Schedule creation and classroom booking (SCCB)

The application main idea is to make university schedule available and simple in use for students and lecturers. By using this service everyone can view the schedule, use different filters to look over the schedule and authorized users can also find free classrooms, book the classroom for lessons.

Roles : Guest, Not Approved User, Student, Lecturer, Admin.

Role	Description
Guest	User that isn't logged in. Can sing up and log in. Also has the ability to view and filter the schedule.
Not Approved User	User that is signed up, but not approved by admin. Can view and filter the schedule and edit personal info.
Student	View the schedule, filter the schedule, find and book free classrooms. Also can get info about his/her account, change password or edit his/her account.
Lecturer	The same description as the student, but has higher priority in booking classrooms.
Admin	Can view info about users, delete users, create new users. Has ability to view and modify the schedule. Besides, has the highest priority in booking classrooms.

Authentication System

№	Role	Use case	Description	Action name
1	Guest	Sign up	Sign up in the system	SignUp
2		Log in	Log in to the system	LogIn
3		Password recovery	Guest can recover forgotten password	PasswordRecovery
4	Not Approved User/ Student/ Lecturer/ Admin	Log in	Log in to the system	LogIn
5		Log out	Log out from the system	LogOut

Schedule System

№	Role	Use case	Description	Action name
1	Guest/ Not Approved User Student/ Lecturer/ Admin	View schedule	View schedule in system	ViewSchedule
2		Filter schedule	Filter schedule in system	FilterSchedule
3		Filter by group	Filter schedule by group	FilterByGroup
4		Filter by day	View the schedule in chosen day	FilterByDay
5		Create schedule	Create schedule in system	CreateSchedule

6	Admin	Edit schedule	Edit schedule in system	EditSchedule
7		Delete schedule	Delete schedule in system	DeleteSchedule

Booking System

№	Role	Use case	Description	Action name
1	Student/ Lecturer/ Admin	Book classroom	Book the classroom in system	BookClassroom
2		Choose purpose	Choose the purpose of booking	ChoosePurpose
3		Cancel classroom booking	Cancel booking of the classroom in system	CancelClassroomBooking
4		View booking	View the booking of the classroom	ViewBooking
5		Get notification about the booking confirmation	User can get the notification about confirmation the booking by admin	GetNotification
6	Admin	Confirm the booking	Admin can confirm the booking	ConfirmBooking
7		Filter booking	Filter booking	FilterBooking
8		Filter by number of lesson	Filter booking by number of of lesson	FilterByNumberOfLesson

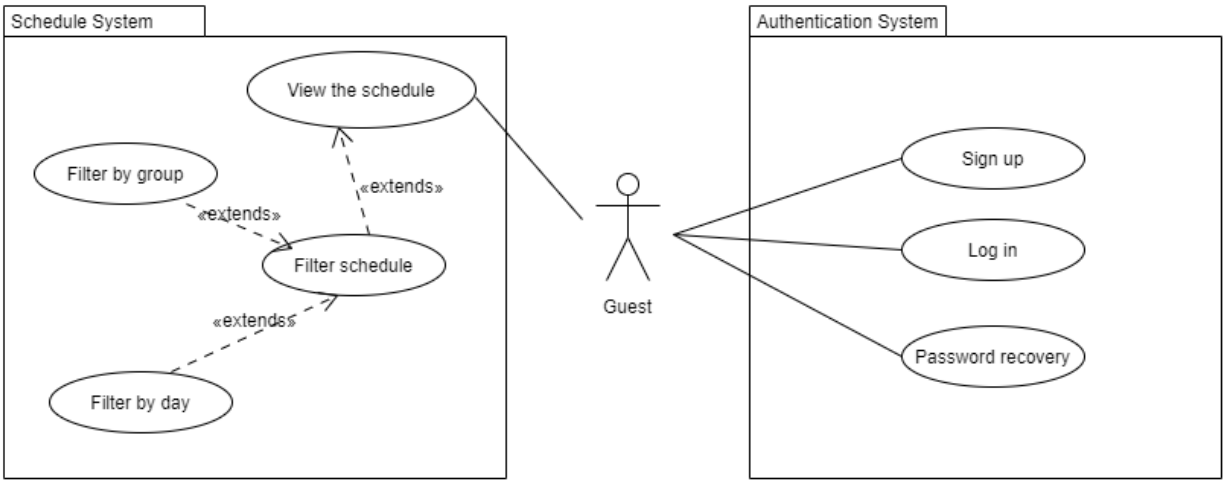
9		Filter by day	Filter booking by day	FilterByDay
10		Filter by classroom	Filter booking by classroom	FilterByClassroom

