

Traineeship Application

Sprint Report

Χαλαϊδόπουλος Μιλτιάδης ΑΜ 5384

Ηλιάκης Ηλίας ΑΜ 5228

VERSIONS HISTORY

Date	Version	Description	Author
10/3/2025	0.1	Created use cases/Use Case diagram	Chalaidopoulos M.
16/4/2025	0.2	Addition of the package diagram	Chalaidopoulos M.
20/5/2025	1.0	Addition of the rest of the design	Chalaidopoulos M.
24/5/2025	1.1	Final Changes	Hliakhs Hlias

1 Introduction

This document provides information concerning the project.

1.1 Purpose

The purpose of the report is to give a rough schedule and the concept behind the creation of the traineeship manager web app, it also contains information about its design

1.2 Document Structure

The rest of this document is structured as follows. Section 2 describes our Scrum team and specifies this Sprint's backlog. Section 3 specifies the main design concepts for this release of the project.

2 Scrum team and Sprint Backlog

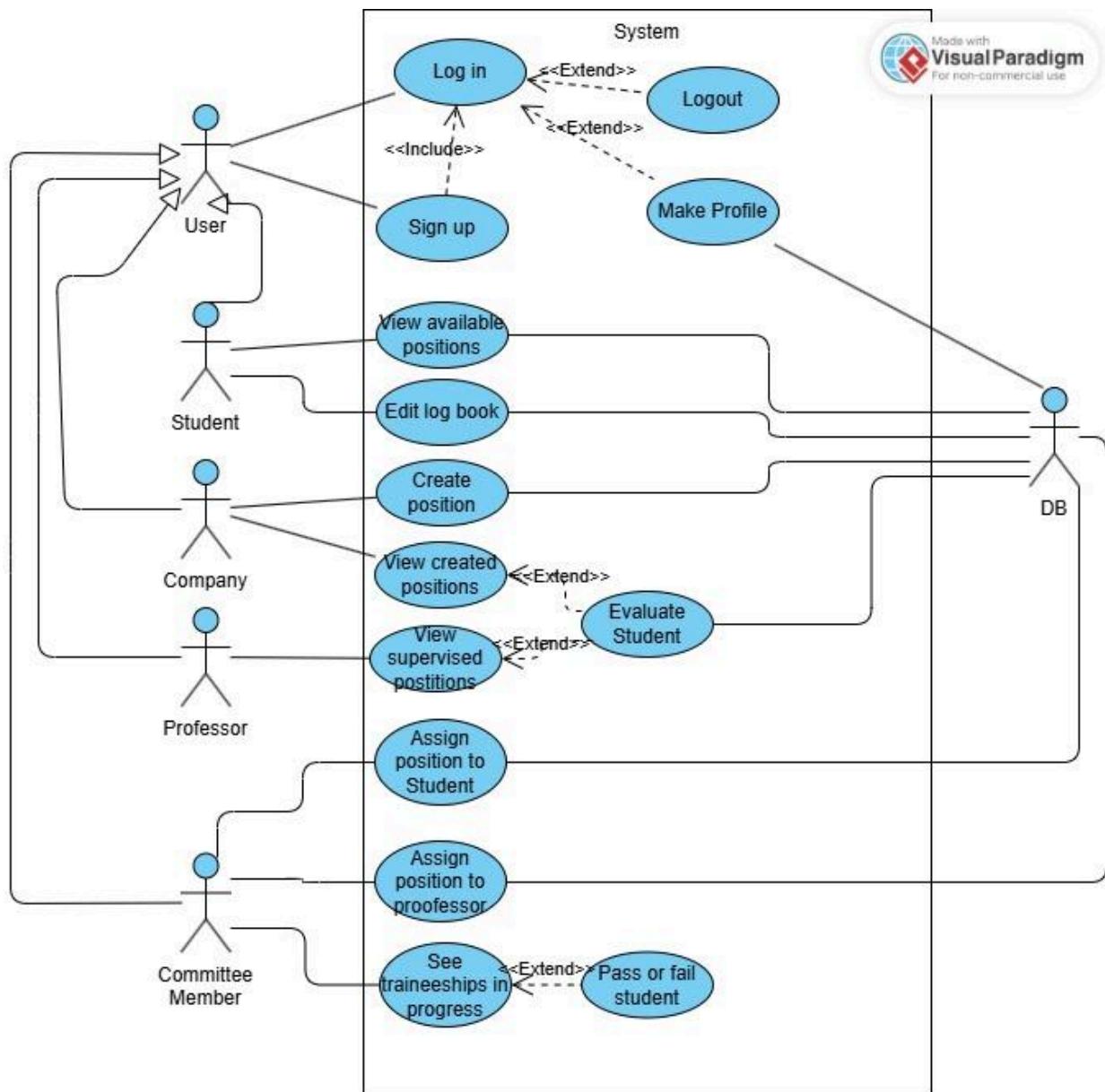
2.1 Scrum team

Product Owner	—
Scrum Master	Chalaidopoulos Miltiadhs
Development Team	Chalaidopoulos Miltiadhs, Hliakhs Hlias

