



integration test for  
user interface classes  
in “view” folder  
(test whether all  
interfaces is created  
as expected)

sees

**View**

notifies

**Controller**

integration test for controller  
classes in “dao” folder  
(test whether the logic of each  
calculating method is correct)

update

**Model**

manipulates

integration test for classes  
that interacts with database  
in “bean” folder  
(test whether any  
modifications on database  
can be done successfully)

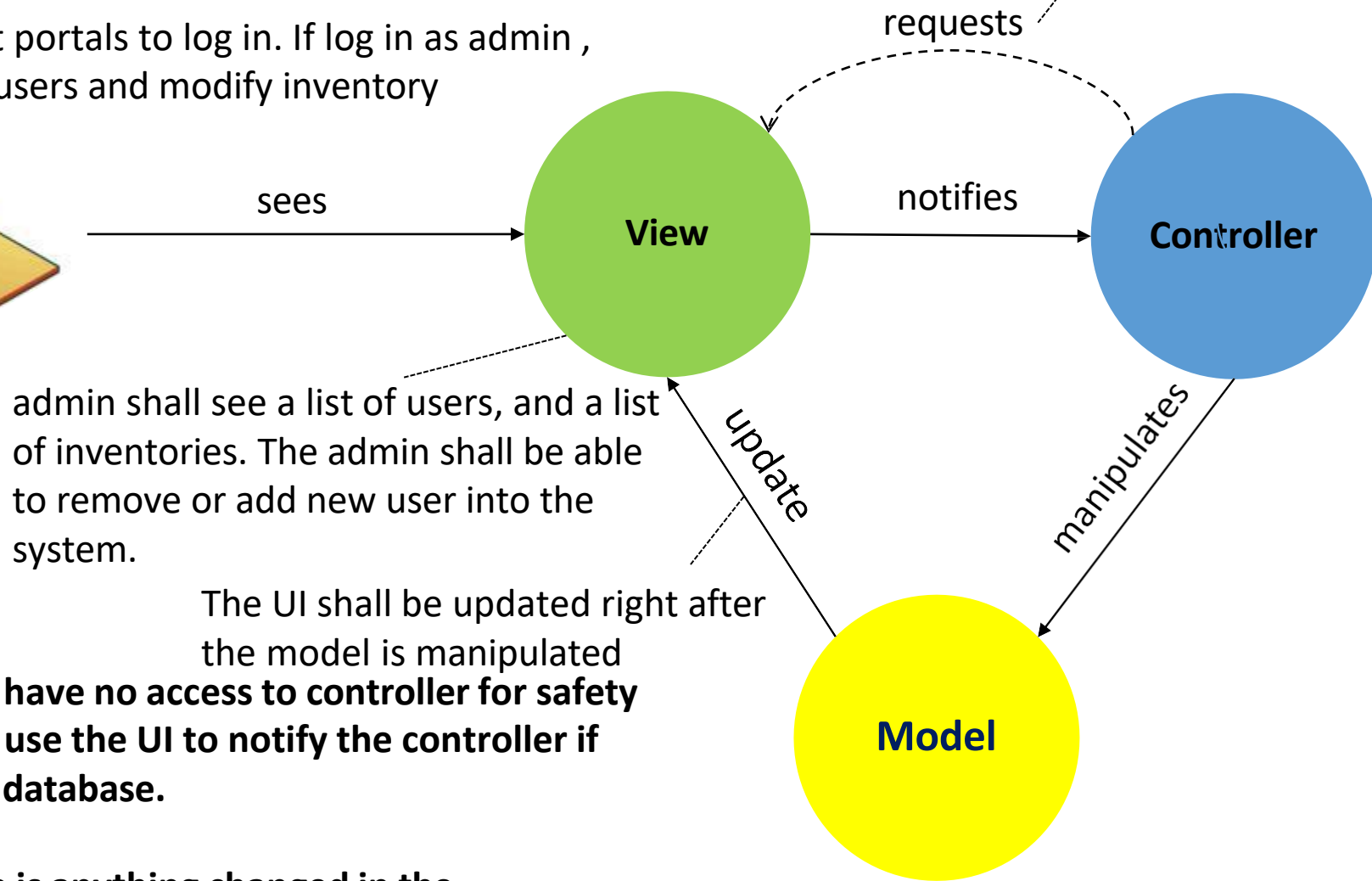
**NOTE:** we construct architecture sketch by using MVC

View represents the UI that client sees

Controller represents the internal component of the software

Model represents the database

There will be two different portals to log in. If log in as admin ,  
he will be able to manage users and modify inventory



As shown above, the admin have no access to controller for safety of the source code, he must use the UI to notify the controller if he wants to manipulate the database.

UI is always updated if there is anything changed in the database. We will design an update button on the main page so that the admin can update the page manually as well.

If membership/coach/front desk/ janitor wants to log in, they will log in through user portal



sees

View

notifies

Controller

their personal information including their title will be shown after they log in through user portal

update

Model

manipulates

e.g. pop a reminder to the client if a membership wants to enroll in a course but funds is not enough

requests

We divide the software into 2 parts since we only want the manager of the gym to have the power of modifying others. So, the architecture is constructed based on who is using the software. If it is the manager, he shall use the admin portal to log in. For other users including membership/coach/gym staff, they will log in through user portal.