FPT Education

FPT UNIVERSITY

SWP391

SOFTWARE DEVELOPMENT PROJECT

TOPIC: SWP MENTOR BOOKING SYSTEM

Semester: Fall 2024

Class: SE1867

Group: 2

Mentor: Phan Minh Tâm (TamPM)

Student implementation:

No.	Student ID	Full Name
1	SE180449	Quách Gia Bảo
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3	SE171680	Vũ Đức Anh
4	SE172068	Trần Minh Đức

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1. INTRODUCTION

1.1 Overview

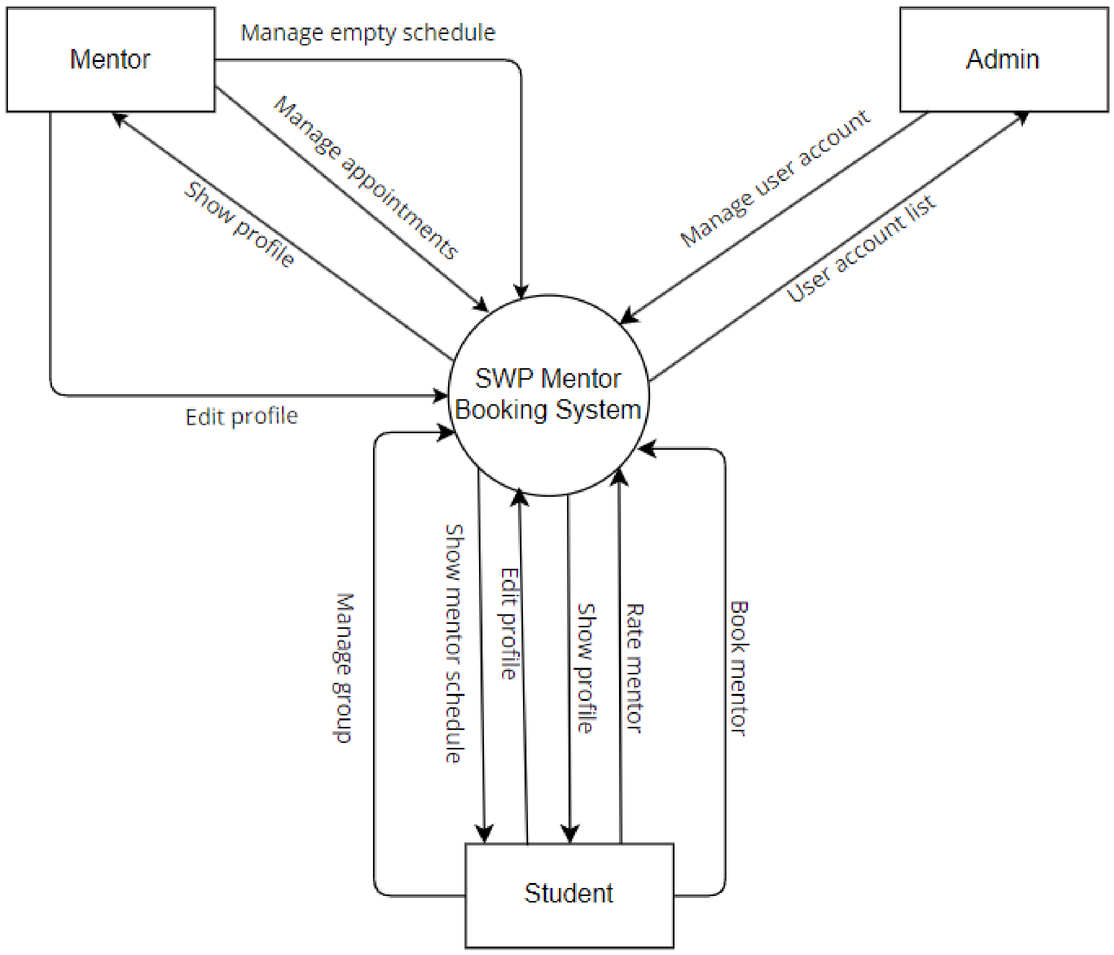
This project is a web application for students to organize into groups and schedule with their chosen mentors through a point system, and for mentors to be able to add their schedules and accept student requests.

