

CoderHub

1651701 Wei Nan

1650527 Cai Zhendong

161718 Fang Pei

1651200 Pu Jiarui

1.Introduction

1. Project Name: CoderHub

2. Introduction:

CoderHub is a **multi-functional** social platform for programmers.
It includes 5 functional modules

- Hot: Share and view articles
- QA: Publish and answer questions
- Gathering: find popular activities and lectures
- Spit: All sorrow and joy
- Recruitment: Seek for job and enterprise.

Meanwhile CoderHub provides management backend for administrator to maintain the web.

3. Team Members:

1651701 Wei Nan

1650527 Cai ZhenDong

1651200 Pu Jiarui

1651718 Fang Pei

4. Contact Number: 18916107060

5. Email Address: 154544017@qq.com

2.System Functionalities

2.1 general user

2.1.1 Account functions

2.1.1.1 Registry

1. Fill in nickname, mobile phone number.
2. Get verification code sent by Alibaba Cloud SMS Service
3. Fill in password
4. Register successfully

2.1.1.2 Login

1. Fill in mobile number, password
2. Login successfully and get token

2.1.1.3 Logout

Clear token and exit.

2.1.2 Hot

2.1.2.1 Get channel

The headlines are categorized by channel, and users can choose different channels, such as machine learning, front-end development, and so on.

2.1.2.2 View the hottest article

Users can browse the headlines of a particular channel by selecting a particular channel. Implemented waterfall loading function, users can pull down to load more articles.

2.1.2.3 View the details of headlines

Users can select a headline article to view the article details and information about the user who posted the article.

2.1.2.4 Publish Headlines

The user can fill in the title and article content to upload the article, and the article is published after being reviewed by the administrator.

2.1.3 QA

2.1.3.1 Get tags

Each question is tagged with a specific tag, such as Java, C ++, etc. The user can select a tag to browse different kinds of questions.

2.1.3.2 View the new answers

Users can view the questions under the specified label, which are sorted by time. Implemented the waterfall loading function.

2.1.3.3 View the hot answers

Users can view the questions under the specified label, which are sorted by the number of answers. Implemented the waterfall loading function.

2.1.3.4 View questions not answered

Users can view the questions not yet answered under the specified label

2.1.3.5 Check the QA details

Users can view the details of a question and answer, such as the publisher, and a list of answers.

2.1.3.6 Answer questions

Users can write answers on the detail page.

2.1.3.7 Publish questions

Users can fill in titles, tags, content (supports rich text editing like code blocks, etc.) and post questions

2.1.4 Activity

2.1.4.1 Browse the latest events

Users can view all activities posted on CoderHub. Implemented the waterfall loading function.

2.1.4.2 View event details

Users can view the start event, end time, organizer, event introduction and other details of the event.

2.1.5 Spit

2.1.5.1 View spits

Users can view all the spits

2.1.5.2 Thumb up

Users can give spit a thumb up on the browse list interface.

2.1.5.3 Check spits

The user can view the details of the spit and comment on the slot.

2.1.5.4 Review spits

The user can comment on the spits by clicking the comment button on the slot detail page.

2.1.5.5 Publish spits

Users can edit spits to publish.

2.1.6 Recruitment

2.1.6.1 View recruitment information

Users can view recommended and newest chances

2.1.6.2 View the hottest enterprise.

Users can view the hottest enterprise

2.1.6.3 View Recruitment Details

Users can view the salary, requirements, job descriptions and job requirements of the recruitment information as well as the introduction of the company.

2.1.6.4 View company details

Users can view company labels, introductions, homepages and more.

2.1.7 Person Center

2.1.7.1 View my answer

Users can answer questions I have answered.

2.1.7.2 View my questions

Users can see the questions I asked.

2.1.7.3 View personal information

Users can view their profile, personal homepage, email and other information.

2.1.7.4 Edit personal information

Users can modify their profile, personal homepage, email and other information.