2.2 Sprints

Sprint No	Begin Date	End Date	Number of weeks	User stories US#
1	27/2/2025	3/3/2025	1	None
2	8/3/2025	16/3/2025	1	1,2,3
3	10/4/2025	29/4/2025	3	4,5,6,7,8,9,10,11,12,13,14,15
4	2/5/2025	16/5/2025	2	16,17,18,19,20,21

3 Use Cases



3.1 <Use Case 1> Register

Use case ID	UC01
Actors	Student , Company ,Professor , Committee Member
Pre conditions	Actor doesn't have an account already
Main flow of events	<ol style="list-style-type: none">1. Actor Clicks on register2. Actor gives name and password3. Actor chooses role4. Actor clicks on register5. System saves the new user with encrypted password
Alternative flow 1	If there is a user with new user's username a message is shown
Alternative flow 2	if user does not fill a password or username a message is shown
Post conditions	User created an account he can log into

3.2 <Use Case 2> Login

Use case ID	UC02
Actors	Student , Company ,Professor , Committee Member
Pre conditions	Actor already has an account
Main flow of events	<ol style="list-style-type: none">1. Actor Clicks on register2. Actor gives name and password3. Actor clicks on register4. Actor is redirected to his dashboard
Alternative flow 1	If password or username is incorrect a message is shown
Alternative flow 2	if user does not fill password or username a message is shown
Post conditions	User is browsing on the right dashboard

3.3 <Use Case 3> Logout

Use case ID	UC03
Actors	Student , Company ,Professor , Committee Member
Pre conditions	Actor is already logged in
Main flow of events	<ol style="list-style-type: none">1. Actor Clicks on logout2. User exits his account
Post conditions	User is redirected to the main menu

3.4 <Use Case 4> Edit Profile

Use case ID	UC04
Actors	Student , Company ,Professor
Pre conditions	User is logged into an account
Main flow of events	<ol style="list-style-type: none">1. Actor Clicks on edit profile2. Actor can edit the details of his profile according to what type of user he is3. Actor clicks on Save4. Systems saves actors profile and overrides previous data if they existed5. User gets redirected back to the dashboard
Alternative flow 1	If the user doesn't want to save new data he can click back and go back to the dashboard
Post conditions	User created an account the he can log into

3.5 <Use Case 5> View Available Positions

Use case ID	UC05
Actors	Student
Pre conditions	Actor is connected as a student

Main flow of events	<ol style="list-style-type: none"> 1. Student Clicks on “View available positions” 2. User gets redirected to a site with a list of the positions that are not taken
Alternative flow 1	If there are no available positions an empty list is shown to the student
Post conditions	Student has seen the available traineeship positions

3.6 <Use Case 6> Update Logbook

Use case ID	UC06
Actors	Student
Pre conditions	Student is already taking place in an traineeship
Main flow of events	<ol style="list-style-type: none"> 1. Actor clicks on View log book 2. Actor writes his progress 3. Actor clicks on save 4. The system updates the logbook for this traineeship 5. The system displays the logbook as well as the date each entry was written
Alternative flow 1	If the Student does not have a traineeship assigned to him a message is shown and he is unable to edit the log book
Alternative flow 2	If the user chooses to, he can delete the final entry or all the entries from his log book by pressing a button.
Post conditions	System has recorded the progress of said student

3.7 <Use Case 7> Set Internship Intention

Use case ID	UC07
Actors	Student
Pre conditions	Actor is logged in as a student
Main flow of events	<ol style="list-style-type: none"> 1. The student clicks on his profile 2. The student clicks on the checkbox looking for traineeship

	<p>3. The student clicks on save</p> <p>4. System updates the correct field with students choise</p>
Post conditions	The looking for traineeship field is updated

3.8 <Use Case 8> Create Position

Use case ID	UC08
Actors	Company
Pre conditions	Actor is logged in as a company
Main flow of events	<p>1. Actor Clicks on add a new position</p> <p>2. Actor enters information about the new position</p> <p>3. Actor clicks on save</p> <p>4. the System creates a new traineeship position with company's specifications</p>
Post conditions	A new traineeship position is added to the database

3.9 <Use Case 9> View Created Positions

Use case ID	UC09
Actors	Company
Pre conditions	Actor is logged in as a company
Main flow of events	<p>1. Actor Clicks on "View available position" or "View assigned positions"</p> <p>2. User gets redirected to a new web page with a list of the traineeship positions of his company</p> <p>2.1. If he clicked on View available position the list contains the positions of his company that are yet to be assigned to a Student</p> <p>2.2. If he clicked on View assigned positions the list contains the positions that are already assigned to a Student</p>
Post conditions	The company can see the positions that they have created

