Iteration 5

Assignment: Analysis and Design models for the Administer User Profile

Team ID: SB5 Team Name: Stars

Analysis Model

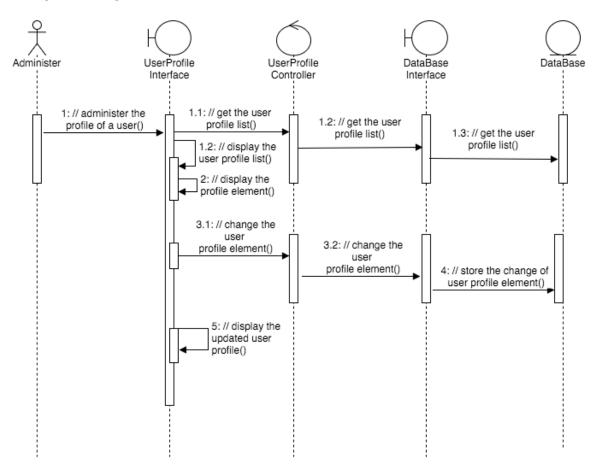
- 1. List of analysis classes

Entity Class: Administer, Database

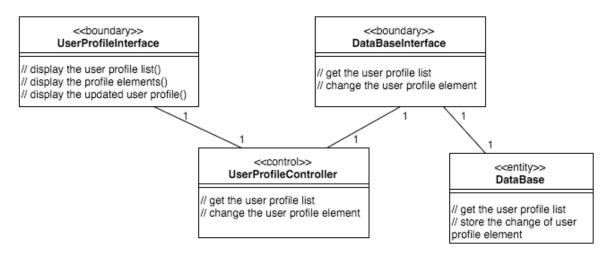
Boundary Class: User Profile Interface, DataBase Interface

Control Class: User Profile Controller

- 2. Sequence Diagram



- 3. High-level class diagram (VOPC)



Design Model

Detailed class diagram demonstrating architectural patterns and design pattern

Model-View-Controller, Layered and event-based architectural patterns together with observer design pattern. Three layers (model layer, view layer and controller layer) are involved. Model plays as the "notifier" while view plays as the "subscriber" so that observer design pattern is implemented through socket event. It is also event-based as socket is event-based.

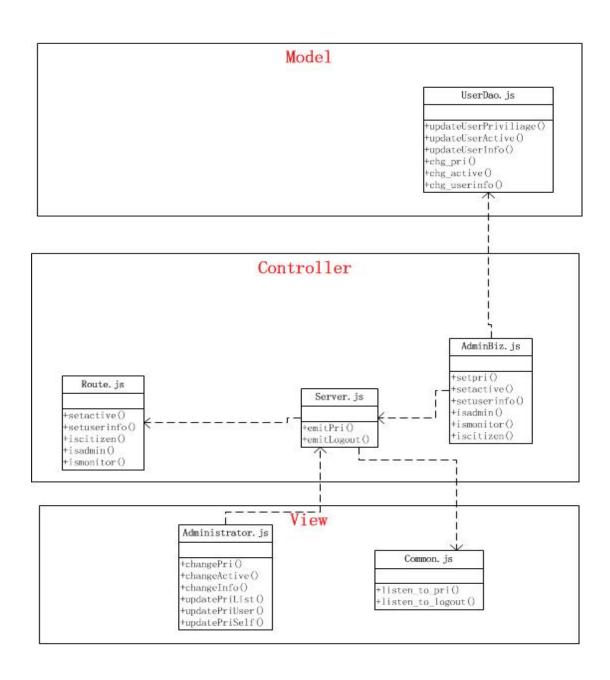
Deal with Privilege:

- 1) administrator.js send change user privilege API
- 2) Above API will get to route.js and get to adminBiz.js to be processed
- 3) adminBiz.js calls the updateUserPrivilege function in adminDao.js to change the privilege information in database
- 4) server.js send the socket event via emitPri and common.js get the socket event and changed the privilege in real time

Deal with inactive users:

The same communications made as "Deal with Privilege".

- 1) administrator.js send change active/inactive status API
- 2) Above API will get to route.js and get to adminBiz.js to be processed
- 3) adminBiz.js calls the updateUserActive function in adminDao.js to change the active/inactive status in database
- 4) server.js send the socket event via emitLogout and common.js get the socket event and changed the active/inactive status in real time and log out the user who has been inactivated



Mapping

Mapping for Administer Profile (MVC Architecture)			
	Analysis Classes	Implementation Elements	Files Involved
MODEL	Boundary Class		
		User Profile lists with user	
	DataBaseInterface	profile elements	<u>userDao.js</u>
	Entity Class	Profile elements: Privilege levels,	
		Username, Password,	
	Database	Active/Inactive Status	<u>chatroom.db</u>
View	Boundary Class		
	UserProfileInterface	User Profiles	administrator.js
Controller	Controller Class		
	UserProfileController	Admin Profile Control	<u>adminBiz.js</u>