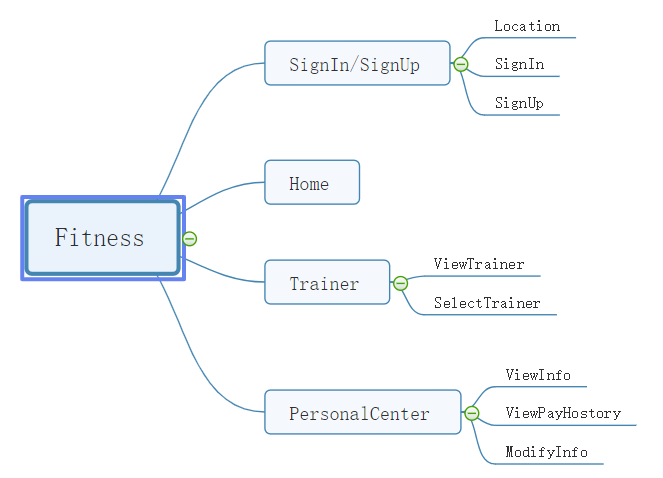
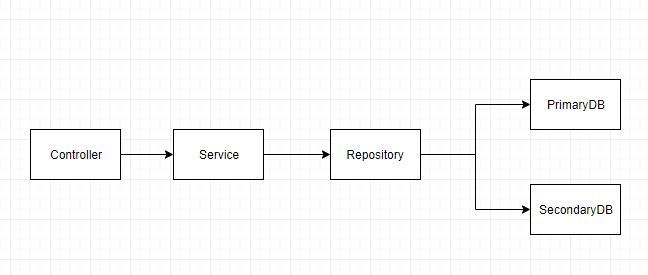
Design Report

1. System Structure Diagram.

There are four models in my project. SignIn/SignUp, Home,Trainer and PersonalCenter.





Tools: Spring-boot ,Mysql , Redis

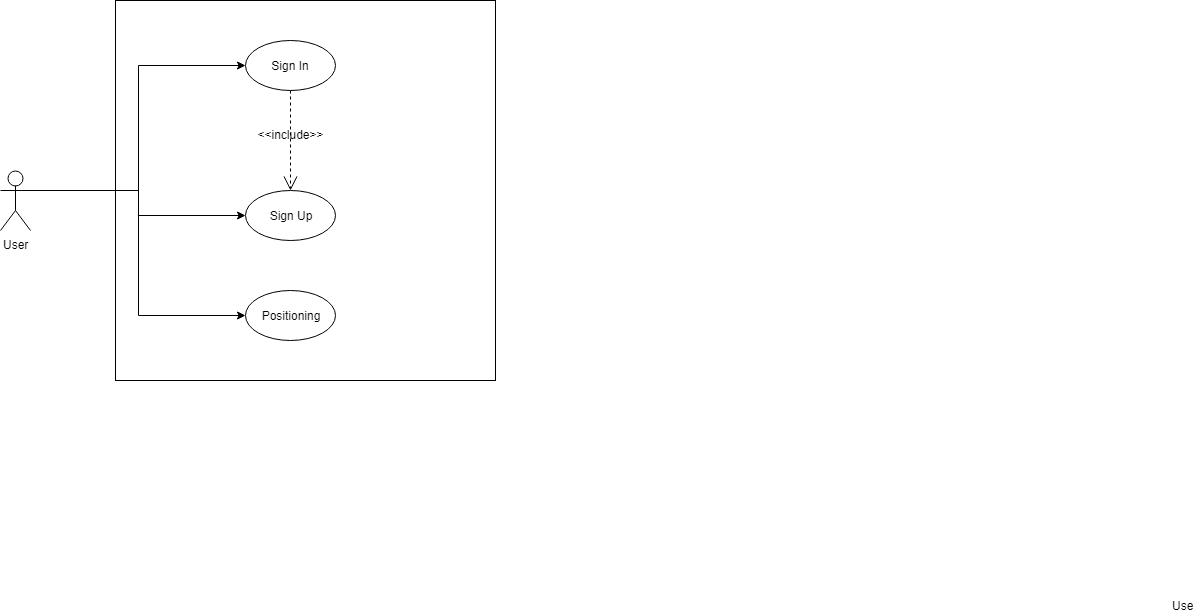
Technology used:Spring-boot,Mysql,Redis,Google Map,Spring-data-jpa,fastJson

Features: multiple tables query, multi datasources, pagination, auditing,caching

* 1. .SignIn/SignUp

Features:Google map, auditing

In this model,user can signIn and signUp or browsing gym location.



* 1. .home

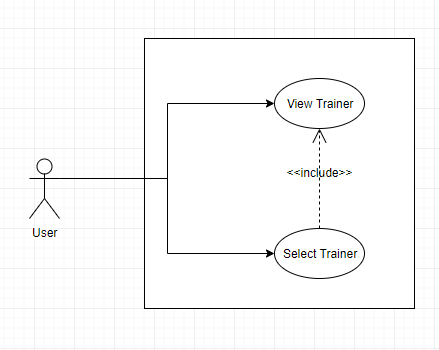
Features:caching , multiple tables query

In this model,user can browser homepage and next step.