3.10 <Use Case 10> Evaluate Student

Use case ID	UC10
Actors	Company ,Professor
Pre conditions	A student is already assigned to a position
Main flow of events	<ol style="list-style-type: none"> 1. Actor clicks on evaluate in a traineeship position from the list of traineeships 2. Actor fills in the form of the evaluation 3. Actor clicks on save 4. The evaluation is saved by the system
Post conditions	An evaluation for the student is created and saved

3.11 <Use Case 11> View Supervised Positions

Use case ID	UC11
Actors	Professor
Pre conditions	Actor is logged in as a Professor
Main flow of events	<ol style="list-style-type: none"> 1. Actor Clicks on View supervised positions 2. The list of supervised positions is shown to the professor
Alternative flow 1	If the professor has no supervised positions assigned to him an empty list is shown
Post conditions	The professor can see the traineeship positions that he supervises

3.12 <Use Case 12> Assign Position to Student

Use case ID	UC12
Actors	Committee Member
Pre conditions	Actor is logged in as a traineeship committee member
Main flow of events	<ol style="list-style-type: none"> 1. Actor Clicks on “Show students looking for traineeship” 2. The system redirects him to a web page with all students looking for traineeship 3. Actor clicks on “recommended positions” for a specific student

	<p>4. The system redirects him to a page with traineeships positions that the student can be assigned to. The positions are sorted with the most suitable at the top and the list suitable at the bottom</p> <p>5. Actor chooses one of the positions</p> <p>6. The system does the necessary changes so that the position is assigned to the student</p>
Post conditions	The student has a traineeship position assigned to him

3.13 <Use Case 13> Assign Professor To Traineeship

Use case ID	UC13
Actors	Committee Member
Pre conditions	Actor is logged in as a traineeship committee member
Main flow of events	<p>1. Actor Clicks on “Assign professors”</p> <p>2. The system redirects him to a web page with all the professors</p> <p>3. Actor clicks on “Find Traineeship” for a specific professor</p> <p>4. The system redirects him to a page with traineeship positions that the professor can supervise. The positions are sorted with the most suitable at the top and the list suitable at the bottom</p> <p>5. Actor chooses one of the positions</p> <p>6. The system does the necessary changes so that the position is assigned to the professor</p>
Post conditions	The professor now supervises a traineeship position

3.14 <Use Case 14> See Traineeships in progress

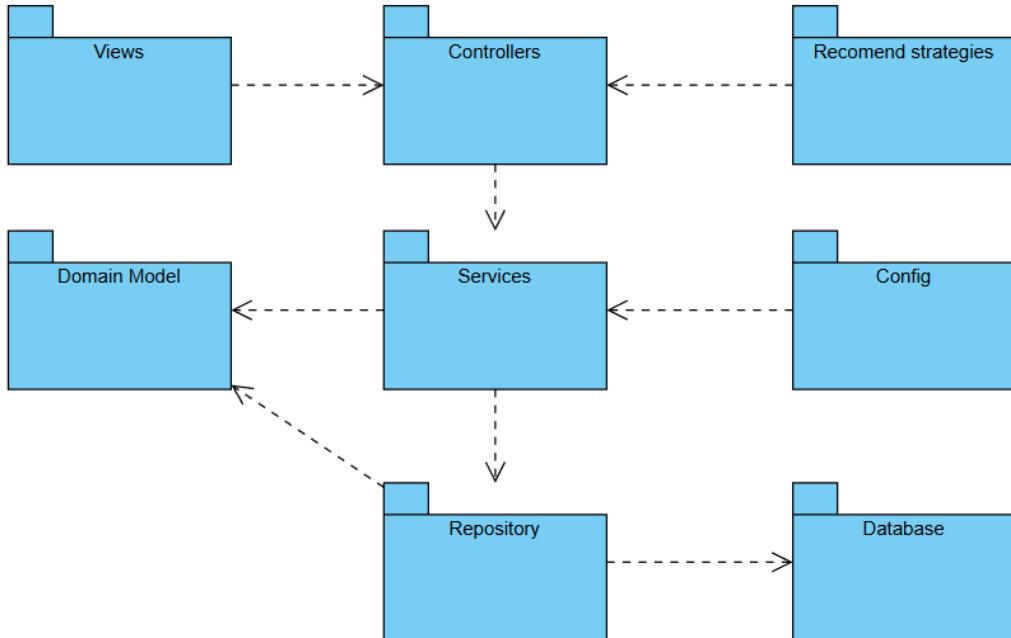
Use case ID	UC14
Actors	Committee Member
Pre conditions	Actor is logged in as a traineeship committee member
Main flow of events	<p>1. Actor Clicks on “show in progress traineeships”</p> <p>2. The system redirects him to a list of active traineeships</p>
Post conditions	User is able to see all the traineeship positions that are currently active

3.15 <Use Case 15> Pass or Fail Student

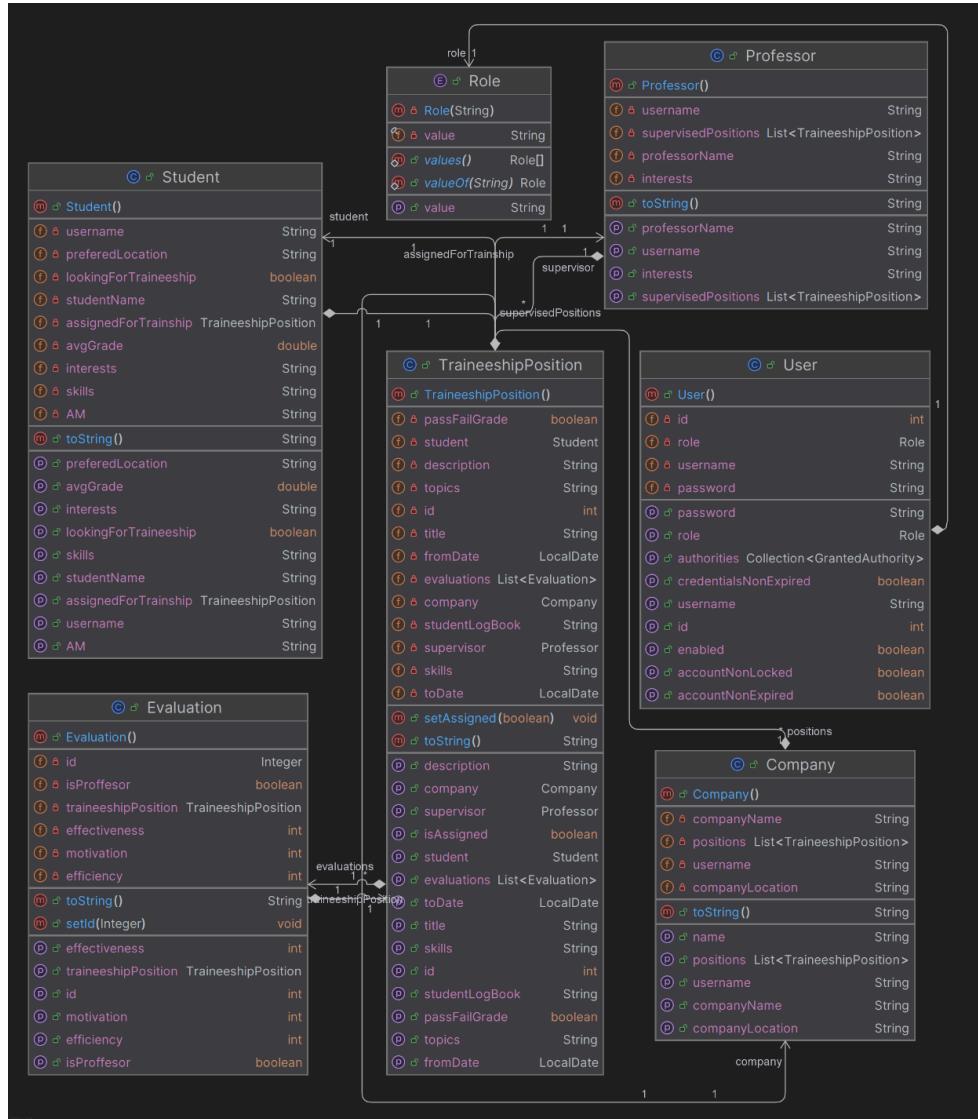
Use case ID	UC15
Actors	Committee Member
Pre conditions	Committee Member is at the traineeships page
Main flow of events	<ol style="list-style-type: none">1. Actor Clicks on “more” for a specific in progress traineeship2. The system redirects him to a new page with more details about the traineeship3. The Committee Member sees the evaluations of the student and his logbook and determines whether or not he passed or failed by clicking on one of the checkboxes4. Users clicks save5. The system saves the grade of the student and informs him about it
Post conditions	The traineeship has been completed