2.2 Administrator

2.2.1 Account

2.2.1.1 Administrator login

Input account(admin) and code(123456) to login, get token.

2.2.1.2 Logout

Clear token and go back to the login page.

2.2.2 Activity Management

2.2.2.1 See all events

The administrator can view all activities in the database.

2.2.2.2 Edit event information

The administrator can modify the event information (name, location, etc.), and can set whether the event is visible (whether it is displayed to the front page).

2.2.2.3 Delete event information

Administrators can delete events.

2.2.2.4 Add event information

Administrators can add activities and choose whether they are visible.

2.2.3 Recruitment Management

2.2.3.1 View all registered enterprises

The administrator can view all enterprise information in the database.

2.2.3.2 Modify Enterprise Information

The administrator can modify the company's information (name, profile, etc.), and can set whether the company is popular (whether to show the hot companies in the foreground).

2.2.3.3 Delete Enterprise Information

Administrators can delete corporate information.

2.2.3.4 New Enterprise

Administrators can add new enterprise information and choose whether it is popular.

2.2.3.5 View all registered job postings

The administrator can view all recruitment information in the database.

2.2.3.6 Modify Recruitment Information

The administrator can modify the recruitment information (name, requirements, etc.), and can decide whether the recruitment is visible (whether the front desk is displayed).

2.2.3.7 Delete Job Information

The administrator can delete job postings.

2.2.2.8 New recruitment information

Administrators can add recruitment information to existing enterprises and choose whether they are visible.

2.2.4 Article Management

2.2.4.1 View all channels

The administrator can view all channels in the database.

2.2.4.2 Modify Channel Information

The administrator can modify the channel information and set whether the channel is visible

2.2.4.3 Delete Channel Information

The administrator can delete a channel.

2.2.4.4 Add Channel

The administrator can add new channels and choose whether they are visible.

2.2.4.5 View all column information

The administrator can view all column information in the database.

2.2.4.6 Review column information

The administrator can review user-submitted columns so that they can be created and displayed on the front end.

2.2.2.7 See all articles

Administrators can view existing and pending articles.

2.2.2.8 Review Article

The administrator reviews the article applied for publishing, so that it can be displayed on the front end, and sets whether to stick it to the top bar.

2.2.2.9 Delete Article

When an administrator reviews an article for publication, the administrator can delete the article.

3. User Manual

3.1 Scenarios

3.1.1 Attentions

Because of the low server performance, so `Network Error, timeout of 3000ms` may appear in the viewing, just refresh the page. Contacting administrator is another way.

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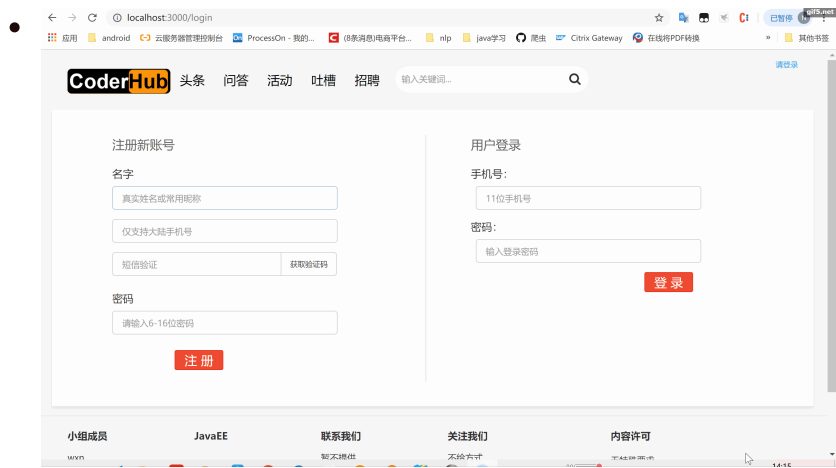
●