* 1. . Trainer

Features:caching, pagination

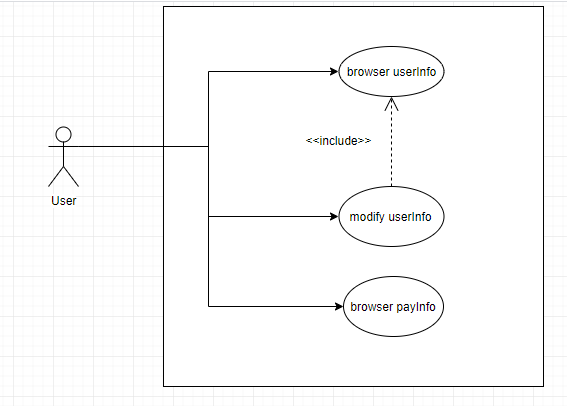
In this model,user can browser and select the trainer.



* 1. .PersonalCenter

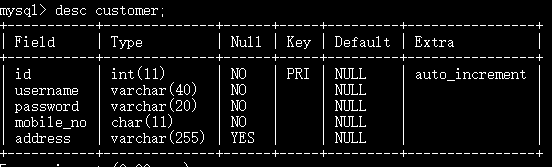
Features: multi datasources, auditing

In this model,user can browser and modify their info.



1. Data design
   1. primary dataDB Entity

Customer :



CREATE TABLE `customer` (

`id` int(11) NOT NULL AUTO\_INCREMENT,

`username` varchar(40) NOT NULL,

`password` varchar(20) NOT NULL,

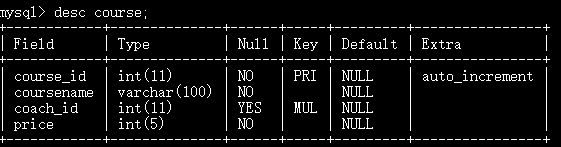
`mobile\_no` char(11) NOT NULL,

`address` varchar(255) DEFAULT NULL,

PRIMARY KEY (`id`)

) ENGINE=InnoDB AUTO\_INCREMENT=12 DEFAULT CHARSET=utf8

Course



CREATE TABLE `course` (

`course\_id` int(11) NOT NULL AUTO\_INCREMENT,

`coursename` varchar(100) NOT NULL,

`coach\_id` int(11) DEFAULT NULL,

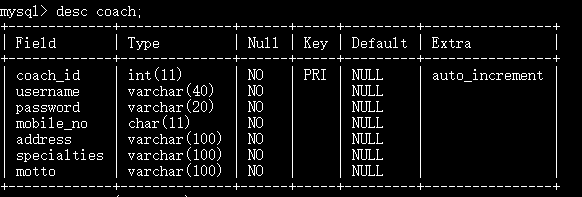
`price` int(5) NOT NULL,

PRIMARY KEY (`course\_id`),

KEY `FK2q0hborxuhg47aryws9woqlf1` (`coach\_id`)

) ENGINE=MyISAM AUTO\_INCREMENT=14 DEFAULT CHARSET=utf8

Coach



CREATE TABLE `coach` (

`coach\_id` int(11) NOT NULL AUTO\_INCREMENT,

`username` varchar(40) NOT NULL,`password` varchar(20) NOT NULL,`mobile\_no` char(11) NOT NULL,

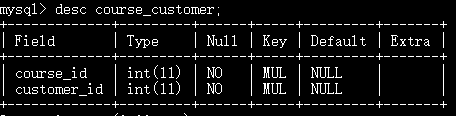
`address` varchar(100) NOT NULL,

`specialties` varchar(100) NOT NULL,

`motto` varchar(100) NOT NULL,PRIMARY KEY (`coach\_id`)

) ENGINE=InnoDB AUTO\_INCREMENT=22 DEFAULT CHARSET=utf8

course\_customer



CREATE TABLE `course\_customer` (

`course\_id` int(11) NOT NULL,

`customer\_id` int(11) NOT NULL,

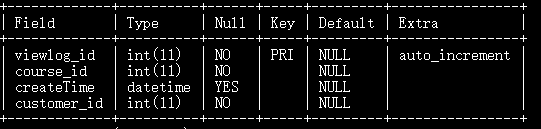
KEY `FKemg9keww81iegt6guwvb1c9nw` (`customer\_id`),

KEY `FK19ryot8csdvwt4m5sgxchakdw` (`course\_id`)

) ENGINE=MyISAM DEFAULT CHARSET=utf8

* 1. secondary dataDB Entity

ViewLog



CREATE TABLE `viewlog` (

`viewlog\_id` int(11) NOT NULL AUTO\_INCREMENT,

`course\_id` int(11) NOT NULL,`createTime` datetime DEFAULT NULL,`customer\_id` int(11) NOT NULL, PRIMARY KEY (`viewlog\_id`)

) ENGINE=MyISAM AUTO\_INCREMENT=4 DEFAULT CHARSET=utf8