User Management System

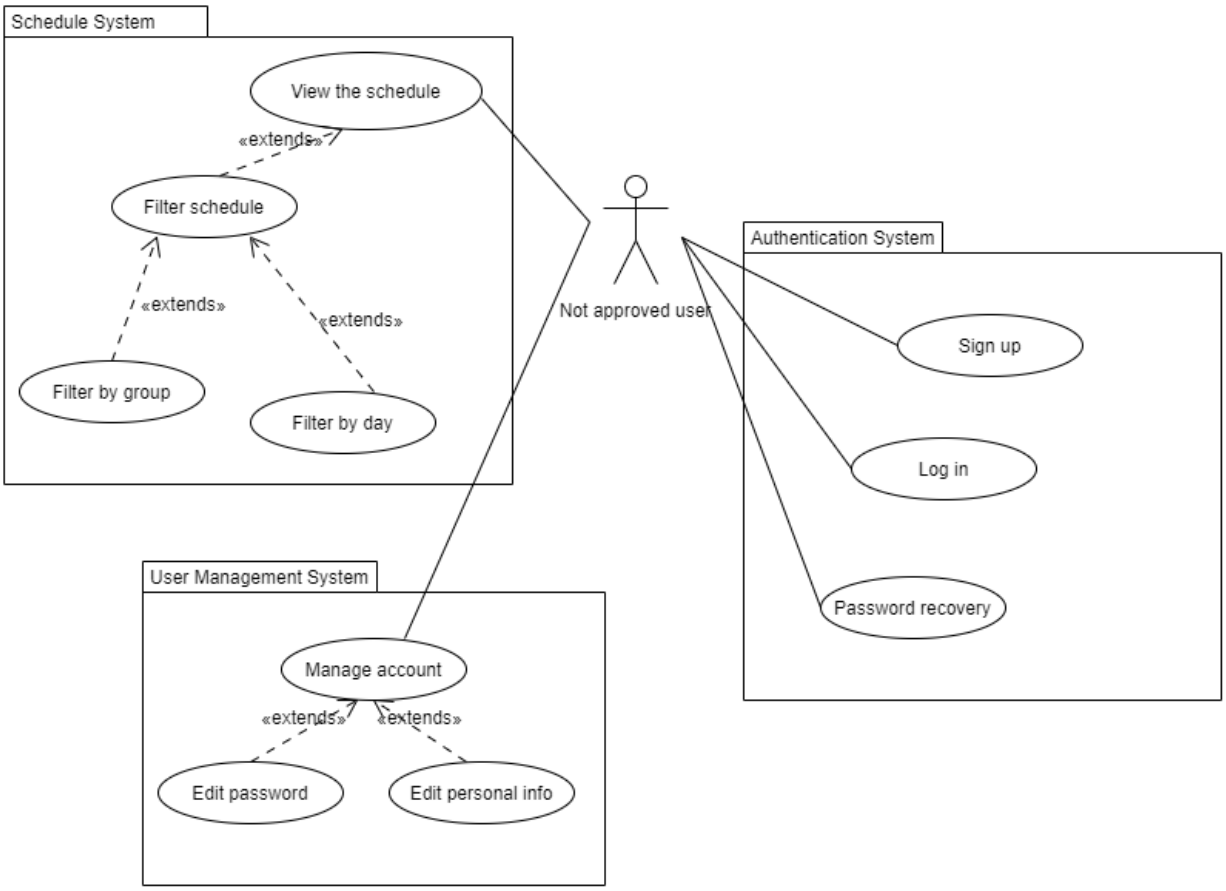
№	Role	Use case	Description	Action name
1	Admin	Manage user account	Can manage user's account	ManageUser
2		Create user	Create new user in system	CreateUser
3		Delete user	Delete user in system	DeleteUser
4		Change user's role	Change user's role in system	ChangeUserRole
5		View all accounts	Can view all users accounts	ViewAccounts
6	Not Approved User/ Student/ Lecturer/ Admin	Manage account	Manage own account	ManageAccount
7		Edit personal info	User can edit his personal information	EditPersonalInfo
8		Change password	User can change his password	ChangePassword
9	User/ Student/ Lecturer/ Admin	Manage notifications	Manage notifications	ManageNotification
10		View messages	View the messages	ViewMessages
11		Create group	Can create the group of users	CreateGroup