●

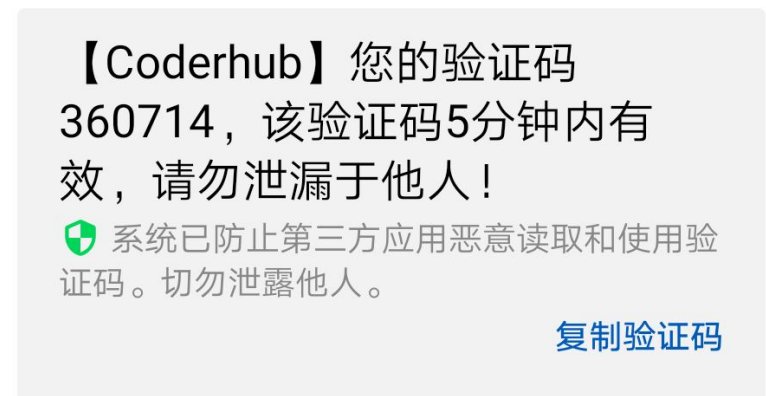
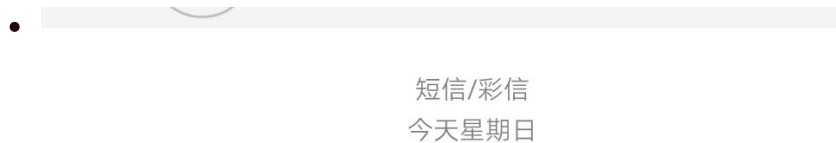
●

3.1.2.1 Register/Login

- Click the 请登录 on the right up corner and enter the Register/Login page.



Enter nickname, phone number and verification will be sent.(Ignore the fail 500 error)



Check the verification.



Enter the verification code and password to complete the registration (Ignored fail 500 error, registration has been completed)

CoderHub

头条问答活动吐槽招聘

输入关键词...

请登录

注册新账号

名字

真实姓名或常用昵称

仅支持大陆手机号

短信验证

获取验证码

密码

请输入6-16位密码

注册

用户登录

手机号:

18916107060

密码:

123456

登录

Login in with registered account or use 18916107060(123456) as demo where some answers and questions are embedded in.

3.1.2.2 Article

1. Change channels



The headline articles are divided into different channels. You can browse different articles by switching channels.

2. View articles



Dynamically load articles through the drop-down, click to view the article details and the author information of the published article.

3. Publish articles



Click Publish to share, you can edit the article, realize rich text editing, you can upload pictures, format text, etc. Posts can be reviewed by the administrator after uploading.

