



ព្រះរាជាណាចក្រកម្ពុជា
ជាតិ សាសនា ព្រះមហាក្សត្រ

Software Engineering

Project : Student Internship Management System

Group: B2

| Name of Student | ID of Student | Score |
|-----------------|---------------|-------|
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Academic year 2025-2026

Progress Report 2

Name: SAM NANGALEX

Login System + Security

- Add form validation
- Add error message handling (wrong password)
- create custom AuthenticationSuccessHandler

```
@Controller
public class AuthController {

    @GetMapping("/login")
    public String loginPage(Model model, String error) {
        if (error != null) {
            model.addAttribute(attributeName: "error", attributeValue: "Invalid email or password");
        }
        return "/login";
    }
}
```

```
package project.demo.security;

import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.security.config.annotation.method.configuration.EnableMethodSecurity;
import org.springframework.security.config.annotation.web.builders.HttpSecurity;
import org.springframework.security.crypto.bcrypt.BCryptPasswordEncoder;
import org.springframework.security.crypto.password.PasswordEncoder;
import org.springframework.security.web.SecurityFilterChain;

@Configuration
@EnableMethodSecurity
public class SecurityConfig{

    @Bean
    public PasswordEncoder passwordEncoder(){
        return new BCryptPasswordEncoder();
    }
    @Bean
    public SecurityFilterChain securityFilterChain(HttpSecurity http) throws Exception{
        http
            .authorizeHttpRequests(auth ->
                auth.requestMatchers(...patterns: "/login").permitAll()
                .requestMatchers(...patterns: "/supervisor/").hasRole(role: "/SUPERVISOR")
                .anyRequest().authenticated()
            )
            .formLogin(form -> form
                .loginPage(loginPage: "/login")
                .loginProcessingUrl(loginProcessingUrl: "/login")
                .usernameParameter(usernameParameter: "email")
                .passwordParameter(passwordParameter: "password")
                .defaultSuccessUrl(defaultSuccessUrl: "/home", alwaysUse: true)
                .permitAll()
            );
        return http.build();
    }
}
```

```

package project.demo.service;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.security.core.userdetails.UserDetails;
import org.springframework.security.core.userdetails.UserDetailsService;
import org.springframework.security.core.userdetails.UsernameNotFoundException;
import org.springframework.stereotype.Service;
import project.demo.entity.User;
import project.demo.repository.UserRepository;

@Service
public class CustomServiceUser implements UserDetailsService{
    @Autowired
    private UserRepository userRepository;

    @Override
    public UserDetails loadUserByUsername(String email) throws UsernameNotFoundException{
        User user = userRepository.findUsersByEmail(email).orElseThrow(() -> new UsernameNotFoundException(msg: "User not found"));

        return org.springframework.security.core.userdetails.User
            .withUsername(user.getEmail())
            .password(user.getPassword())
            .roles(...roles: "STUDENT")
            .disabled(!user.isEnabled())
            .build();
    }
}

```

Database

- role table
- user_role table
- Add foreign keys for relationships
- Create internship_app table
- Create evaluation table
- Add foreign key student_id
- Add foreign key supervisor_id
- Add foreign key for evaluation
- Create supervisor table
- Add foreign key user_id → supervisor
- Add constraints (unique user_id)

```

create table supervisors(
    id int auto_increment primary key,
    user_id int,
    full_name varchar(64) not null,
    email varchar(128) not null,
    phone_number int,
    department varchar(128)
);

create table internship_application(
    id int auto_increment primary key,
    student_id int,
    supervisor_id int,
    company_id int,
    title varchar(255) not null,
    description varchar(255),
    status enum('Pending', 'Approved', 'Rejected') default 'Pending' not null,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    updated_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP
);

```

```

CREATE TABLE document (
    id int PRIMARY KEY AUTO_INCREMENT,
    student_id int,
    internship_app_id int,
    file_name VARCHAR(255) NOT NULL,
    file_path VARCHAR(255) NOT NULL,
    uploaded_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);

create table evaluations(
    id int primary key auto_increment,
    internship_app_id int,
    supervisor_id int,
    comment varchar(255),
    score int,
    evaluations_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);

```

Reading table information for completion of table and column names
 You can turn off this feature to get a quicker startup with -A

```

Database changed
mysql> show tables;
+-----+
| Tables_in_internship |
+-----+
| company              |
| document              |
| evaluations           |
| flyway_schema_history |
| internship_application |
| roles                 |
| students              |
| supervisors           |
| user_role             |
| users                 |
+-----+
10 rows in set (0.00 sec)

mysql> ~