Use case diagrams

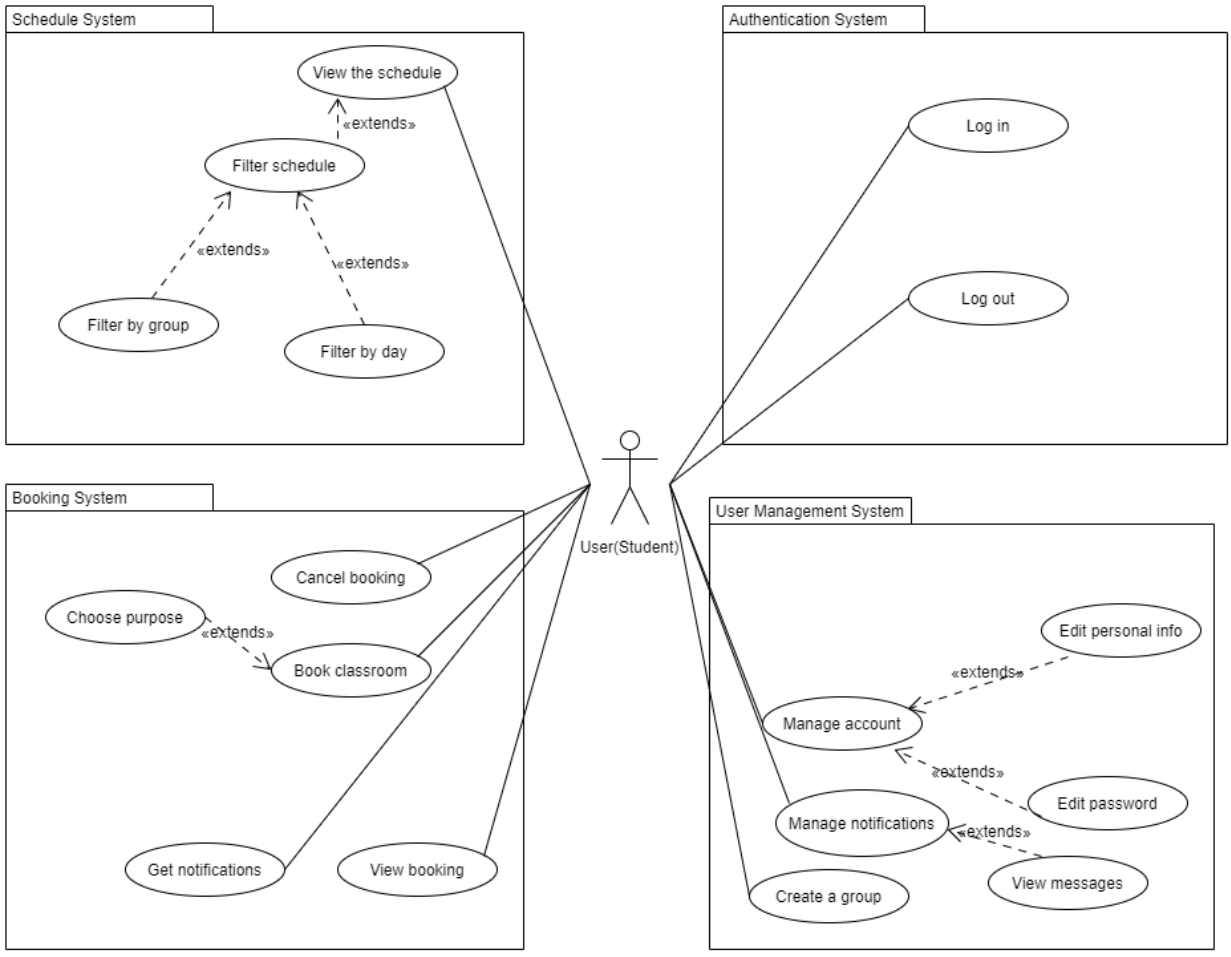
Guest role:



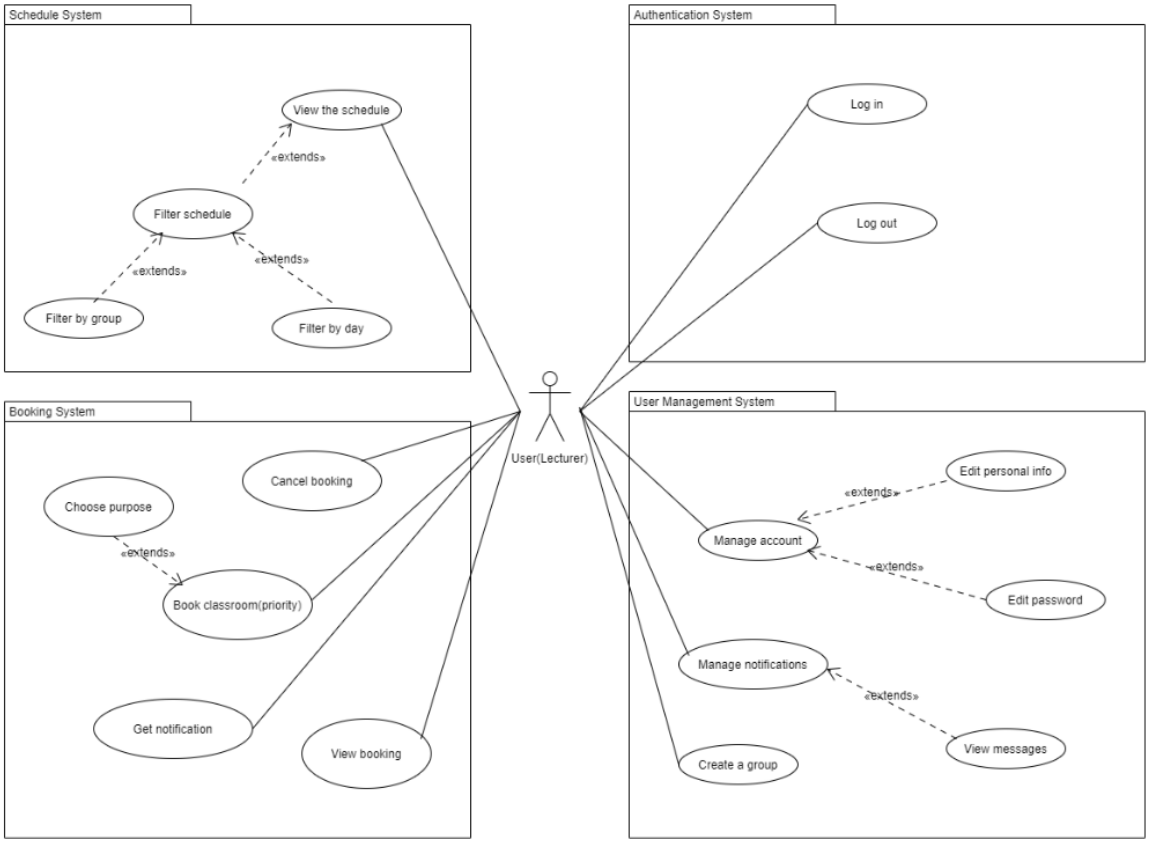
Not Approved User role:



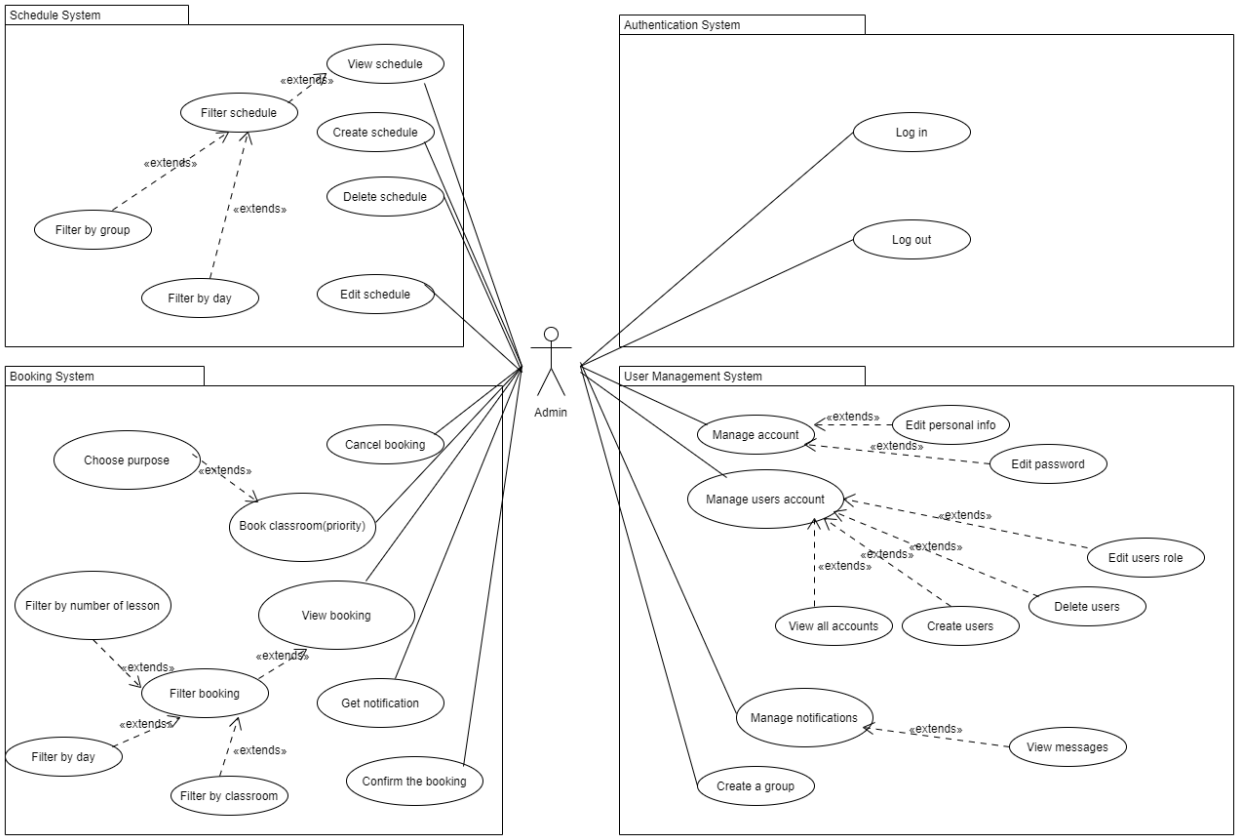
User(Student) role:



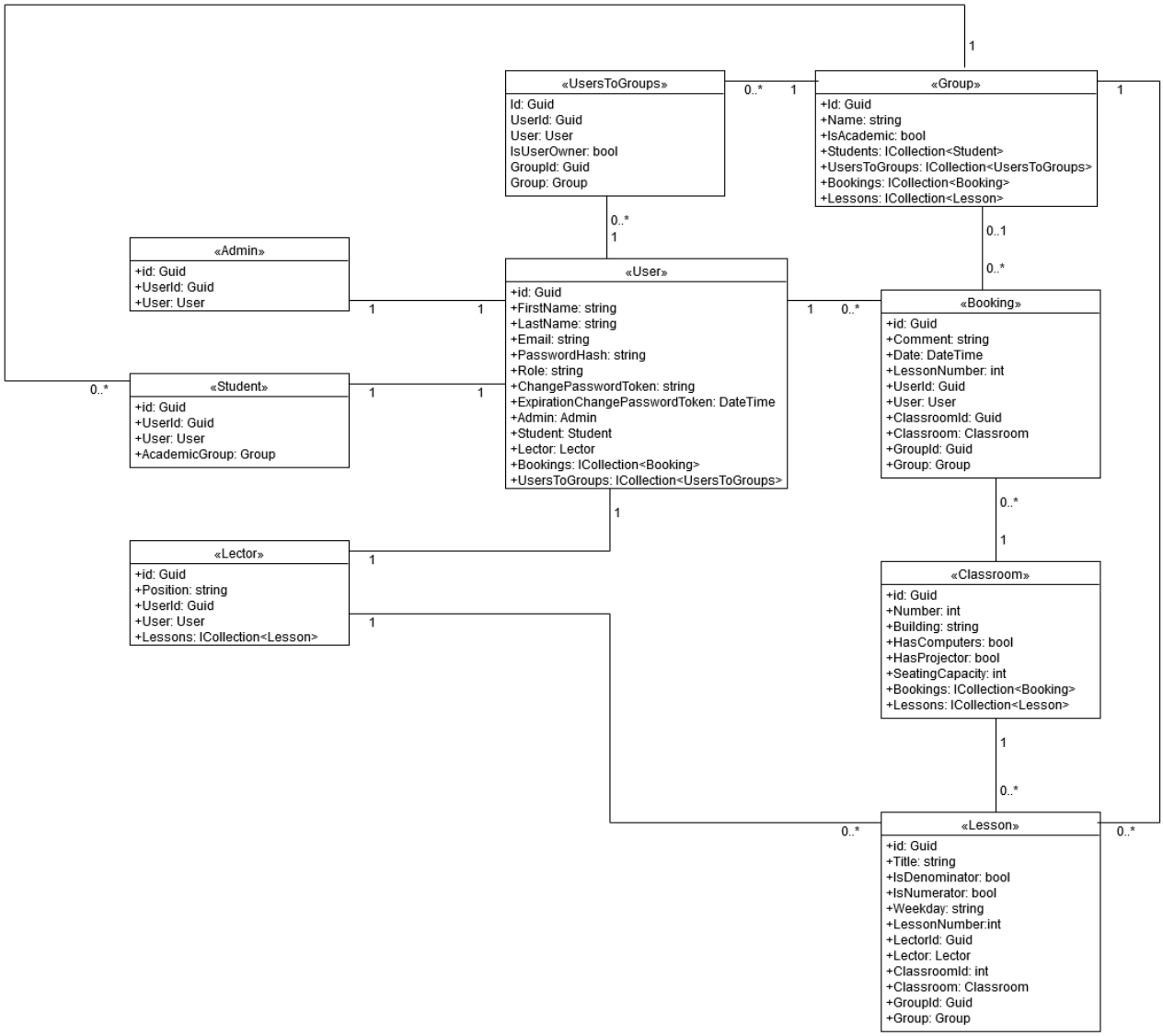
User(Lecturer) role:



Admin role:

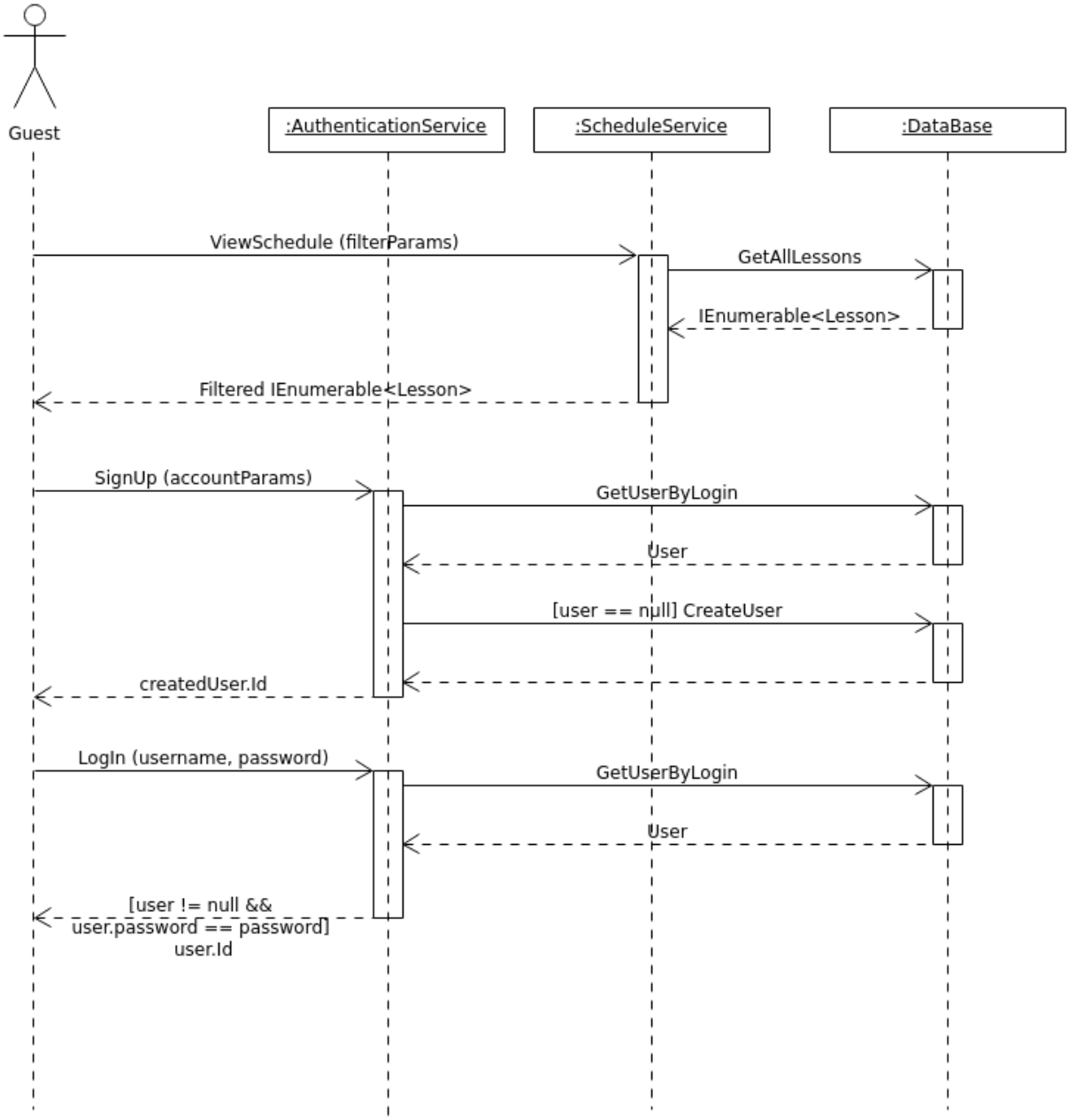

Schedule System
View schedule
«extends»
Filter schedule
Create schedule
«extends»
Delete schedule
«extends»
Filter by group
Filter by day
Edit schedule
Authentication System
Log in
Log out
Admin
Booking System
Cancel booking
Choose purpose
«extends»
Book classroom(priority)
Filter by number of lesson
View booking
«extends»
«extends»
Filter booking
Get notification
«extends»
Filter by day
«extends»
Filter by classroom
Confirm the booking
User Management System
Manage account
«extends»
Edit personal info
«extends»
Edit password
Manage users account
«extends»
«extends»
«extends»
Edit users role
Delete users
View all accounts
Create users
Manage notifications
«extends»
View messages
Create a group