1.2 Scope

"SWP Mentor Booking System" Project Scope			
Project name	SWP Mentor Booking System		
Project Manager	Vu Duc Anh		
Date of Project Approval	September 23rd	**Last Revision Date**	October 24th
Scope Description	IN SCOPE: + A student group making and managing system + A point system for student groups to schedule with their chosen mentor + A mentor system to post and adjust schedules, rating and manage their transaction points after meeting. + An admin system to manage student and mentor profiles.		
Project Deliverables	+ Group management system (as student) + Mentor booking system + Mentor scheduling system		

	+ Admin system
Acceptance Criteria	+ Functional Students, Mentors and Admin systems + Database + Functional and Clean UI
Constraints	+ Small team of 4 + Relatively short development period + Multiple Systems to implement + Relatively new to software development

2. PROJECT SCOPE



[Context diagram visual paradigm]

3. FUNCTIONAL REQUIREMENTS

3.1 Roles

Admin:

- Manage all users (students, mentors).
- Verify new mentor account (apply mentor).
- View statistical reports on: number of students, mentors, groups.

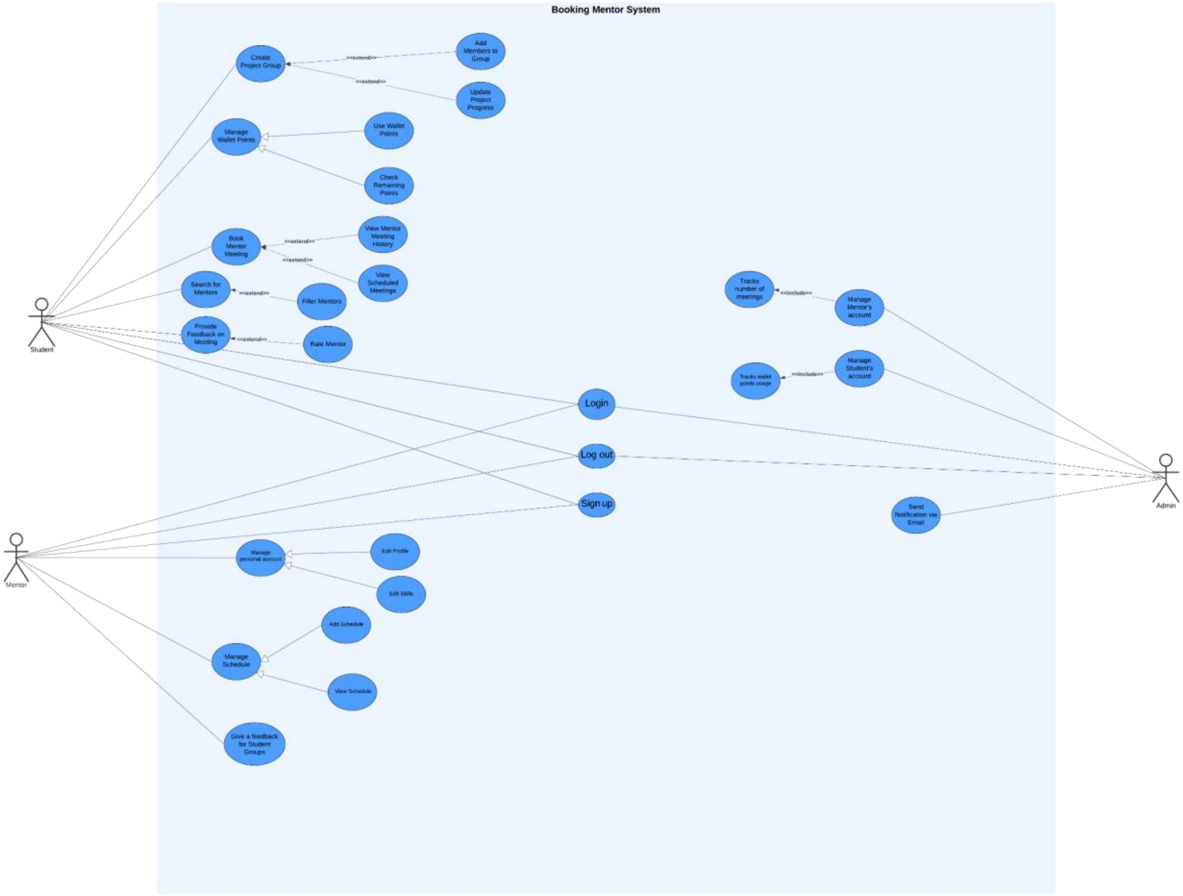
Mentor:

- Set personal information, skills.
- Manage availability (set available time slots).
- View a list of scheduled appointments.
- Rating and Feedback the student group after each meeting.
- Receive appointment reminders (via email).

Student:

- Set personal information.
- Create a group and invite other students to join.
- View wallet points, topic of group.
- View, search for mentors by skills, free time.
- Leader: Schedule a meeting with mentor.
- Receive appointment reminders (via email).
- View transaction history.
- Rating and Feedback mentor after each meeting.

3.2 Use Cases Diagram



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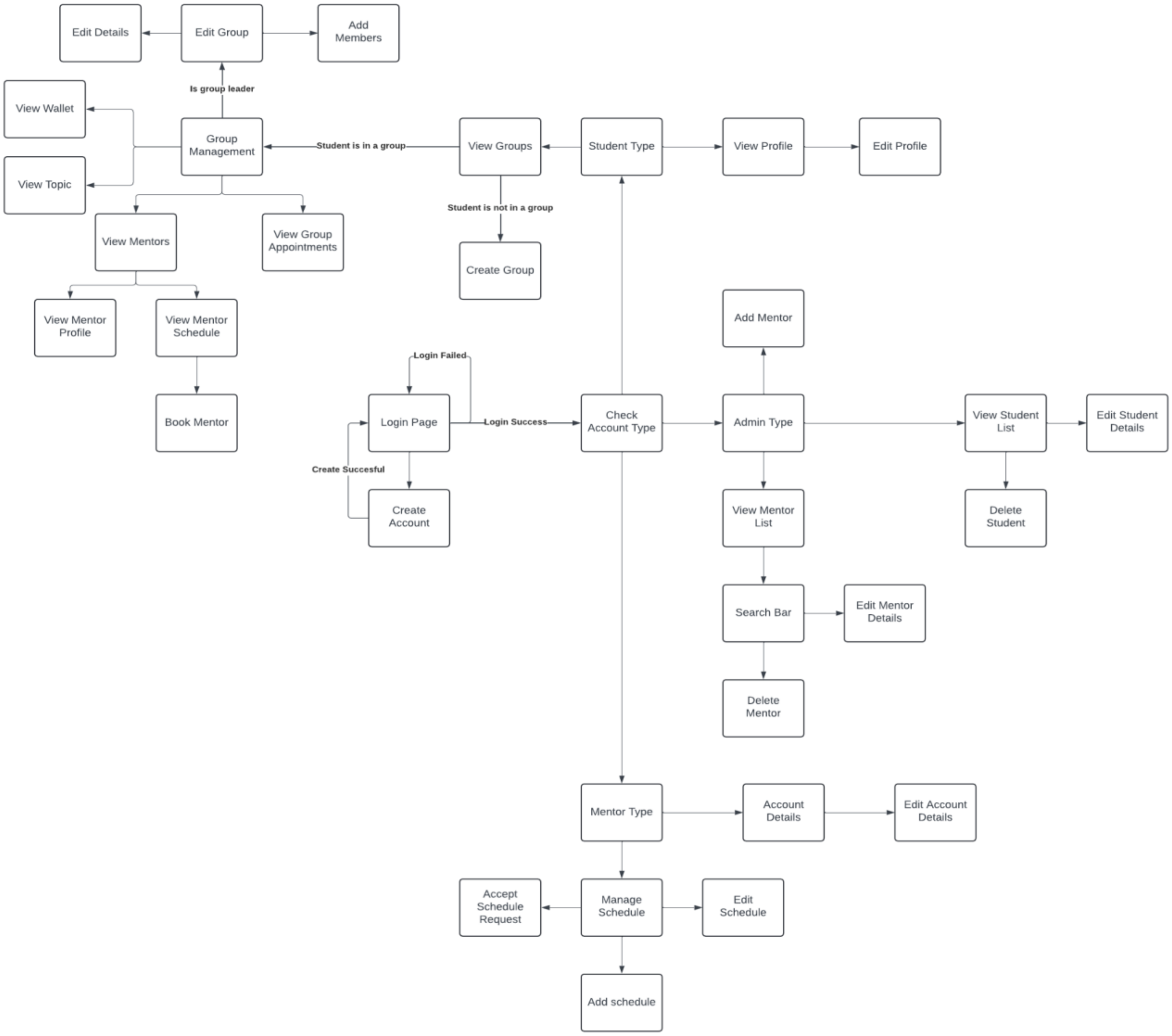
4. NON-FUNCTIONAL REQUIREMENTS