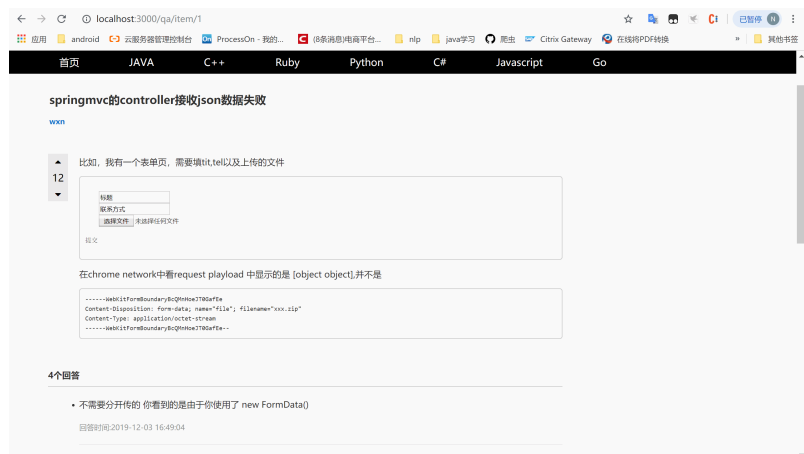
3.1.2.2 QA

1. View questions



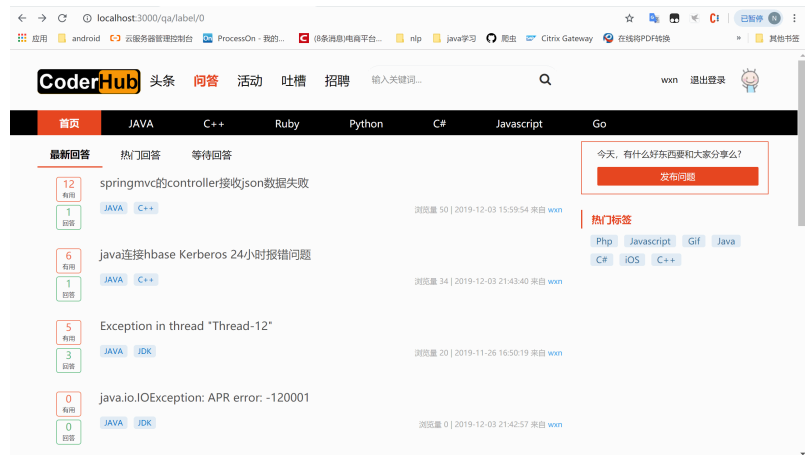
Questions have different tags depending on the type, and you can select a tag to switch. The questions in each label are arranged in three ways: latest answer, hottest answer, and waiting answer. Click on a question to see the details of the question and answer.

2. Answer questions



Below the question users can fill in their own answers and support rich text editing.

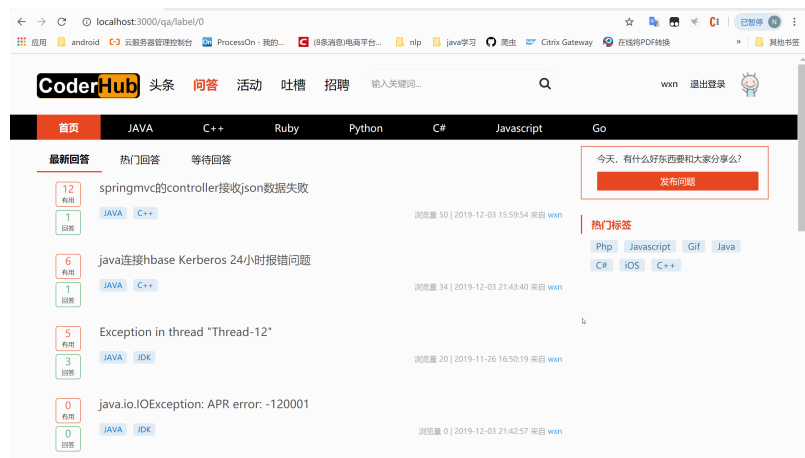
3. Publish questions



Users can post questions and label them. Supports rich text editing.

3.1.2.3 Activity

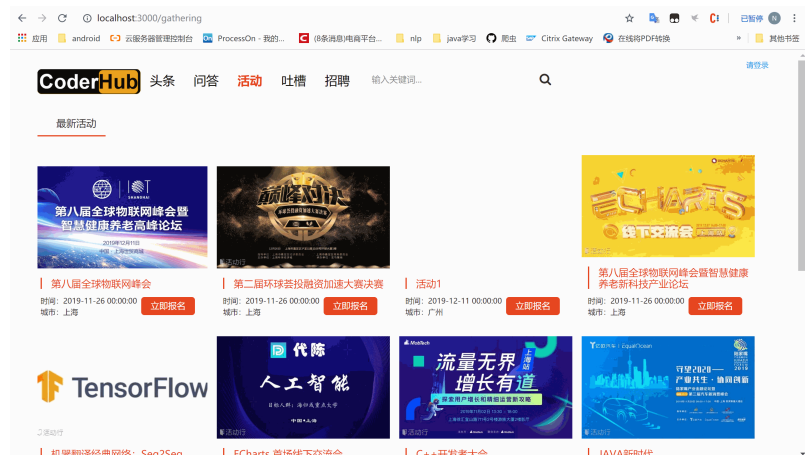
1. Browse events and view event details



Users can browse the activities posted by the administrator, and you can load more activities dynamically. Click on the event to get the details of the event.

3.1.2.4 Spit

1. Browse spit and view spit details



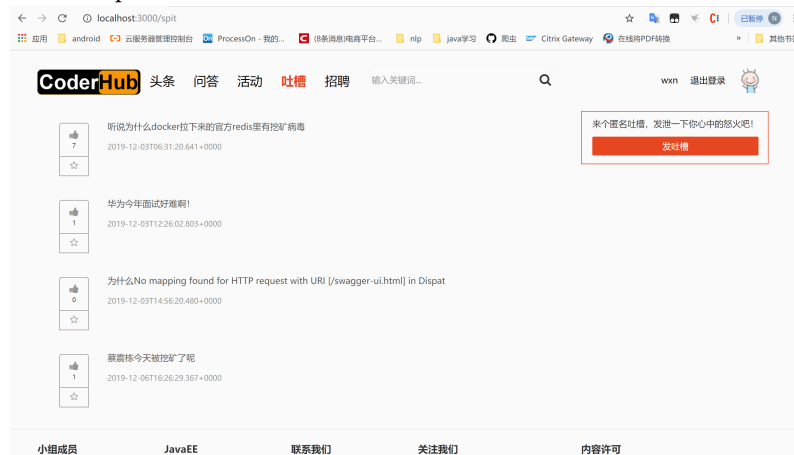
Users can browse the spit published by other users. Click on the spit to get the details and comments of the spit.

2. Comment spit



You can comment a spit in the spit detail page.

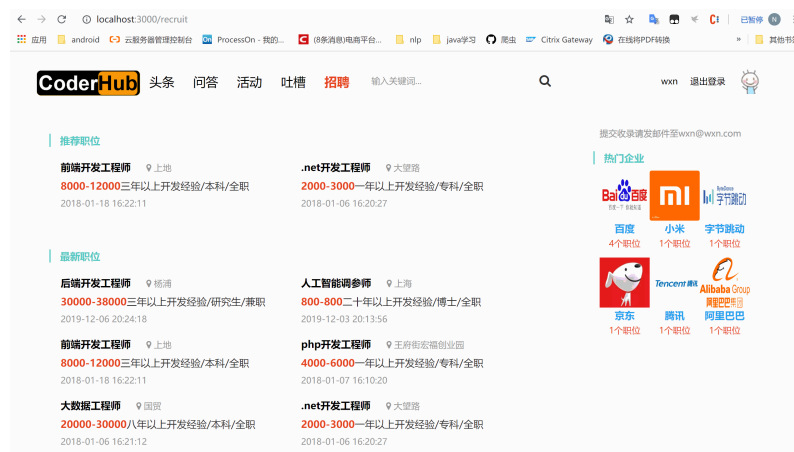
3. Thumb up



Users can give a spit thumb up in the browser list page.

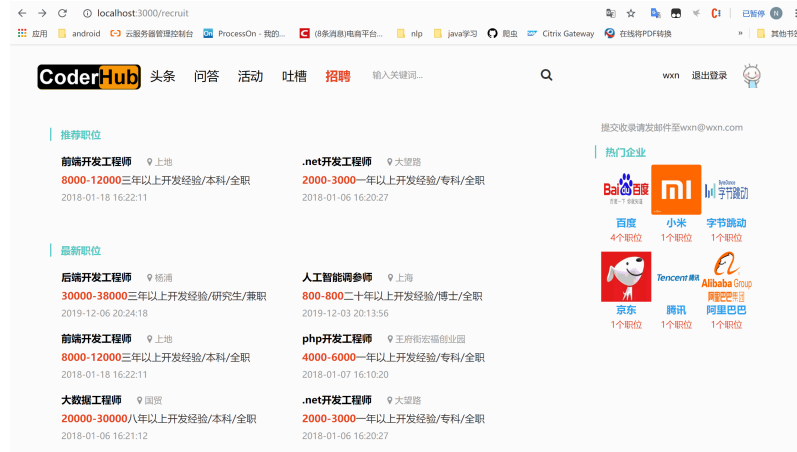
3.1.2.5 Recruitment

1. View recruitment information



Users can browse the newest and recommend jobs and click on it to get the detailed information about this job.