Class diagram

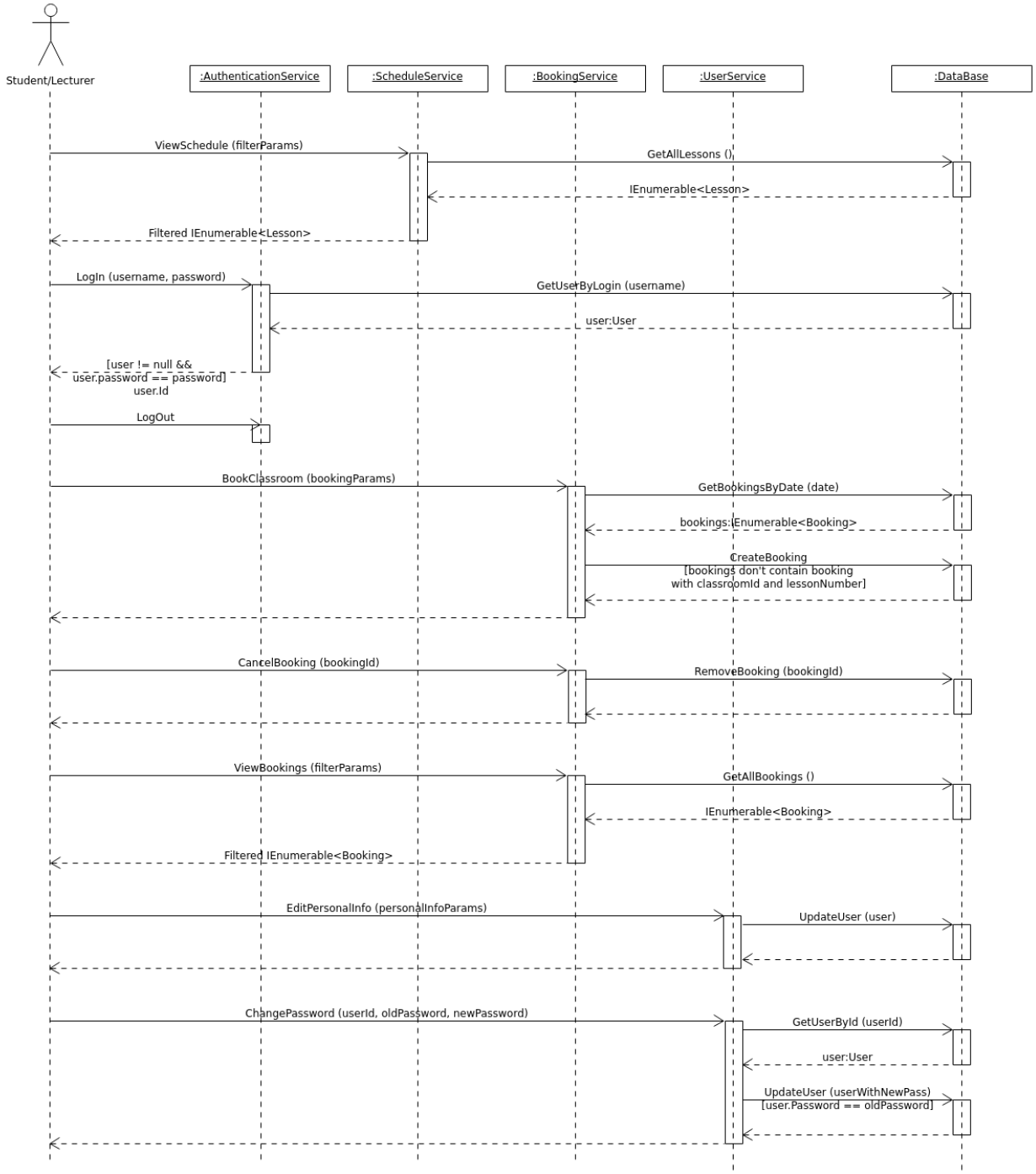
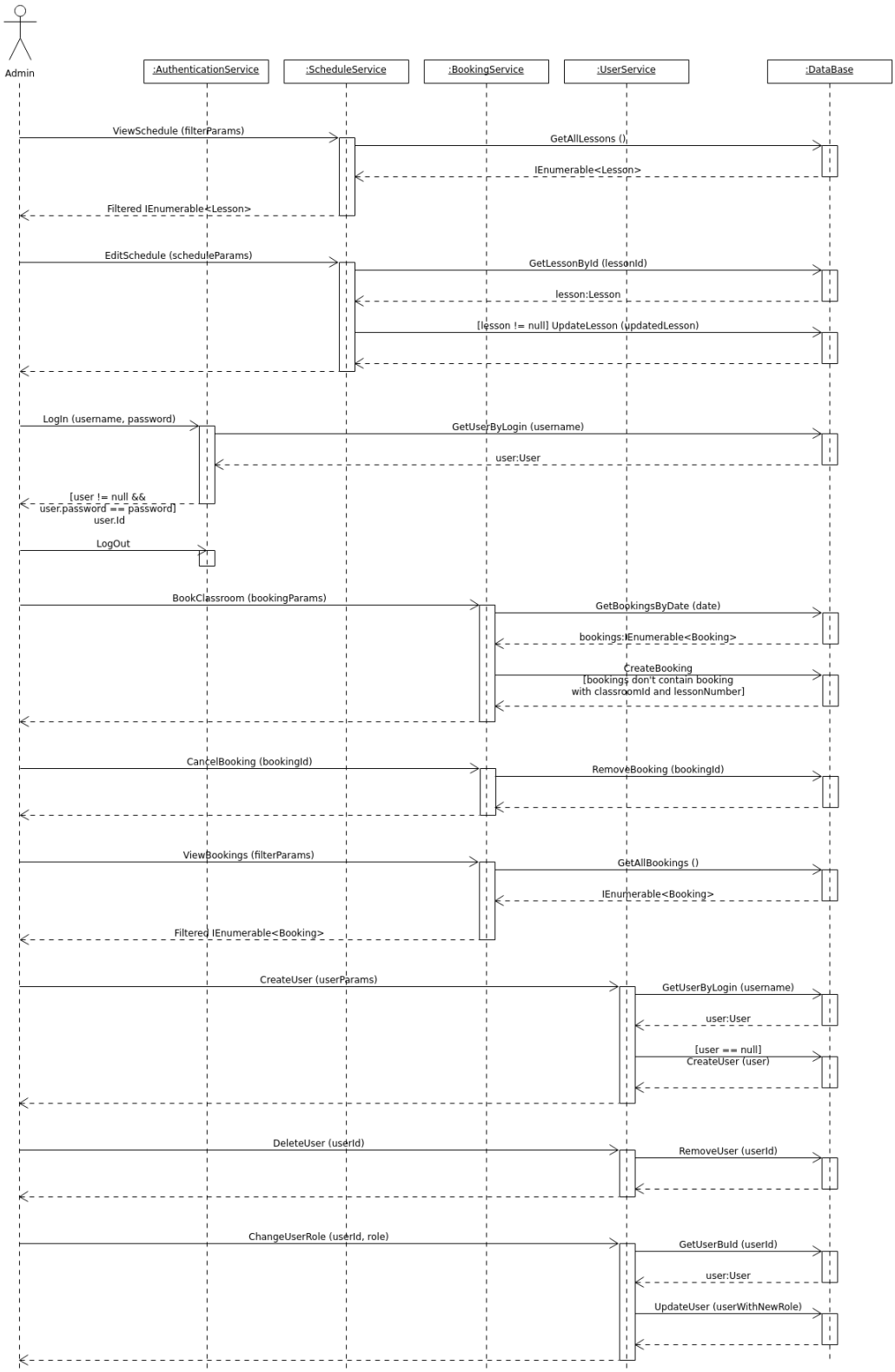


Sequence diagrams

Guest sequence diagram:



User sequence diagram:



Admin sequence diagram: