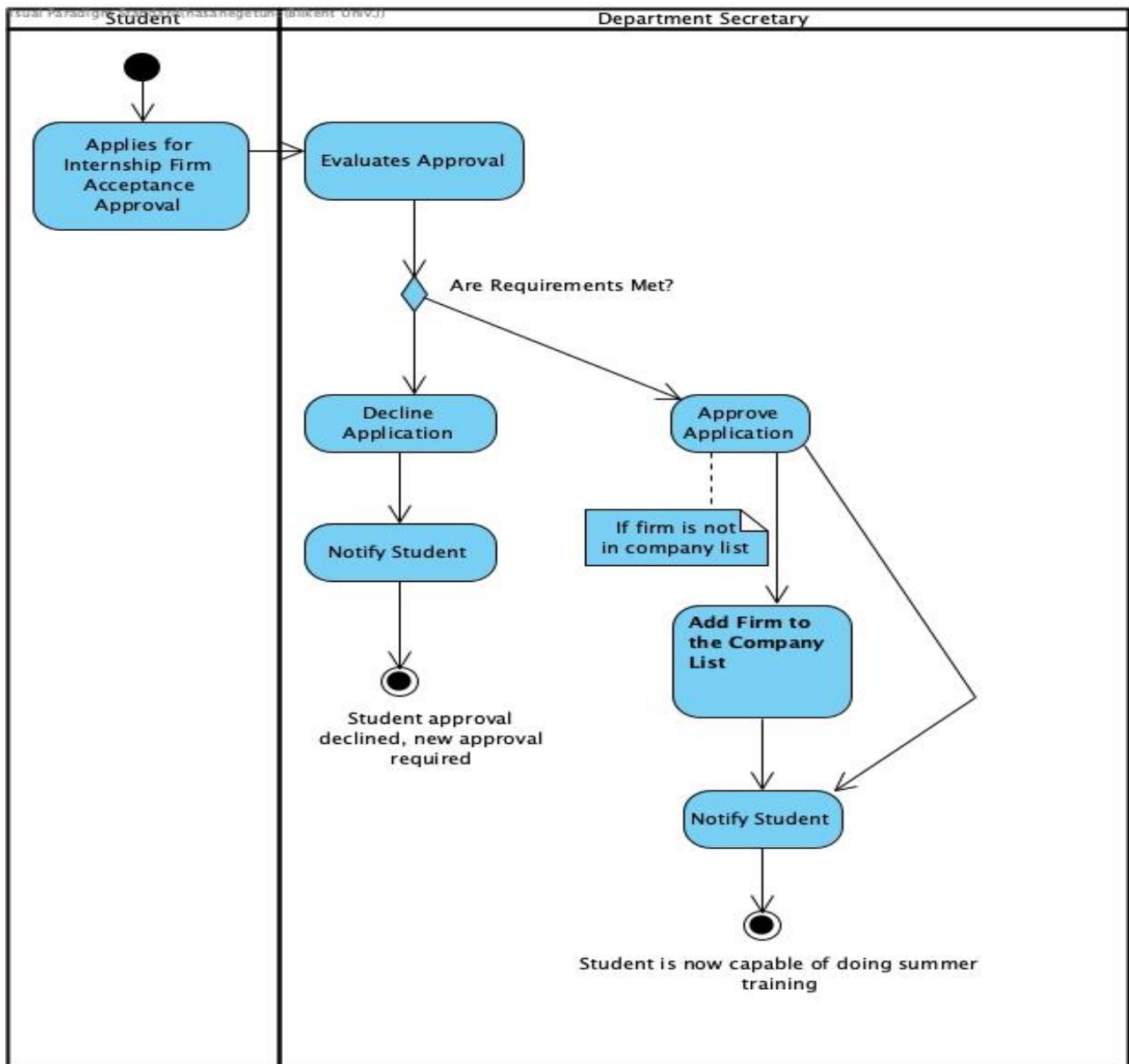


For better understanding, some of the getter/setter methods are not included in the diagram.

### 3.5.3. Dynamic Models

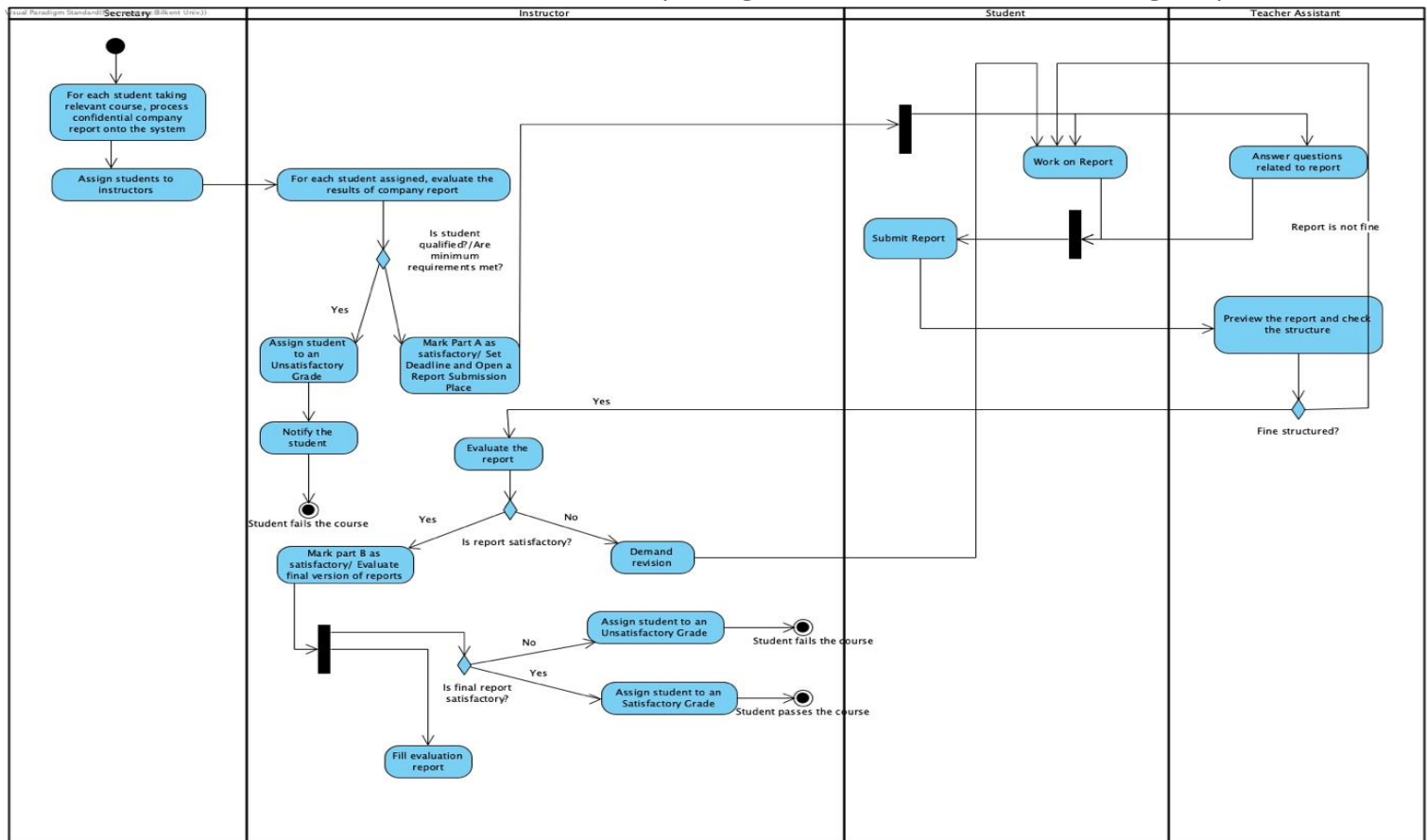
#### 3.5.3.1. Activity Diagram

##### 3.5.3.1.1. Activity Diagram for Company Approval Validation Application



As seen from the diagram, a student applies for approval of the acceptance document s/he received from the company. After the secretary check, this document can either be approved or declined. Approval means the student is now legitimately capable of doing summer training. Otherwise, the student has to submit another form that should be met the criteria searched by the secretary.

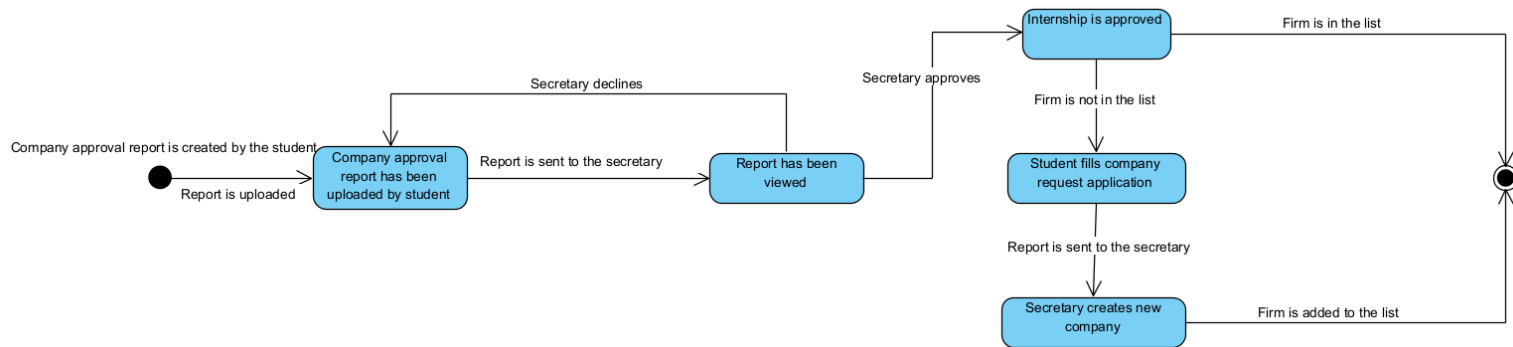
### 3.5.3.1.2. Activity Diagram for Summer Training Report



As illustrated in the figure given above, firstly secretary processes the confidential company evaluation form to the system. Following this action, instructor evaluates whether student is able to satisfactorily pass Part-A of Student Summer Training Grading Reports. If student does so, this part is marked as satisfactory and submission box is opened by instructor. Students work on their reports and submit them by collaborating with TA if there is a question to be answered. Reports are previewed by TA and if reports are found to be well structured or appropriate for instructor evaluation, then Part-B of Student Summer Training Grading Reports will take place. Having evaluated reports, instructor can demand revision of the report or mark Part-B as satisfactory. Provided that students pass Part-B, then final version of the report is evaluated and work evaluation form for each student will be filled by instructor. Depending on work evaluation form, instructor may assign either a Satisfactory or Unsatisfactory grade to students for XX-299/XX-399 Courses.

### 3.5.3.2. State Diagram

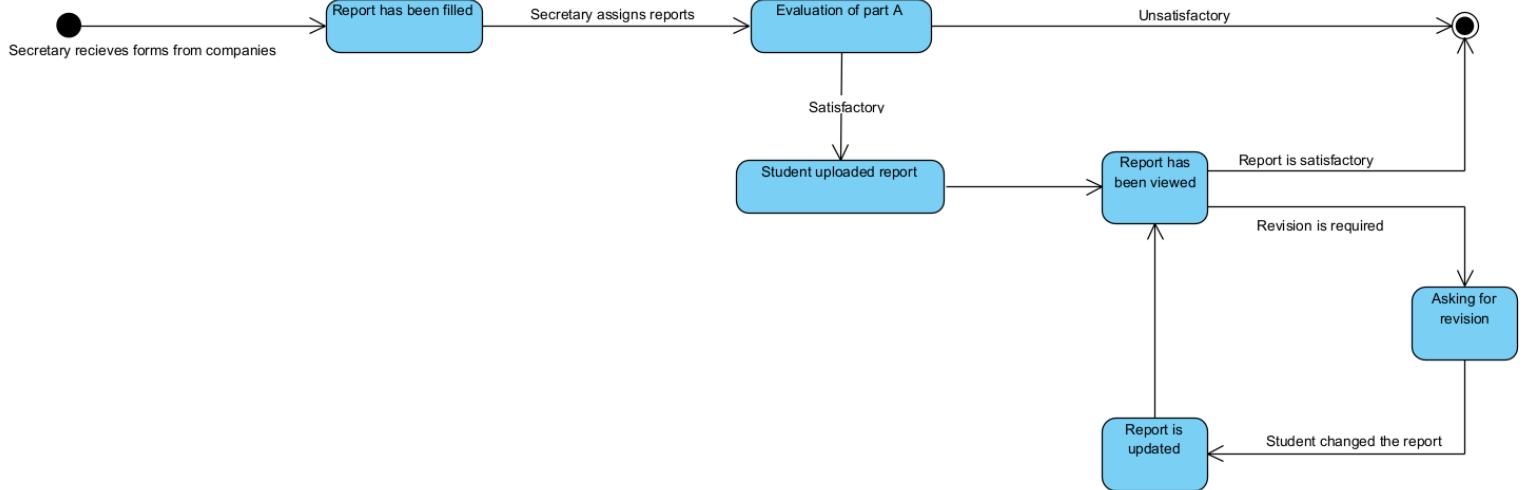
#### 3.5.3.2.1. State Diagram for Internship Approval



Initially, the company approval report should be created and uploaded to the system. After that, the department secretary views the report. If the report is not approved by the secretary, the student uploads a new report. After the report's approval, the student checks whether the firm is in the list. If the firm is in the list, the final state is reached. Otherwise, the student creates a company request application and uploads it to the system. The secretary views the request and adds the firm to the system.



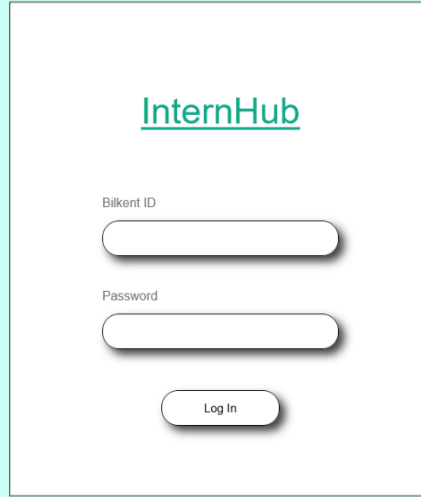
### 3.5.3.2.2. State Diagram for Internship Report Evaluation



In this state diagram, firstly secretary receives summer training grade forms from companies. Then the department secretary fills the reports to the system. After that the reports has been sent to the instructors of each student and instructors evaluate part A. If part A is unsatisfactory system reaches the final state in which report is graded. Otherwise, the student uploads the part B of the report and this report has also been sent to the instructor. In that part instructor can request a revision multiple time. When revision is required, changes are stated on the report by instructor and student uploads the new report until it is satisfactory.

### 3.5.4. User Interface

#### 1. Login page



A mockup of a login page for 'InternHub'. The page has a light blue background. In the center, there is a white rectangular box containing the login form. The form includes the 'InternHub' logo in teal, a 'Bilkent ID' label above a text input field, a 'Password' label above another text input field, and a 'Log In' button at the bottom.

InternHub

Bilkent ID


Password

Log In

# udent Page

Report

Feedback

Contact 

Companies

InternHub

Announcements

> Academic Calendar


It is extended. Internship period will be affected.

> Due Date


Last day for the apply an internship is 23.07.2023.

> Random Announcement

Anything can be written.

Alper Göçmen

Student



Deadlines


Report 1st Iteration

Due Date: 10 May 2023

## 2. Student Contact Page

Report

Feedback

Contact 

Companies

InternHub

Contact

Contact to secreter: [secreter@bilkent.edu.tr](mailto:secreter@bilkent.edu.tr)


Contact to secreter: [instructor@bilkent.edu.tr](mailto:instructor@bilkent.edu.tr)

From:


To:

Subject:


Attach a file



Attach vCard

Alper Göçmen

Student



Deadlines

Report 1st Iteration

Due Date: 10 May 2023

### 3. Student Feedbacks Page

Report

Feedback

Contact

Companies

InternHub

Feedbacks

> Feedback of 1st Iteration

View

> Feedback of 2nd Iteration

View

Alper Göçmen  
Student

Deadlines

Report 1st Iteration

Due Date: 10 May 2023

### 4. Student Feedback View Page

Report

Feedback

Contact

Companies

InternHub

Feedback of 1st iteration

Your report

What is Lorem Ipsum?

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

Why do we use it?

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of using Lorem Ipsum is that it has a more-or-less normal distribution of letters, as opposed to using 'Content here, content here', making it look like readable English. Many desktop publishing packages and web page editors now use Lorem Ipsum as their default model text, and a search for 'lorem ipsum' will uncover many web sites still in their infancy. Various versions have evolved over the years, sometimes by accident, sometimes on purpose (injected humour and the like).

Where does it come from?

Contrary to popular belief, Lorem Ipsum is not simply random text. It has roots in a piece of classical Latin literature from 45 BC, making it over 2000 years old. Richard McClintock, a Latin professor at Hampden-Sydney College in Virginia, looked up one of the more obscure Latin words, consectetur, from a Lorem Ipsum passage, and going through the cites of the word in classical literature, discovered the undoubtable source. Lorem Ipsum comes from sections 1.10.32 and 1.10.33 of "de Finibus Bonorum et Malorum" (The Extremes of Good and Evil) by Cicero, written in 45 BC. This book is a treatise on the theory of ethics, very popular during the Renaissance. The first line of Lorem Ipsum, "Lorem ipsum dolor sit amet..", comes from a line in section 1.10.32.

Instructor's comments

- problem about what is part ...

- you can change why do we use it part as...

- problem about what is part ...

- you can change why do we use it part as...

- problem about what is part ...

- you can change why do we use it part as...

Alper Göçmen  
Student

Deadlines

Report 1st Iteration

Due Date: 10 May 2023

## 5. Student Companies Page

InternHub

Report

Feedback

Contact

Companies

Companies

> Roketsan  
Ankara

> Havelsan  
Ankara

> Aselsan  
Ankara

> Other company  
Istanbul

> Other company  
Germany, Berlin

> Other company  
France, Paris

> Offer Company  
Offer a new company if it is not in the company list.

Offer

1 of 6 pages >

Alper Göçmen  
Student

Deadlines

Report 1st Iteration  
Due Date: 10 May 2023

## 6. Student Offering Company Page

InternHub

Report

Feedback

Contact

Companies

Offering Company

Company Name:

Grass Technology

Location:

Ankara, Turkey

Brief Information:

Tech company which makes websites for customers, located in Cyberpark.

Send it to Secretary

Alper Göçmen  
Student

Deadlines

Report 1st Iteration  
Due Date: 10 May 2023

## 7. Student Report Page

InternHub

Report

Feedback

Contact

Companies

Report

> Upload a report (for the first time)

Download

Upload

Uploaded report: **AlperGocmenReport.pdf**

Under Evaluation

Download

> Upload a revised version of your report (for any iteration)

Download

Upload

Last version of uploaded report:

Download

Alper Göçmen

Student

Deadlines

Report 1st Iteration

Due Date: 10 May 2023

## 8. Instructor Page

InternHub

Student List

Contact

Announcements

> Academic Calendar

It is extended. Internship period will be affected.

> Due Date

Last day for the apply an internship is 23.07.2023.

> Random Announcement

Anything can be written.

Eray Tüzün

Instructor

Deadlines

Report of Alper Göçmen

Due Date: 10 May 2023

Report of H. Ege Tunç

Due Date: 21 May 2023

Report of Sarper A. Bakır

Due Date: 11 March 2023

Report of Deniz T. Onguner

Due Date: 13 May 2023

Report of Anıl İlağa

Due Date: 15 May 2023

9. Instructor Student List Page

Student List

Contact

Student List

> Alper Göçmen

CS299

Evaluate Report

> H. Ege Tunç

CS299

Evaluate Report

> Sarper A. Bakır

CS299

Evaluate Report

> Deniz T. Onguner

CS299

Evaluate Report

> Anıl İlağa

CS299

Evaluate Report

> Other Student

CS399

Evaluate Report

> Other Student

CS399

Evaluate Report

1 of 3 pages

>

Eray Tüzün

Instructor

Deadlines

Report of Alper Göçmen

Due Date: 10 May 2023

Report of H. Ege Tunç

Due Date: 21 May 2023

Report of Sarper A. Bakır

Due Date: 11 March 2023

Report of Deniz T. Onguner

Due Date: 13 May 2023

Report of Anıl İlağa

Due Date: 15 May 2023

10. Instructor Evalute Report Page

Student List

Contact

Evaluate Report

Alper Göçmen's Report

What is Lorem Ipsum?

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

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Give Satisfactory

Request revision with made comments

Give Unsatisfactory

Make a comment

- problem about what is part ...

- you can change why do we use it part as...

- problem about what is part ...

- you can change why do we use it part as...

- problem about what is part ...

- you can change why do we use it part as...

Eray Tüzün

Instructor

Deadlines

Report of Alper Göçmen

Due Date: 10 May 2023

Report of H. Ege Tunç

Due Date: 21 May 2023

Report of Sarper A. Bakır

Due Date: 11 March 2023

Report of Deniz T. Onguner

Due Date: 13 May 2023

Report of Anıl İlağa


Due Date: 15 May 2023

## 11. Secretary Page

InternHub

Instructor List

Company Evaluation Forms

Contact 

Companies


Announcements

Make announcement


> Academic Calendar  
It is extended. Internship period will be affected.

> Due Date  
Last day for the apply an internship is 23.07.2023.

> Random Announcement  
Anything can be written.



İpek Sürücü  
Secretary




## 12. Secretary Companies Evaluation Forms Page

InternHub

Instructor List

Company Evaluation Forms


Contact 

Companies


Companies' Evaluation Forms

Download the pdf

Download the pdf



İpek Sürücü  
Secretary





### 13. Secretary Companies Page

InternHub

Instructor List

Company Evaluation Forms

Contact

Companies

Companies

Roketsan  
Ankara

Havelsan  
Ankara

Aselsan  
Ankara

Other company  
Istanbul

Other company  
Germany, Berlin

Other company  
France, Paris

See Company Offers  
See the students' company offers

Offerings

1 of 6 pages

>

İpek Sürücü  
Secretary

### 14. Secretary Company Offerings Page

InternHub

Instructor List

Company Evaluation Forms

Contact

Companies

Company Offerings

> Grass Technology  
Offered by Alper Göçmen

Details

> Green Technology  
Offered by H. Ege Tunç

Details

İpek Sürücü  
Secretary

## 15. Secretary Company Offering Approval Page

InternHub

[Instructor List](#)  
[Company Evaluation Forms](#)  
[Contact](#)   
[Companies](#)

Company Offerings

Company Name:

Grass Technology

Location:

Ankara, Turkey

Brief Information:

Tech company which makes websites for customers, located in Cyberpark

Offered by:

Alper Göçmen

Approve

Reject

İpek Sürücü  
Secretary

## 16. Secretary Instructor List Page

InternHub

Instructor List

Company Evaluation Forms

Contact

Companies

Instructors

>

Eray Tüzün  
CS

6 student assigned

See assigned students

>

Orhan Arıkan  
EE

15 student assigned

See assigned students

>

Other Instructor  
ME

20 student assigned

See assigned students

>

Other Instructor  
EE

3 student assigned

See assigned students

>

Other Instructor  
CS

0 student assigned

See assigned students

>

Other Instructor  
ME

5 student assigned

See assigned students

>

Other Instructor  
IE

11 student assigned

See assigned students

1 of 3 pages

>

İpek Sürücü


Secretary

## 17. Secretary Instructors' Assigned Students Page

InternHub

Instructor List

Company Evaluation Forms

Contact 

Companies

Assign new student from the student list

Students Assigned for Eray Tüzün

> Alper Göçmen  
CS299


> H. Ege Tunç  
CS299

> Sarper A. Bakır  
CS299


> Deniz T. Onguner  
CS299

> Anil İlağa  
CS299

1 of 3 pages >



İpek Sürücü  
Secretary




## 18. Secretary Assigning Students to Instructor Page

InternHub

Instructor List

Company Evaluation Forms

Contact 

Companies

Assign Students to Eray Tüzün

> Alper Göçmen  
CS299

> H. Ege Tunç  
CS299


> Sarper A. Bakır  
CS299

> Deniz T. Onguner  
CS299

> Anil İlağa  
CS299

> Other Student  
CS399


> Other Student  
CS399




Already Assigned to other instructor

☐

Already Assigned to this instructor



Already Assigned to this instructor



Already Assigned to this instructor


☐

Already Assigned to this instructor


☐

Already Assigned to this instructor

1 of 3 pages >



İpek Sürücü  
Secretary



19. Dean Page

InternHub

Instructor List

Student Statistics

Contact

Companies

Announcements

Make announcement

> Academic Calendar

It is extended. Internship period will be affected.

> Due Date

Last day for the apply an internship is 23.07.2023.

> Random Announcement

Anything can be written.

Orhan Arıkan

Dean

20. Dean Student Statistics Page

InternHub

Instructor List

Student Statistics

Contact

Companies

Student Statistics

- CS %23

- EE %27

- ME %26

- IE %24

Orhan Arıkan


Dean

# 21.General Profile Page

InternHub

Report

Feedback

Contact 

Companies

Profile

Name - Surname:

Alper Göçmen

Grade:

3rd Grade

Course Taken:

CS299

Assigned Instructor:

Eray Tüzün


Extra Information:

Make Changes

Deadlines

Report 1st Iteration

Due Date: 10 May 2023



Alper Göçmen

Student

