



# **PES UNIVERSITY**

(Established under Karnataka Act No. 16 of 2013)

## **Object Oriented Analysis and Design using Java (UE20CS352)**

### **Mini Project**

#### **E-PAATHASHALA (E-LEARNING PLATFORM)**

#### **TEAM MEMBER DETAILS:**

Sanjita Chandan	PES1UG20CS380
Shaarvari Kiran	PES1UG20CS389
Shyam Krishna K	PES1UG20CS422
Siddharth M	PES1UG20CS427

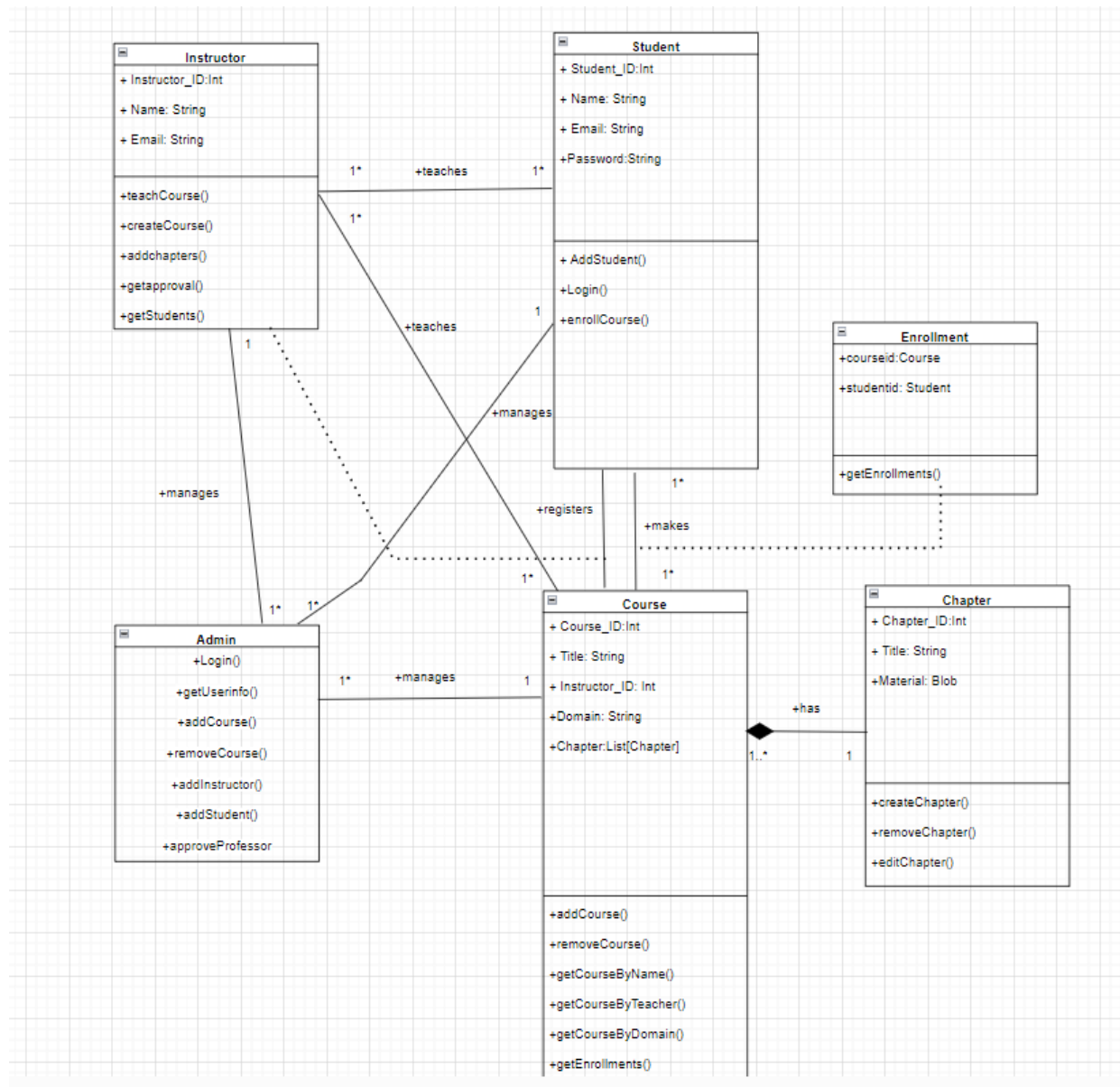
## **PROBLEM STATEMENT:**

Create an e-learning platform using Java that includes a MVC framework along with Frontend.

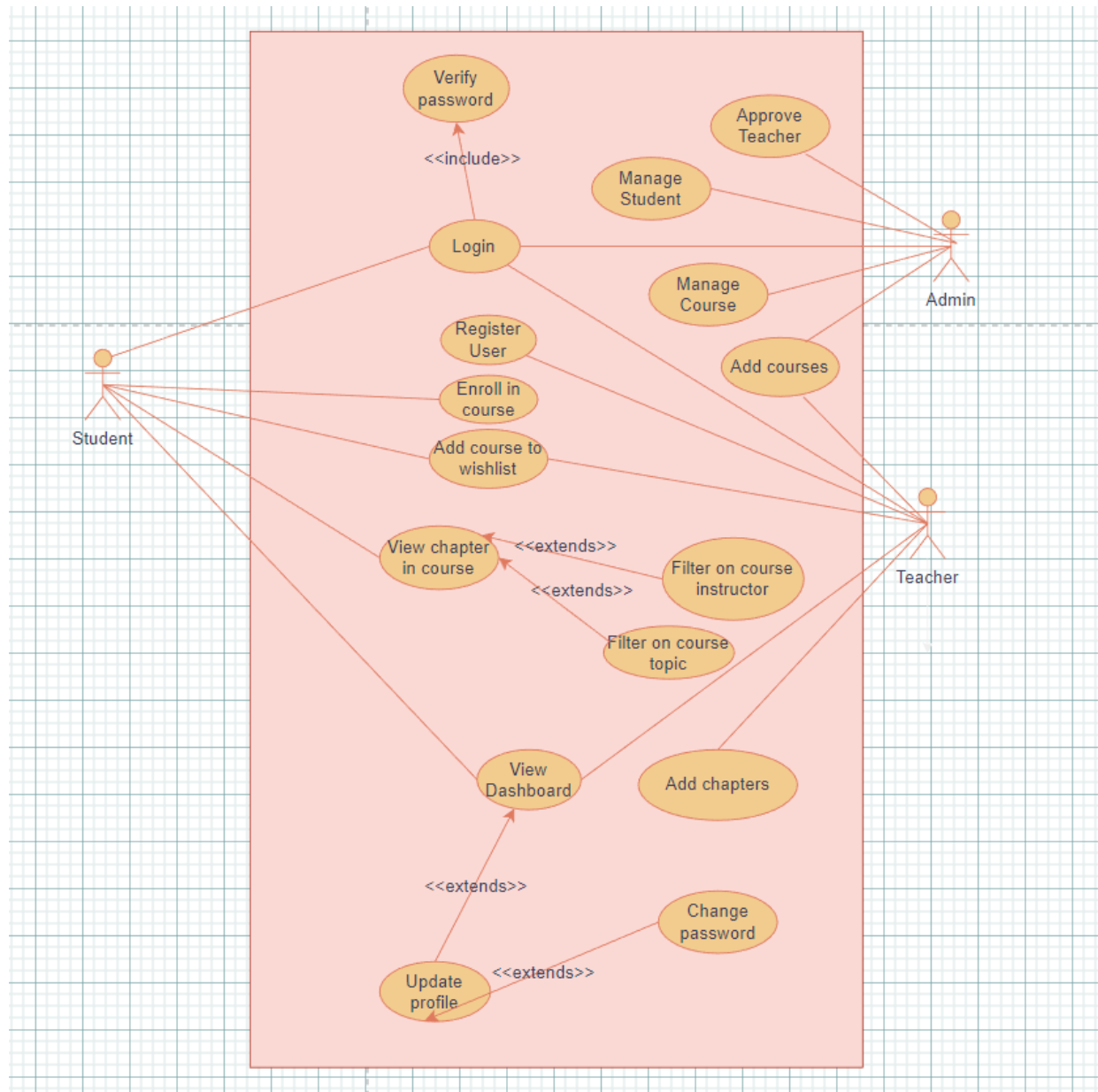
- There should be video-based courses which can be hosted by multiple teachers. The courses should be chapter wise and study materials based on the topic should be provided.
- A filter feature must be implemented where students can view courses offered by their preferred professors and also view all the courses available under a domain.
- The students should be able to enrol for a course and view the material.
- The teacher should be able to create courses, add chapters and view enrolled students.
- The admin must be able to approve teachers, manage students, manage teachers and create courses and chapters.

# MODELS:

## 1. Class Diagram:



## 2. Usecase Diagram



# DESIGN PATTERNS AND PRINCIPLES

## Single Responsibility Principle:

- Controllers only handle the incoming requests and delegate the processing to services.
- Services only contain business logic and delegate data access to repositories.
- Repositories only handle data access to the underlying database.
- Models only

## Command Pattern:

This behavioral design pattern allows to encapsulate actions as objects, which can be invoked by different clients. In this pattern, a client sends a request to a receiver object, which in turn delegates the request to a command object to perform the necessary actions. We have used it for the GetMapping and RequestMapping methods.

## GITHUB LINK

<https://github.com/shyamk10/E-Paathashala>

## **INDIVIDUAL CONTRIBUTIONS**

### **1. Sanjita Chandan Ballapur (PES1UG20CS380)**

- Create course functionality with model, service, repository and controller
- Frontend implementation for the same

### **2. Shaarvari Kiran (PES1UG20CS389)**

- Login functionality with authentication using Controller
- Frontend implementation for the same

### **3. Shyam Krishna K (PES1UG20CS422)**

- Create chapter for course using model, service, repository and controller
- Frontend implementation for the same

### **4. Siddharth M (PES1UG20CS427)**

- Admin approves/rejects professor using service
- Frontend implementation for the same

# SCREENSHOTS

## 1. Create course

### New Course

Course Name : *	Course Start Date : *
<input type="text" value="ooadj"/>	<input type="text" value="08-04-2023"/>
Instructor Name : *	Skill Level : *
<input type="text" value="shaar"/>	<input type="text" value="Intermediate"/>
Course Video ID : (only ID) *	Course Description : *
<input type="text" value="elrMbAQSU34"/>	<div>Introduction to Java course</div>
Course Type : *	
<input type="text" value="Youtube"/>	
Course Language : *	
<input type="text" value="English"/>	

+ Add Course

## Course List



**ooadj**

937NXutdT6Cy

**Instructor:** shaar

**Learners:** 0 enrolled previously

**Level:** Intermediate

**Language:** English

**Introduction to Java course**

More Info

	id	courseid	coursename	coursetype	description	enrolledcount	enrolleddate	instructorinstitution	instructorname	language	skilllevel	websiteurl	youtubeurl
<input type="checkbox"/>		14	9CvaLiPvIOXQ	dbt	Youtube	Database Technologies	3	2023-04-08	kss	Hindi	Basic		Ekhm-aFggs4
<input type="checkbox"/>		40	937NXutdT6Cy	ooadj	Youtube	Introduction to Java course	0	2023-04-08	shaar	English	Intermediate		elrMbAQSU34

## 2. Create chapter

### NEW CHAPTERS

Course Name: \*

Please choose course name from the drop-down

Chapter-1 Name: \*

Chapter-1 URL: \*

Please Provide the Chapter-1 video ID as the URL here...

+ Add

+ Add Chapter

Welcome to oadj course 🙌



#### Course Contents

(click on chapter name to get into the videos)

✓ 1) Object oriented  
subcontents (1/1)

	id	chapter1id	chapter1name
<input type="checkbox"/>	41	drQK8ciCAjY	Object oriented



### 3. Enroll in course

ooadj

937NXutdT6Cy

**Instructor Name :** shaar  
**Instructor Institution :**  
**Enrolled Date :** 2023-04-08  
**Learners :** 1 learners enrolled previously  
**Course Type :** Youtube contents  
**Level :** Intermediate  
**Language :** English

#### Introduction to Java course

Enrolled

Visit Course

Courselist



Like

 My Learning



ooadj

937NXutdT6Cy

**Date:** 2023-04-28

**Your ID:** tPjFQ08MIM5e

**Instructor:** shaar

**Learners:** 1 enrolled previously

**Type:** Youtube

**Level:** Intermediate

**Language:** English

Introduction to Java course

<div><div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div></div><div></div></div></div></div> <div><div>id</div><div>courseid</div><div>coursename</div><div>coursetype</div><div>description</div><div>enrolledcount</div><div>enrolleddate</div><div>enrolleduserid</div><div>enrolledusername</div><div>enrolledusertype</div><div>instructorinstitution</div><div>instructorname</div><div>language</div><div>skilllevel</div><div>websiteurl</div></div>																	
<div><div><div><div></div><div>Edit</div><div>Copy</div><div>Delete</div></div><div>42</div><div>937NXutdT6Cy</div><div>ooadj</div></div><div>Youtube</div><div>Introduction to Java course</div><div>1</div><div>2023-04-28</div><div>tPjFQ08MIM5e</div><div>sanj</div><div>user</div><div>shaar</div><div>English</div><div>Intermediate</div></div>																	

## 4. Create professor

User

Professor

### Professor Registration

atleast one uppercase, numeric digit, lowercase, special character, length of 6-20

☐ I agree to all Terms & Conditions

Already have an Account? [click here](#)

Register

## Professor Dashboard

Home

Welcome sanj@gmail.com

Logout

### Welcome to Professor Dashboard

Courses

2 courses available

Learners

1 enrollments have been made by 1 Learners







Chapters

1 courses are with its detailed chapters

Favourites



2 courses are loved by most of the Learners

Professor added to the database:

←→														
		email	degreecompleted	department	experience	gender	institutionname	mobile	password	professorid	professorname	status		
<input type="checkbox"/>	 Edit	 Copy	 Delete	sanj@gmail.com	Btech	CSE	3	Female	PES	8618544470	123	ear3VCLeHzb	Sanjita	false
<input type="checkbox"/>	 Edit	 Copy	 Delete	shy@gmail.com	Btech	CSE	2	Female		9902016468	123	heU2WBE5KpGa	shyam	accept

## 5. Approve professor

### Approve Professor Here

IDENTITY	NAME	EMAIL	DEGREE	EXPERIENCE	DEPARTMENT	MOBILE	STATUS
	Sanjita	sanj@gmail.com	Btech	3 years	CSE	8618544470	<div>Accept</div> <div>Reject</div>
	shyam	shy@gmail.com	Btech	2 years	CSE	9902016468	<div>Accepted</div>

	email	degreecompleted	department	experience	gender	institutionname	mobile	password	professorid	professorname	status
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	sanj@gmail.com	Btech	CSE	3	Female	PES	8618544470	123	eaUr3VCLeHzb	Sanjita	accept
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	shy@gmail.com	Btech	CSE	2	Female		9902016468	123	heU2WBE5KpGa	shyam	accept

## 6. Add wishlist

ooadj

937NXutdT6Cy

**Instructor Name :** shaar  
**Instructor Institution :**  
**Enrolled Date :** 2023-04-08  
**Learners :** 1 learners enrolled previously  
**Course Type :** Youtube contents  
**Level :** Intermediate  
**Language :** English

### Introduction to Java course

Enrolled

Visit Course

Courselist



### ♥ User WishList

Course : java

Course ID : HTQoBXFnSEVc

Instructor : mahitha

Learners : 0 enrolled already

Type : Youtube Tutorials

Level : Basic

Language : English

Visit Course

Course : ooadj

Course ID : 937NXutdT6Cy

Instructor : shaar

Learners : 1 enrolled already

Type : Youtube Tutorials

Level : Intermediate

Language : English

Visit Course

	coursename	courseid	coursetype	description	enrolledcount	instructorinstitution	instructorname	language	likeduser	likedusertype	skilllevel	websiteurl
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	java	HTQoBXFnSEVc	Youtube	mbmbm	0		mahitha	English	1@gmail.com	user	Basic	
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	ooadj	937NXutdT6Cy	Youtube	Introduction to Java course	1		shaar	English	1@gmail.com	user	Intermediate	

## 7. View Statistics