2. View enterprise information



Users can browse the hot enterprises and click on it to get the detailed information.

3.1.2.6 Person Center

1. View personal information, personal questions and personal answers



2. Edit personal information



Users can modify their profile, personal homepage, email and other information.

3.1.3 Administrator

3.1.3.1 Administrator login

account:admin

password:123456

3.1.3.2 Activity management

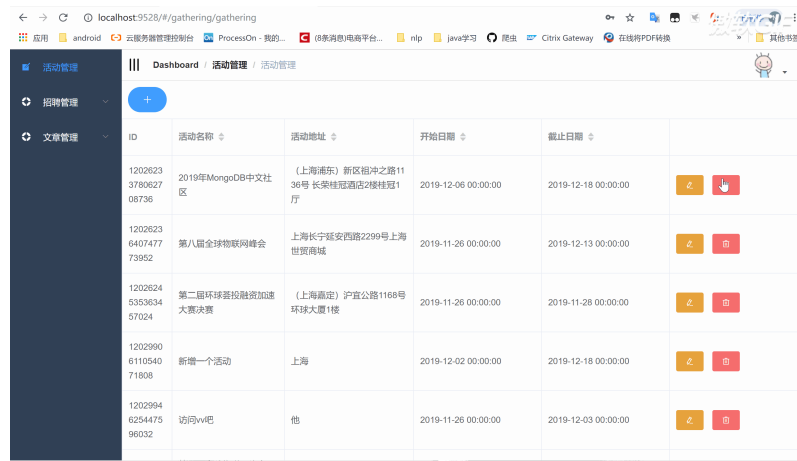
1. Change activities



The screenshot shows a web application interface for activity management. On the left is a sidebar with navigation links: '活动管理' (Activity Management), '招聘管理' (Recruitment Management), and '文章管理' (Article Management). The main area is titled 'Dashboard / 活动管理 / 活动管理'. It contains a table with the following columns: ID, 活动名称 (Activity Name), 活动地点 (Activity Location), 开始日期 (Start Date), 截止日期 (End Date), and a column with edit and delete buttons. The table lists five activities.

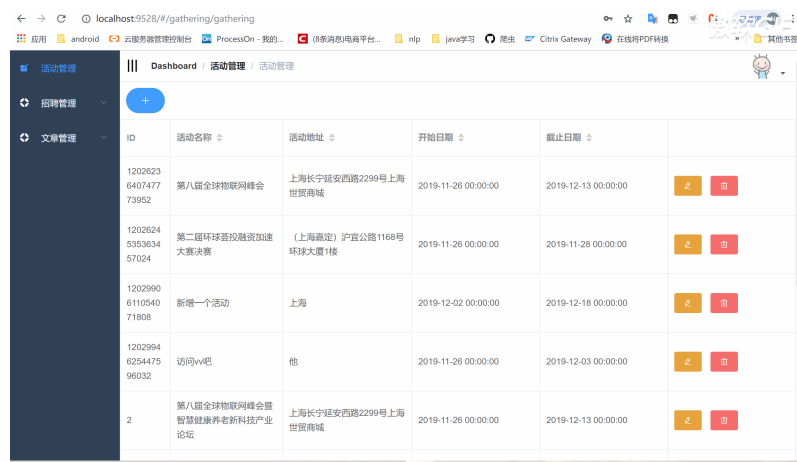
ID	活动名称	活动地点	开始日期	截止日期	
1202623 3780627 08736	2019年MongoDB中文社区	(上海浦东) 新区祖冲之路1136号 长荣桂冠酒店2楼桂冠1厅	2019-12-06 00:00:00	2019-12-18 00:00:00	 
1202623 6407477 73952	第八届全球物联网峰会	上海长宁延安西路2299号上海世贸商城	2019-11-26 00:00:00	2019-12-13 00:00:00	 
1202624 5353634 57024	第二届环球赛投融资加速大赛决赛	(上海嘉定) 沪宜公路1168号 环球大厦1楼	2019-11-26 00:00:00	2019-11-28 00:00:00	 
1202990 6110540 71808	新增一个活动	上海	2019-12-02 00:00:00	2019-12-18 00:00:00	 
1202994 6254475 96032	访问v吧	他	2019-11-26 00:00:00	2019-12-03 00:00:00	 