4 Design

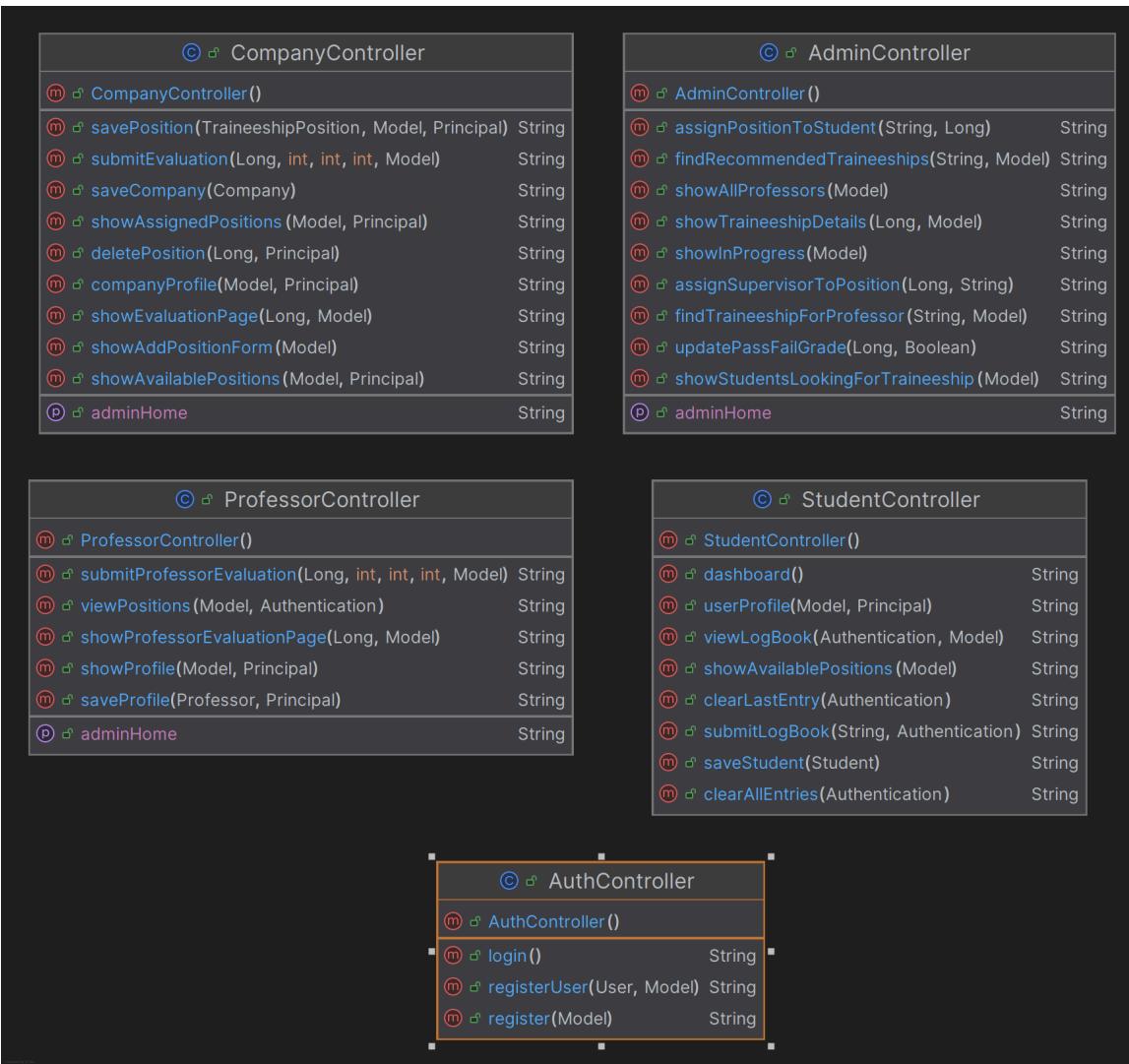
4.1 Architecture - Package diagram



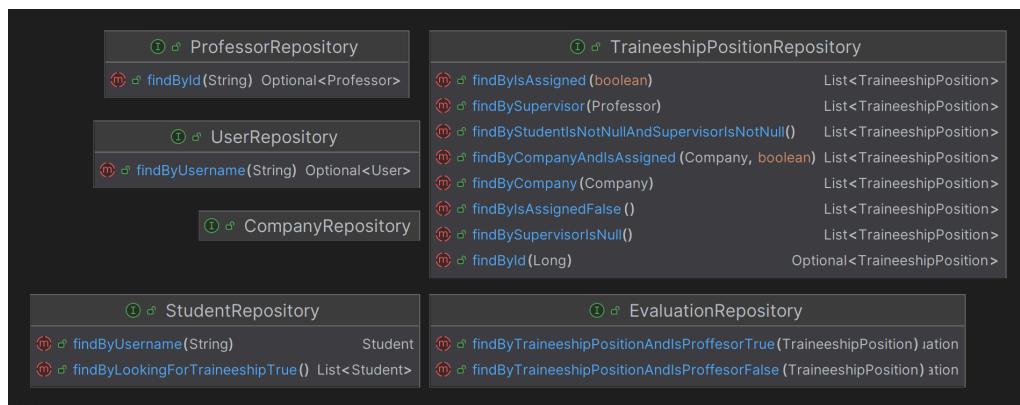
4.2 Design



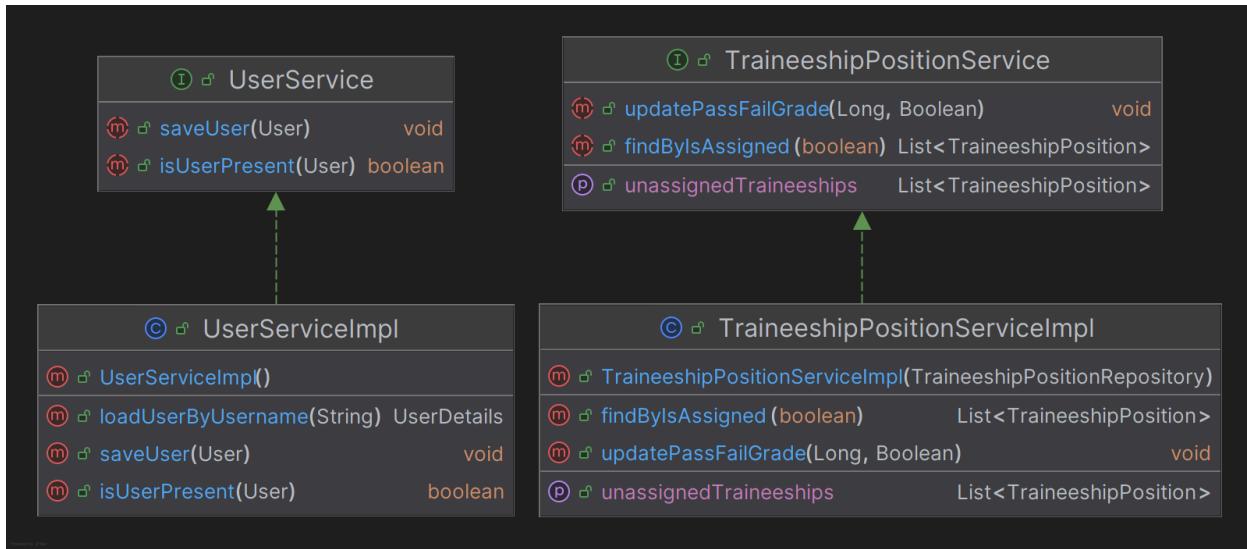
Domain model package diagram



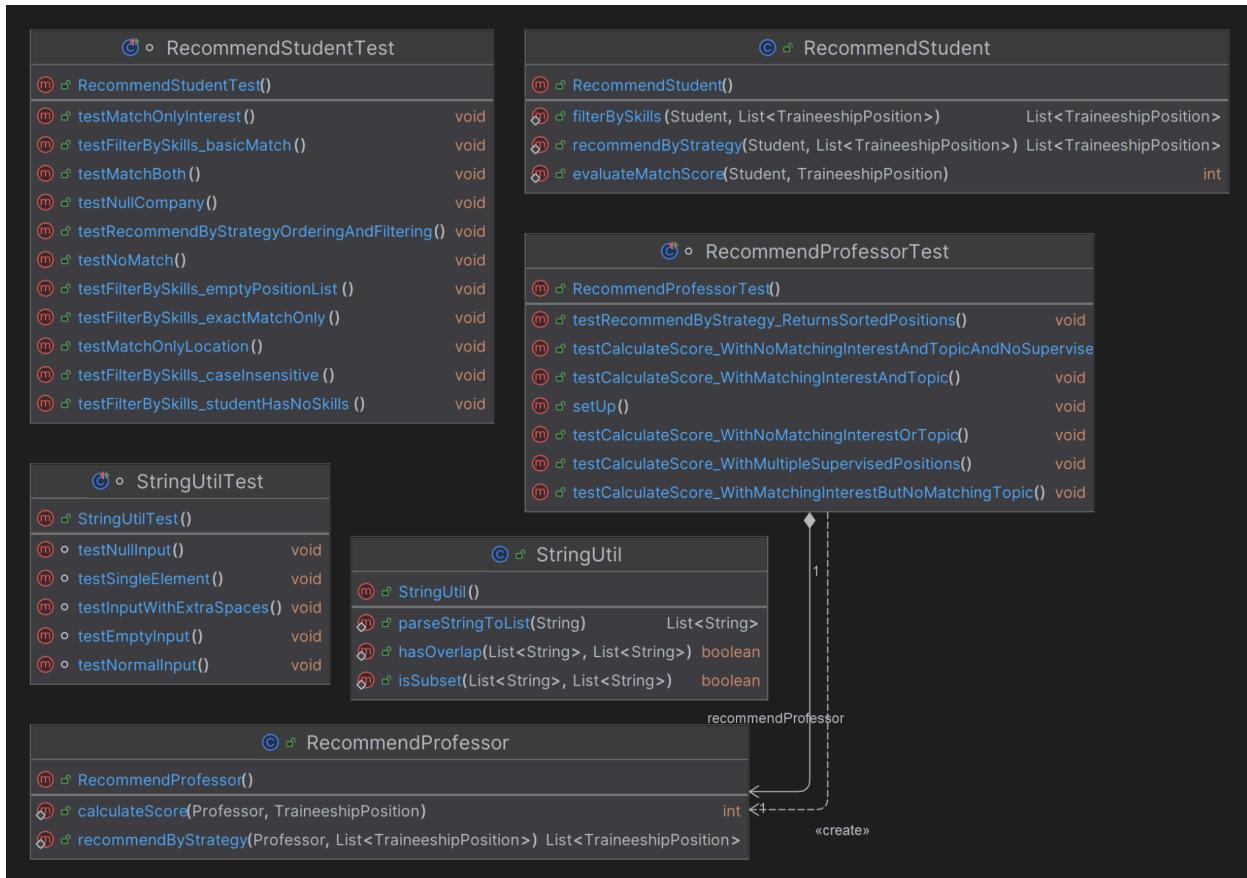
Controllers package



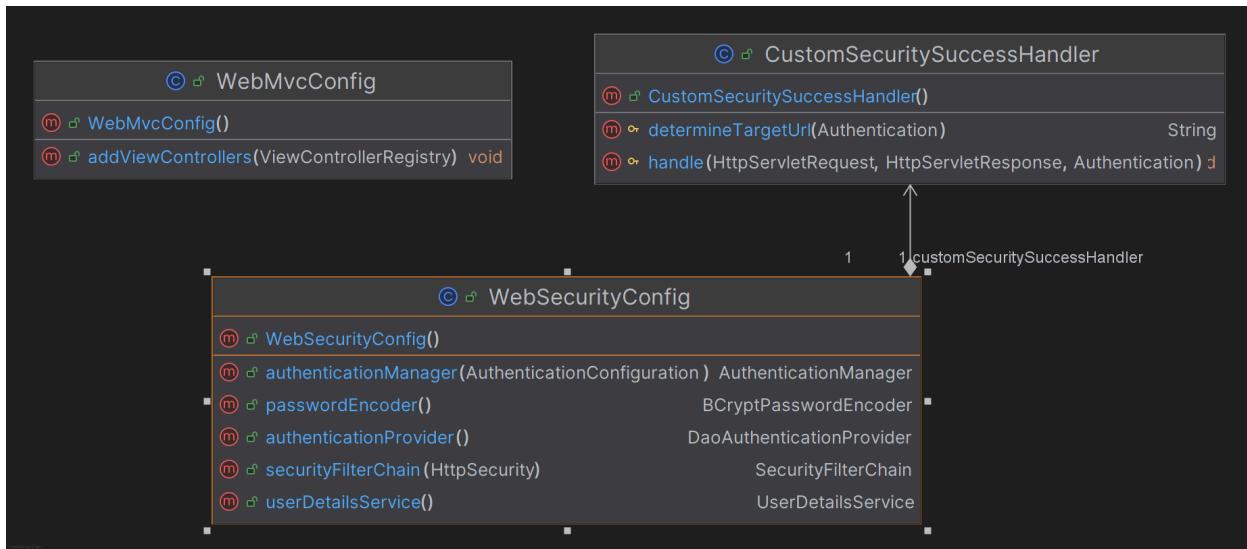
Repository Package



Service package



recommend strategies package



Config Package

Class Name: Student	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> Creating student Objects 	<ul style="list-style-type: none"> TraineeshipPosition

Class Name: Professor	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> Creating professor objects 	<ul style="list-style-type: none"> TraineeshipPosition

Class Name: Company	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> Creating company objects 	<ul style="list-style-type: none"> TraineeshipPosition

Class Name: User	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> Creates different types of users 	<ul style="list-style-type: none"> Role

Class Name: Traineeship Position	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Creates traineeship positions for the students 	<ul style="list-style-type: none"> ▪ Professor ▪ Company ▪ Student ▪ Evaluation

Class Name: StudentRepository	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Executes queries for Student ▪ Finds students by username ▪ finds students who look for traineeship 	<ul style="list-style-type: none"> ▪ Student ▪ Jpa Repository

Class Name: CompanyRepository	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Executes queries for company 	<ul style="list-style-type: none"> ▪ Company ▪ Jpa Repository