```

```

src/main/resources/db/migrations/V1__add_foreign_keys.sql
alter table user_role
add constraint user_role(userID) foreign key (user_id) references users(id)
on update cascade on delete restrict;

alter table user_role
add constraint user_role(roleID) foreign key (role_id) references roles(id)
on update cascade on delete restrict;

alter table students
add constraint students(userID) foreign key (user_id) references users(id)
on update cascade on delete restrict;

alter table supervisors
add constraint supervisors(userID) foreign key (user_id) references users(id)
on update cascade on delete restrict;

alter table internship_application
add constraint internship_app_students_id foreign key (student_id) references students(id)
on update cascade on delete restrict;

alter table internship_application
add constraint internship_app_supervisors_id foreign key (supervisor_id) references supervisors(id)
on update cascade on delete restrict;

alter table internship_application
add constraint internship_app_company_id foreign key (company_id) references company(id)
on update cascade on delete restrict;

alter table document
add constraint document_student_id foreign key (student_id) references students(id)
on update cascade on delete restrict;

alter table document
add constraint document_internship_app_id foreign key (internship_app_id) references internship_application(id)
on update cascade on delete restrict;
alter table evaluations
add constraint evalutions_supervisor_id foreign key (supervisor_id) references supervisors(id)
on update cascade on delete restrict;

alter table evaluations
add constraint evalutions_internship_app_id foreign key (internship_app_id) references internship_application(id)
on update cascade on delete restrict;

```

Backend

- Create Student /entity/repository
- Create User /entity//repository
- Create Role /entity/repository
- Create User_role /entity/repository

```
demo > src > main > java > project > demo > enums > RoleName.java > ...
1 package project.demo.enums;
2
3 public enum RoleName {
4     ROLE_STUDENT,
5     ROLE_ADMIN,
6     ROLE_SUPERVISOR
7 }
8
```

```
application.properties | Role.java | StudentRepository.java | CustomServiceUser.java | ... | RoleRepository.java
demo > src > main > java > project > demo > entity > Role.java > Role > roleName
1 package project.demo.entity;
2
3 import jakarta.persistence.*;
4 import project.demo.enums.RoleName;
5
6 @Entity
7 @Table(name = "roles")
8 public class Role {
9
10     @Id
11     @GeneratedValue(strategy = GenerationType.IDENTITY)
12     private Integer id;
13
14     @Enumerated(EnumType.STRING)
15     @Column(name = "role_name", nullable = false, unique = true)
16     private RoleName roleName;
17
18     public Role() {}
19
20     public Integer getId() {
21         return id;
22     }
23
24     public RoleName getRoleName() {
25         return roleName;
26     }
27
28     public void setRoleName(RoleName roleName) {
29         this.roleName = roleName;
30     }
31 }
```

```
demo > src > main > java > project > demo > repository > RoleRepository.java > Language Support for Java
1 package project.demo.repository;
2
3 import project.demo.entity.Role;
4 import project.demo.enums.RoleName;
5
6 import java.util.List;
7
8 import org.springframework.data.jpa.repository.JpaRepository;
9
10 public interface RoleRepository extends JpaRepository<Role, Integer> {
11     List<Role> findRoleByRoleName(RoleName roleName);
12 }
```

```

src > main > java > project > demo > entity > Student.java > {} project.demo.entity
1 package project.demo.entity;
2
3 import jakarta.persistence.*;
4
5 @Entity
6 @Table(name = "students")
7 public class Student {
8     @Id
9     @GeneratedValue(strategy = GenerationType.IDENTITY)
10    private Integer id;
11
12    @Column (name = "full_name", nullable = false)
13    private String full_name;
14
15    @Column (name = "phone_number", unique = true)
16    private Integer phone_number;
17
18    @Column (name = "email", unique = true)
19    private String email;
20
21    @Column (name = "year")
22    private Integer year;
23
24    @Column (name = "department")
25    private String department;
26
27    @ManyToOne
28    @JoinColumn(name = "user_id")
29    private User user;
30
31    public void student(){}
32
33    public Integer getId(){
34        return id;
35    }
36    public void setId(Integer id){
37        this.id = id;
38    }
39    public String getFullName(){
40        return full_name;
41    }
42    public void setFullName(String full_name){
43        this.full_name = full_name;
44    }
45    public String getEmail(){
46        return email;
47    }
48    public void setEmail(String email){
49        this.email = email;
50    }
51
52 }

```

```

src > main > java > project > demo > repository > StudentRepository.java > Language Support for Java(M) by Red Hat
1 package project.demo.repository;
2
3
4 import java.util.Optional;
5
6 import project.demo.entity.User;
7 import org.springframework.data.jpa.repository.JpaRepository;
8
9 import project.demo.entity.Student;
10
11 public interface StudentRepository extends JpaRepository<Student, Integer>{
12     Optional<Student> findByUserId(User userId);
13 }
14

```

```

src > main > java > project > demo > entity > User.java > {} project.demo.entity
1 package project.demo.entity;
2
3 import jakarta.persistence.*;
4 import java.time.LocalDateTime;
5 import java.util.Set;
6
7 @Entity
8 @Table(name = "users")
9 public class User {
10
11    @Id
12    @GeneratedValue(strategy = GenerationType.IDENTITY)
13    private Integer id;
14
15    @Column(nullable = false, unique = true)
16    private String email;
17
18    private String username;
19
20    @Column(nullable = false)
21    private String password;
22
23    @Column(name = "enable")
24    private boolean enable = true;
25
26    @Column(name = "created_at")
27    private LocalDateTime createdat;
28
29    @OneToMany(mappedBy = "user", fetch = FetchType.LAZY)
30    private Set<UserRole> userRoles;
31
32    public User() {
33    }
34
35    public Integer getId() {
36        return id;
37    }
38
39    public void setId(Integer id) {
40        this.id = id;
41    }
42
43    public String getEmail() {
44        return email;
45    }
46
47    public void setEmail(String email) {
48        this.email = email;
49    }
50
51 }

```

```

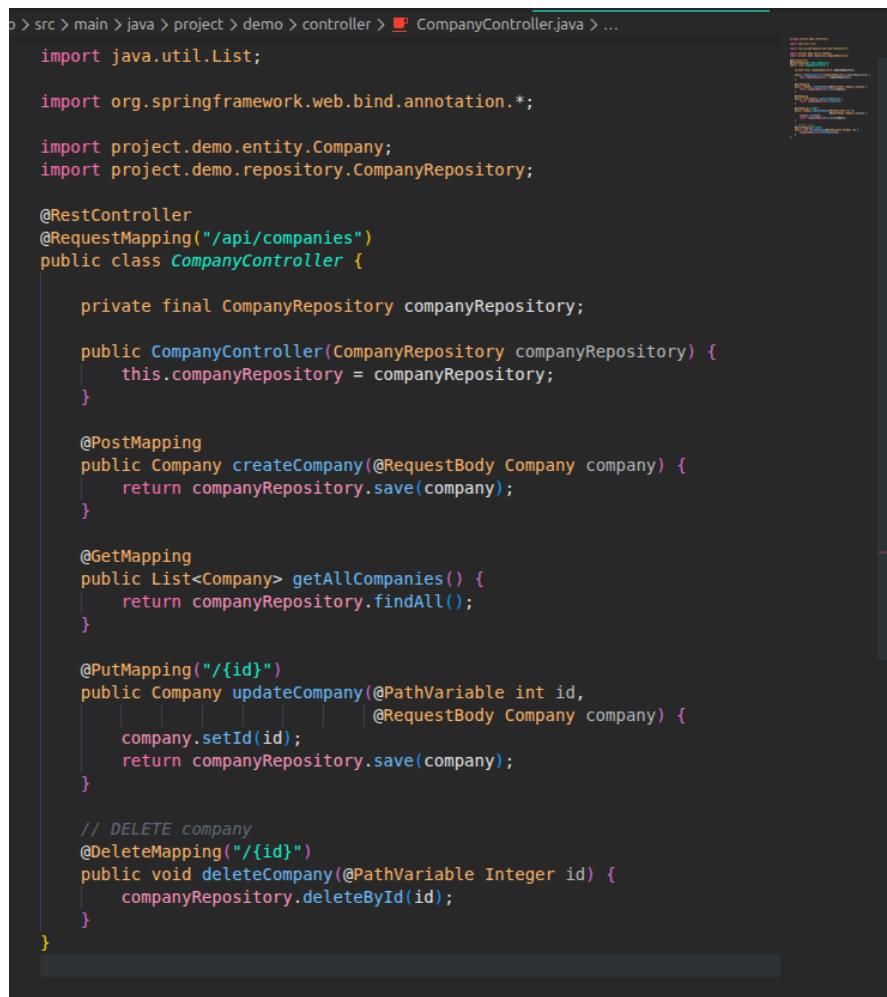
src > main > java > project > demo > repository > UserRepository.java > ...
1 package project.demo.repository;
2
3 import java.util.Optional;
4
5 import project.demo.entity.User;
6 import org.springframework.data.jpa.repository.JpaRepository;
7
8 public interface UserRepository extends JpaRepository<User, Integer>{
9     Optional<User> findUsersByEmail(String email);
10 }
11