- **Basic, easy-to-use interface**: The system should have a simple, clean interface where students and mentors can quickly learn how to use the basic functions like creating accounts, booking mentor meetings, and managing points.
- **Scalability**: The system should be simple enough for you or your team to maintain and update without needing advanced tools or expertise.

5. SCREEN FLOW



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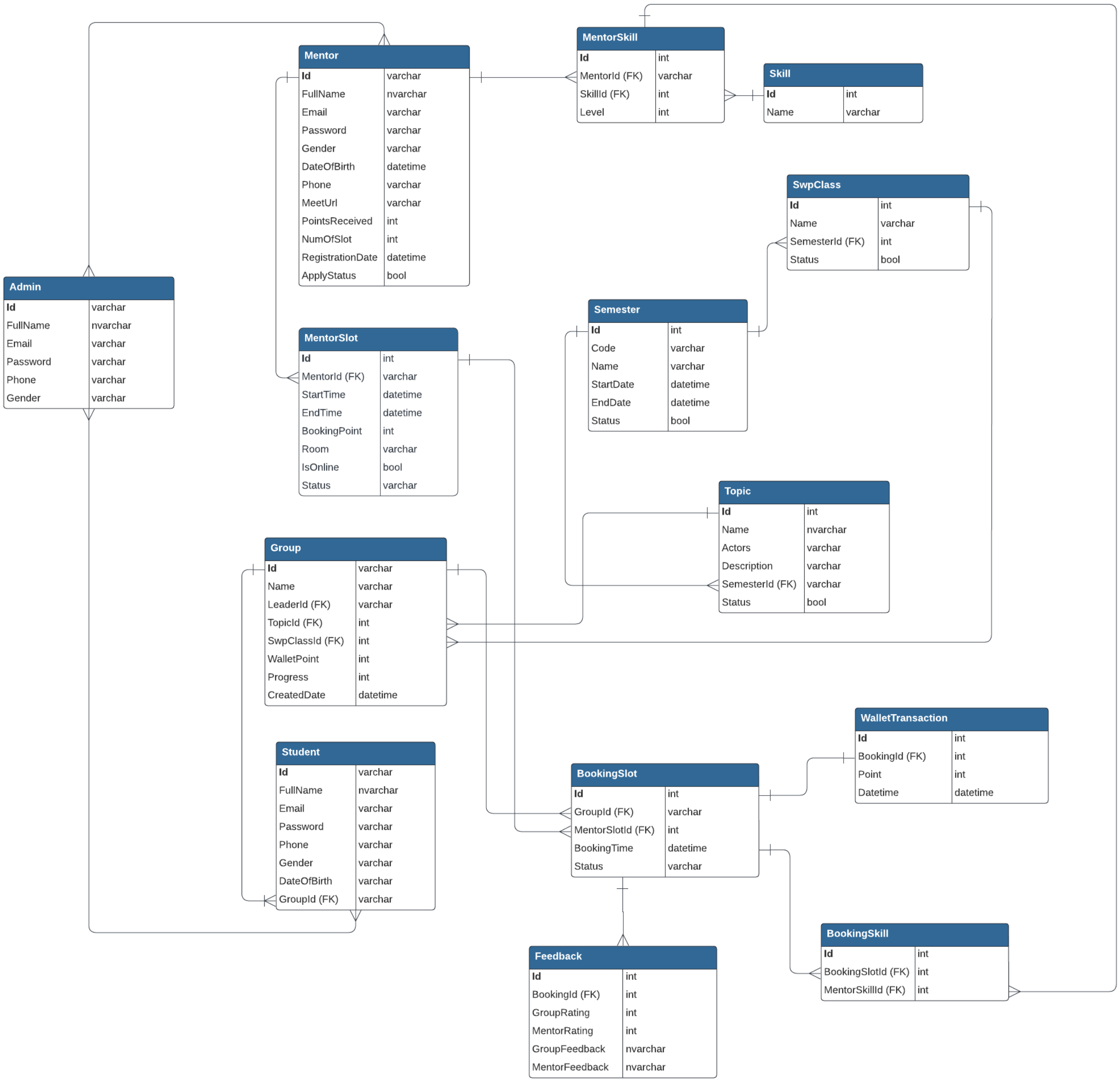
6. DATABASE DESIGN



Mentor	
Id	varchar
FullName	nvarchar
Email	varchar
Password	varchar
Gender	varchar
DateOfBirth	datetime
Phone	varchar
MeetUrl	varchar
PointsReceived	int
NumOfSlot	int
RegistrationDate	datetime
ApplyStatus	bool

MentorSkill	
Id	int
MentorId (FK)	varchar
SkillId (FK)	int
Level	int

Skill	
Id	int
Name	varchar

SwpClass	
Id	int
Name	varchar
SemesterId (FK)	int
Status	bool

Admin	
Id	varchar
FullName	nvarchar
Email	varchar
Password	varchar
Phone	varchar
Gender	varchar

MentorSlot	
Id	int
MentorId (FK)	varchar
StartTime	datetime
EndTime	datetime
BookingPoint	int
Room	varchar
IsOnline	bool
Status	varchar

Semester	
Id	int
Code	varchar
Name	varchar
StartDate	datetime
EndDate	datetime
Status	bool

Topic	
Id	int
Name	nvarchar
Actors	varchar
Description	varchar
SemesterId (FK)	varchar
Status	bool

Group	
Id	varchar
Name	varchar
LeaderId (FK)	varchar
TopicId (FK)	int
SwpClassId (FK)	int
WalletPoint	int
Progress	int
CreatedDate	datetime

WalletTransaction	
Id	int
BookingId (FK)	int
Point	int
Datetime	datetime

Student	
Id	varchar
FullName	nvarchar
Email	varchar
Password	varchar
Phone	varchar
Gender	varchar
DateOfBirth	varchar
GroupId (FK)	varchar

BookingSlot	
Id	int
GroupId (FK)	varchar
MentorSlotId (FK)	int
BookingTime	datetime
Status	varchar

BookingSkill	
Id	int
BookingSlotId (FK)	int
MentorSkillId (FK)	int

Feedback	
Id	int
BookingId (FK)	int
GroupRating	int
MentorRating	int
GroupFeedback	nvarchar
MentorFeedback	nvarchar

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7. SOURCE CONTROL

https://github.com/baoqg9104/Group2_SWP391_SE1867_Frontend

https://github.com/baoqg9104/Group2_SWP391_SE1867_Backend