Class Name: ProfessorRepository	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Executes queries for Professor ▪ Finds professor by username 	<ul style="list-style-type: none"> ▪ Professor ▪ Jpa Repository

Class Name: TraineeshipPositionRepository	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Executes queries for Traineeen. position ▪ Searches based on Company ▪ Searches based on Supervisor ▪ Searches based on Id 	<ul style="list-style-type: none"> ▪ TraineeshipPosition ▪ Company ▪ Professor ▪ Student

	<ul style="list-style-type: none"> ▪ JpaRepository
--	---

Class Name: UserRepository	
<p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Executes queries for user ▪ Finds users by username 	<p>Collaborations:</p> <ul style="list-style-type: none"> ▪ User ▪ Jpa Repository

Class Name: EvaluationRepository	
<p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Executes queries for Evaluation ▪ Find's Evaluations based on if they were done by a professor 	<p>Collaborations:</p> <ul style="list-style-type: none"> ▪ Evaluation ▪ TraineeshipPosition ▪ JpaRepository

Class Name: StudentController	
<p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Show's students dashboard ▪ Edit's student profile ▪ Shows available positions ▪ Edit's student logbook 	<p>Collaborations:</p> <ul style="list-style-type: none"> ▪ StudentRepository ▪ TraineeshipPositionRepository ▪ Html pages from /templates/user

Class Name: ProfessorController	
<p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Show's professors dashboard ▪ Edit's professor's profile ▪ Show's supervising positions ▪ Makes Position's evaluations 	<p>Collaborations:</p> <ul style="list-style-type: none"> ▪ ProfessorRepository ▪ TraineeshipPositionRepository ▪ EvaluationRepository ▪ Html pages from /templates/professor

Class Name: CompanyController	
Responsibilities:	Collaborations:

<ul style="list-style-type: none"> ▪ Shows Company's dashboard ▪ Edit's company's profile ▪ Makes new Traineeship positions ▪ Shows Company's positions ▪ Deletes positions ▪ Evaluates Students 	<ul style="list-style-type: none"> ▪ CompanyRepository ▪ TraineeshipPositionRepository ▪ EvaluationRepository ▪ Html pages from /templates/company
--	--

Class Name: AdminController	
<p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Shows committee's dashboard ▪ Show's students looking for traineeship ▪ Assigns students to traineeship ▪ Assigns supervising professors ▪ Show's ongoing traineeships ▪ Let's committee grade a student 	<p>Collaborations:</p> <ul style="list-style-type: none"> ▪ StudentRepository ▪ ProfessorRepository ▪ TraineeshipPositionRepository ▪ TraineeshipPositionService ▪ RecommendStudent ▪ RecommendProfessor ▪ Html pages in /template/admin

Class Name: AuthController	
<p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Show's login page ▪ Show's sign up page ▪ Saves new users 	<p>Collaborations:</p> <ul style="list-style-type: none"> ▪ UserService ▪ User ▪ Html pages from /templates/auth

Class Name: TraineeshipPositionServiceImpl	
<p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Implements TraineeshipPositionService ▪ Finds unassigned traineeships ▪ Updates grade 	<p>Collaborations:</p> <ul style="list-style-type: none"> ▪ TraineeshipPositionRepository ▪ TraineeshipPosition

Class Name: TraineeshipPositionService (interface)	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Interface of TraineeshipPositionServiceImpl ▪ Finds unassigned traineeships 	<ul style="list-style-type: none"> ▪ TraineeshipPosition ▪ TraineeshipPositionServiceImpl

Class Name: UserServiceImpl	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Saves new users with an encrypted password ▪ Authenticates user with spring security 	<ul style="list-style-type: none"> ▪ UserRepository ▪ BCryptPasswordEncoder ▪ UserService ▪ User

Class Name: UserService (interface)	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Interface of UserServiceImpl ▪ Saves User ▪ Checks if User is present 	<ul style="list-style-type: none"> ▪ UserServiceImpl ▪ User

Class Name: StringUtil	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Converts String to list ▪ Checks if one list contains the other ▪ Checks for list overlap 	<ul style="list-style-type: none"> ▪ None

Class Name: RecommendStudent	
Responsibilities:	Collaborations:
<ul style="list-style-type: none"> ▪ Filters positions by skills ▪ Evaluates students position fitness 	<ul style="list-style-type: none"> ▪ Student ▪ TraineeshipPosition

<ul style="list-style-type: none"> ▪ Recommends a selection strategy 	<ul style="list-style-type: none"> ▪ Company ▪ StringUtil
---	---

Class Name: RecommendProfessor	
<p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Evaluates supervisors position fitness ▪ Recommends a selection strategy 	<p>Collaborations:</p> <ul style="list-style-type: none"> ▪ Professor ▪ TraineeshipPosition ▪ StringUtil