```

Name: OUN RHITI

Backend

- Implement create company entity and repository
- Implement view all companies
- Implement update company
- Implement delete company
- Test using Postman



```
o > src > main > java > project > demo > controller > CompanyController.java > ...
import java.util.List;
import org.springframework.web.bind.annotation.*;
import project.demo.entity.Company;
import project.demo.repository.CompanyRepository;

@RestController
@RequestMapping("/api/companies")
public class CompanyController {

    private final CompanyRepository companyRepository;

    public CompanyController(CompanyRepository companyRepository) {
        this.companyRepository = companyRepository;
    }

    @PostMapping
    public Company createCompany(@RequestBody Company company) {
        return companyRepository.save(company);
    }

    @GetMapping
    public List<Company> getAllCompanies() {
        return companyRepository.findAll();
    }

    @PutMapping("/{id}")
    public Company updateCompany(@PathVariable int id,
                                 @RequestBody Company company) {
        company.setId(id);
        return companyRepository.save(company);
    }

    // DELETE company
    @DeleteMapping("/{id}")
    public void deleteCompany(@PathVariable Integer id) {
        companyRepository.deleteById(id);
    }
}
```

```
b > src > main > java > project > demo > entity > Company.java > Company
package project.demo.entity;

import jakarta.persistence.*;

@Entity
@Table(name = "company")
public class Company {

    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Integer id;

    @Column(name = "name", nullable = false)
    private String name;

    @Column(name = "address")
    private String address;

    @Column(name = "phone_number")
    private Integer phoneNumber;

    // Constructors
    public Company() {}

    // Getters and Setters
    public Integer getId() {
        return id;
    }

    public void setId(Integer id) {
        this.id = id;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getAddress() {
        return address;
    }

    public void setAddress(String address) {
        this.address = address;
    }
}
```

```
src > main > java > project > demo > repository > CompanyRepository.java > ...
package project.demo.repository;

import org.springframework.data.jpa.repository.JpaRepository;
import project.demo.entity.Company;

public interface CompanyRepository extends JpaRepository<Company, Integer> {
}
```

- Create document model
- Create document entity / repository
- Create upload controller
- Add file validation (size, type: pdf, docx, etc.)
- Add file storage logic

- Save file path to DB
- Link document → user or internship

```
src > main > java > project > demo > controller > DocumentController.java > Language Support for Java(TM) by Red Hat > DocumentController.java
package project.demo.controller;

import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.*;
import org.springframework.web.multipart.MultipartFile;
import project.demo.entity.Document;
import project.demo.repository.DocumentRepository;

import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;

@RestController
@RequestMapping("/api/documents")
public class DocumentController {

    private final DocumentRepository documentRepository;

    public DocumentController(DocumentRepository documentRepository) {
        this.documentRepository = documentRepository;
    }

    @PostMapping("/upload")
    public ResponseEntity<?> uploadDocument(
        @RequestParam("file") MultipartFile file,
        @RequestParam("userId") Long userId
    ) throws IOException {
        if (file.isEmpty()) {
            return ResponseEntity.badRequest().body("File is empty");
        }

        // ✅ Project root/uploads
        Path uploadPath = Paths.get("uploads");

        // create folder if not exists
        if (!Files.exists(uploadPath)) {
            Files.createDirectories(uploadPath);
        }

        // save file
        Path filePath = uploadPath.resolve(file.getOriginalFilename());
        Files.copy(file.getInputStream(), filePath);

        // save to DB
        Document document = new Document();
        document.setFileName(file.getOriginalFilename());
        document.setFilePath(filePath.toString());
    }
}
```

The screenshot shows the Postman application interface for API testing. The left sidebar contains navigation links: Home, Workspaces, API Network, Collections, Environments, History, and Flows. The main workspace displays a POST request to `http://localhost:8080/api/documents/upload`. The request body is set to `form-data`, containing two fields: `file` (selected) with value `TP Activity Diagram.pdf`, and `userId` (selected) with value `1`. Below the request, the response details are shown: a `200 OK` status with a response time of `366 ms`, a response size of `360 B`, and a `Raw` preview showing the message `File uploaded successfully`.

```
src > main > java > project > demo > entity > Document.java > (1) project.demo.entity
package project.demo.entity;

import jakarta.persistence.*;

@Entity
@Table(name = "documents")
public class Document {

    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long id;

    private String fileName;
    private String filePath;
    private String fileType;

    @Column(name = "user_id")
    private Long userId;

    // getters & setters
    public Long getId() {
        return id;
    }

    public String getFileName() {
        return fileName;
    }

    public void setFileName(String fileName) {
        this.fileName = fileName;
    }

    public String getFilePath() {
        return filePath;
    }

    public void setFilePath(String filePath) {
        this.filePath = filePath;
    }

    public String getFileType() {
        return fileType;
    }

    public void setFileType(String fileType) {
        this.fileType = fileType;
    }

    public Long getUserId() {
```

Name: PENG SEYHA

Create Student controller

```
Project: demo > Java > Project > controller > StudentController.java > Language: Support for Java (TM) by Red Hat > {} project.demo.controller

import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.security.core.Authentication;
import org.springframework.security.core.context.SecurityContextHolder;

// Removed the generic Application import to prevent naming conflicts
import project.demo.entity.Student;
import project.demo.entity.User;
import project.demo.entity.Company;
import project.demo.repository.StudentRepository;
import project.demo.repository.UserRepository;
import project.demo.repository.CompanyRepository;
import project.demo.service.ApplicationService;

import java.util.Comparator;
import java.util.List;
import java.util.Optional;
import java.util.stream.Collectors;

@Controller
@RequestMapping("/student")
public class StudentController {

    @Autowired
    private UserRepository userRepository;

    @Autowired
    private StudentRepository studentRepository;

    @Autowired
    private ApplicationService applicationService;

    @Autowired
    private CompanyRepository companyRepository;
```

Frontend

Student Dashboard

- ~~Dashboard UI layout~~
- ~~Show basic information about student~~
- ~~Add menu links (Profile, Application, Evaluation, Status)~~

Student Forms

- ~~Student registration or edit profile form~~
- ~~Validation (email, phone, required fields)~~
- ~~Add success/error messages~~

My Profile

Update your personal information

Full Name

Your name

Email Address

you@email.com

Phone Number

+855...

[Save Changes](#)

[Cancel](#)

Profile updated successfully.

Failed to update profile.

Application Form

- Create form UI
- Validation for required fields
- Integrate API to submit

Fill in internship details

Title

Description

[Save](#)

Editing is disabled after approval.

Application Detail Page

- Display all application info
- Show status
- Show company assigned

My Applications

Internship submissions

New

| Description | Status | Company | |
|-------------|--------|---------|-----------------------|
| | | | <button>View</button> |

Evaluation List Page

- ~~Table listing all evaluations~~
- ~~Filter by student/supervisor~~
- ~~View evaluation detail~~
- ~~Edit evaluation (supervisor only)~~

My Evaluations

Supervisor feedback

| Application | Score | Comment |
|-------------|-------|---------|
| | | |

Name: YI MONIROM

Backend

- ~~Create supervisor service~~
- ~~Create supervisor repository~~
- ~~Create supervisor entity~~
- ~~Implement Create supervisor~~
- ~~Implement Read supervisor~~
- ~~Implement Update supervisor~~
- ~~Implement Delete supervisor~~
- ~~Validate inputs (e.g., name, email, dept)~~

```
> src > main > java > project > demo > controller > SupervisorController.java > Language Support for Java (TK) by Red Hat > ✎ SupervisorController > ↴ Createsupervisor(SupervisorDTO)
```

```
package project.demo.controller;

import jakarta.validation.Valid;    The import jakarta.validation cannot be resolved
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.*;
import project.demo.entity.Supervisor;
import project.demo.Model.SupervisorDTO;
import project.demo.repository.supervisorRepository;

import java.util.List;
import java.util.stream.Collectors;

@RestController
@RequestMapping("/api/supervisors")
public class SupervisorController {

    @Autowired
    private supervisorRepository supervisorRepository;

    // --- CREATE supervisor ---
    @PostMapping
    public SupervisorDTO createSupervisor(@Valid @RequestBody SupervisorDTO dto) {    Valid cannot be resolved to a type
        if (supervisorRepository.existsByUserId(dto.getUserId())) {
            throw new RuntimeException("User is already a supervisor");
        }

        Supervisor supervisor = new Supervisor();
        supervisor.setUserId(dto.getUserId());
        supervisor.setFullName(dto.getFullName());
        supervisor.setEmail(dto.getEmail());
        supervisor.setPhoneNumber(dto.getPhone());
        supervisor.setDepartment(dto.getDepartment());

        Supervisor saved = supervisorRepository.save(supervisor);

        return toDTO(saved);
    }

    // --- READ all supervisors ---
    @GetMapping
    public List<SupervisorDTO> getAllSupervisors() {
        return supervisorRepository.findAll()
            .stream()
            .map(this::toDTO)
            .collect(Collectors.toList());
    }

    // --- READ supervisor by ID ---
    @GetMapping("/{id}")
}
```

Δ Yu-Monirou (2 hours ago) | Ln 54 Col 6 | Spaces: 4 | UTE: 8 | LF: 1 | Java | ↵ Quota reached | ⌂ Go Live | ⌂ Print

```
> src > main > java > project > demo > Model > ✎ SupervisorDTO.java > ✎ getduo
```

```
package project.demo.Model;

import jakarta.validation.constraints.Email;    The import jakarta.validation cannot be resolved
import jakarta.validation.constraints.NotBlank;  The import jakarta.validation cannot be resolved

public class SupervisorDTO {

    private Integer id;

    private Integer userId;

    @NotBlank(message = "Full name is required")    NotBlank cannot be resolved to a type
    private String fullName;

    @Email(message = "Email must be valid")    Email cannot be resolved to a type
    private String email;

    private Integer phone;

    @NotBlank(message = "Department is required")    NotBlank cannot be resolved to a type
    private String department;

    // --- Constructors ---
    public SupervisorDTO() {}

    public SupervisorDTO(Integer userId, String fullName, String email, Integer phone, String department) {
        this.userId = userId;
        this.fullName = fullName;
        this.email = email;
        this.phone = phone;
        this.department = department;
    }

    // --- Getters & Setters ---
    public Integer getId() { return id; }
    public void setId(Integer id) { this.id = id; }

    public Integer getUserId() { return userId; }
    public void setUserId(Integer userId) { this.userId = userId; }

    public String getFullName() { return fullName; }
    public void setFullName(String fullName) { this.fullName = fullName; }

    public String getEmail() { return email; }
    public void setEmail(String email) { this.email = email; }

    public Integer getPhone() { return phone; }
    public void setPhone(Integer phone) { this.phone = phone; }
}
```

Δ Yu-Monirou (2 hours ago) | Ln 35 Col 20 | Spaces: 4 | UTE: 8 | LF: 1 | Java | ↵ Quota reached | ⌂ Go Live | ⌂ Print

```
> src > main > java > project > demo > repository > SupervisorRepository.java > ...
package project.demo.repository;

import org.springframework.data.jpa.repository.JpaRepository;

import jakarta.persistence.criteria.CriteriaBuilder.In;    The import jakarta.persistence.criteria.CriteriaBuilder.In is never used
import project.demo.entity.Supervisor;

public interface SupervisorRepository extends JpaRepository<Supervisor, Integer> {
    boolean existsByUserId(Integer userId);
}

}
```

Name: SOEUN SEREVATH

- Create student service
- Create Admin Controller
- Create Admin Controller on Supervisor

```
> src > main > java > project > demo > controller > AdminPagesController.java > ...
package project.demo.controller;

import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;

@Controller
public class AdminPagesController {

    @GetMapping("/admin/dashboard")
    public String dashboard(Model model) {
        model.addAttribute(attributeName: "studentCount", attributeValue: 0);
        model.addAttribute(attributeName: "supervisorCount", attributeValue: 0);
        model.addAttribute(attributeName: "applicationCount", attributeValue: 0);
        model.addAttribute(attributeName: "recentLogs", java.util.Collections.emptyList());
        return "admin-dashboard";
    }

    @GetMapping("/admin/assign-supervisor")
    public String assignSupervisor() {
        return "assign-supervisor";
    }

    @GetMapping("/admin/approvals")
    public String approvals() {
        return "approvals";
    }
}
```

```

> src > main > java > project > demo > service > StudentService.java > Language Support for Java(TM) by Red Hat > student.service > getbyid(Long)
import java.util.List;

@Service
public class StudentService {

    private final StudentRepository repo;

    public StudentService(StudentRepository repo) {
        this.repo = repo;
    }

    public List<Student> getAll() {
        return repo.findAll();
    }

    public Student getById(Long id) {
        return repo.findById(id).orElseThrow(() -> new IllegalStateException("Student not found"));
    }

    public Student create(Student s) {
        if (repo.existsByEmail(s.getEmail())) {
            throw new IllegalStateException("Email already exists");
        }
        return repo.save(s);
    }

    public Student update(Long id, Student s) {
        Student existing = getById(id);
        existing.setFullName(s.getFullName());
        existing.setEmail(s.getEmail());
        return repo.save(existing);
    }

    public void delete(Long id) {
        repo.deleteById(id);
    }
}

```

Admin CRUD Students

- List all students
- Create student service
- Create new student
- Edit student
- Delete student

```

> src > main > java > project > demo > controller > StudentAdminController.java > ...
import org.springframework.web.bind.annotation.*;
import project.demo.entity.Student;
import project.demo.service.StudentService;

@Controller
@RequestMapping("/admin/students")
public class StudentAdminController {

    private final StudentService studentService;

    public StudentAdminController(StudentService studentService) {
        this.studentService = studentService;
    }

    // LIST
    @GetMapping
    public String list(Model model) {
        model.addAttribute("students", studentService.getAll());
        return "students";
    }

    // CREATE FORM
    @GetMapping("/create")
    public String createForm(Model model) {
        model.addAttribute("student", new Student());
        return "create-student";
    }

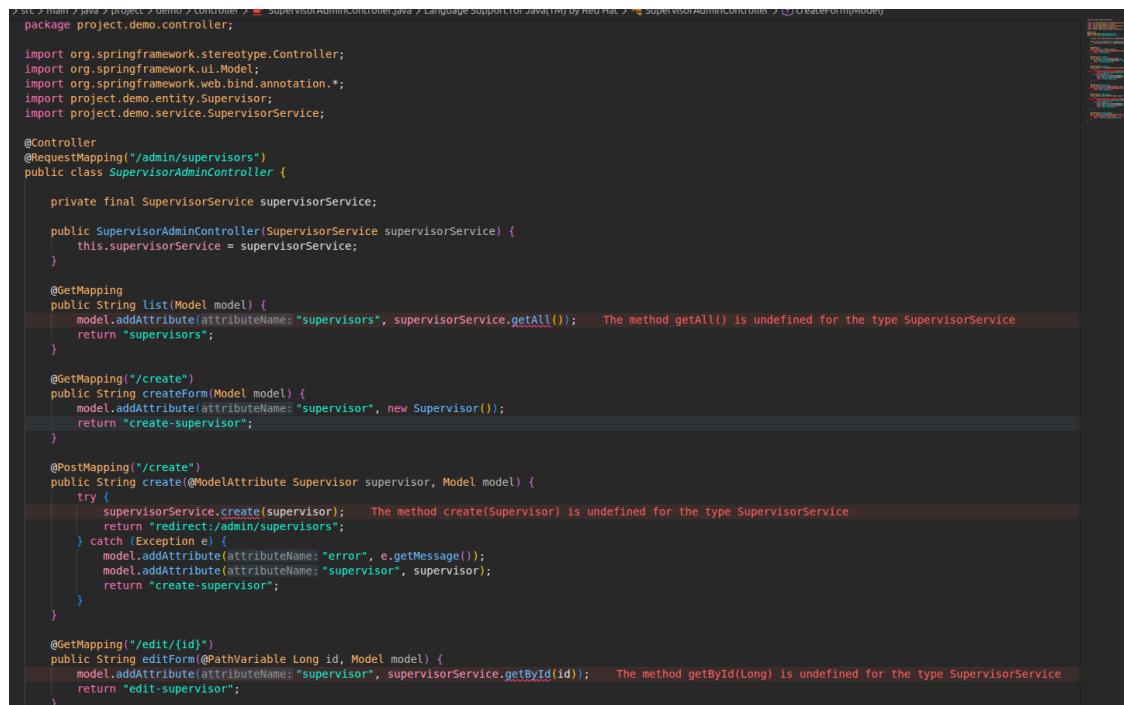
    // CREATE SUBMIT
    @PostMapping("/create")
    public String create(@ModelAttribute Student student, Model model) {
        try {
            studentService.create(student);
            return "redirect:/admin/students";
        } catch (Exception e) {
            model.addAttribute("error", e.getMessage());
            model.addAttribute("student", student);
            return "create-student";
        }
    }

    // EDIT FORM
    @GetMapping("/edit/{id}")
    public String editForm(@PathVariable Long id, Model model) {
        model.addAttribute("student", studentService.getById(id));
        return "edit-student";
    }
}

```

Admin CRUD on supervisor

- List supervisors
- Add supervisor
- Edit supervisor
- Delete supervisor



```
package project.demo.controller;

import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.*;
import project.demo.entity.Supervisor;
import project.demo.service.SupervisorService;

@Controller
@RequestMapping("/admin/supervisors")
public class SupervisorAdminController {

    private final SupervisorService supervisorService;

    public SupervisorAdminController(SupervisorService supervisorService) {
        this.supervisorService = supervisorService;
    }

    @GetMapping
    public String list(Model model) {
        model.addAttribute(attributeName: "supervisors", supervisorService.getAll());   The method getAll() is undefined for the type SupervisorService
        return "supervisors";
    }

    @GetMapping("/create")
    public String createForm(Model model) {
        model.addAttribute(attributeName: "supervisor", new Supervisor());
        return "create-supervisor";
    }

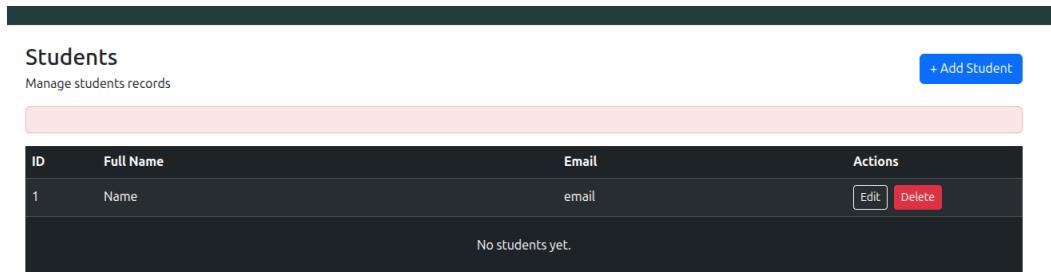
    @PostMapping("/create")
    public String create(@ModelAttribute Supervisor supervisor, Model model) {
        try {
            supervisorService.create(supervisor);   The method create(Supervisor) is undefined for the type SupervisorService
            return "redirect:/admin/supervisors";
        } catch (Exception e) {
            model.addAttribute(attributeName: "error", e.getMessage());
            model.addAttribute(attributeName: "supervisor", supervisor);
            return "create-supervisor";
        }
    }

    @GetMapping("/edit/{id}")
    public String editForm(@PathVariable Long id, Model model) {
        model.addAttribute(attributeName: "supervisor", supervisorService.getById(id));   The method getById(Long) is undefined for the type SupervisorService
        return "edit-supervisor";
    }
}
```

Frontend

Admin Dashboard

- Show statistics (students, supervisors, applications)
- Students management UI
- Supervisors management UI
- Supervisor assignment UI
- Approval UI



| ID | Full Name | Email | Actions |
|----|-----------|-------|-----------------------------------------------|
| 1 | Name | email | <button>Edit</button> <button>Delete</button> |

No students yet.

Admin Dashboard

Student Internship Management System

Tip: Use the menu to manage data quickly.

Students

0

[Manage Students](#)

Supervisors

0

[Manage Supervisors](#)

Applications

0

[Approvals](#) [Active](#)

Recent Updates / Logs

No logs yet.

| Time | Action | Actor | Target | Detail |
|------|--------|-------|--------|--------|
| time | action | actor | target | detail |

Supervisors

Manage supervisors records

[+ Add Supervisor](#)

| ID | Full Name | Email | Actions |
|----|-----------|-------|---------------------------------------------|
| 1 | Name | email | Edit Delete |

No supervisors yet.