2. Delete activities













This screenshot is identical to the previous one, but the delete button (red icon) for the first activity is highlighted with a mouse cursor, indicating the action being performed.

3. Add activities



This screenshot shows the activity management interface after adding a new activity. The table now contains six activities, with the new one added at the bottom.

ID	活动名称	活动地点	开始日期	截止日期	
1202623 6407477 73952	第八届全球物联网峰会	上海长宁延安西路2299号上海世贸商城	2019-11-26 00:00:00	2019-12-13 00:00:00	 
1202624 5353634 57024	第二届环球赛投融资加速大赛决赛	(上海嘉定) 沪宜公路1168号 环球大厦1楼	2019-11-26 00:00:00	2019-11-28 00:00:00	 
1202990 6110540 71808	新增一个活动	上海	2019-12-02 00:00:00	2019-12-18 00:00:00	 
1202994 6254475 96032	访问v吧	他	2019-11-26 00:00:00	2019-12-03 00:00:00	 
2	第八届全球物联网峰会暨智慧健康养老科技产业论坛	上海长宁延安西路2299号上海世贸商城	2019-11-26 00:00:00	2019-12-13 00:00:00	 

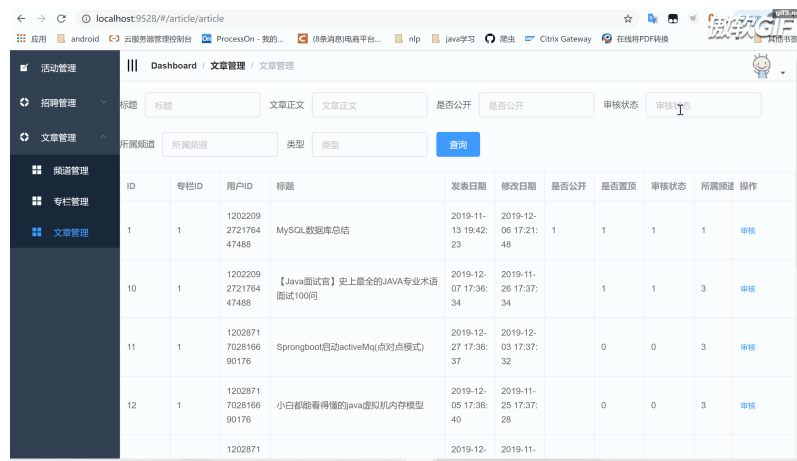
3.1.3.3 Recruitment

Enterprise management and recruitment management are similar to that in activity management.

Attention: When add a picture for new business, because we use *jsonplaceholder.typicode.com* to help save pictures, generally it depends on the network

3.1.3.4 Article management

1. Channel management is the same as activity management.
2. Article review



3. Adding the column is like adding new activity as before, and the review is the same as the article review.

3.2 System Deployment and Configurations

3.2.1 CoderHub User Frontend

1. Unzip CoderHub.zip
2. The relevance: npm install
3. Start the program: npm run dev

3.2.2 CoderHub Management Backend

1. Unzip CoderHubManagement.zip
2. The relevance: npm: npm install
3. Start: npm run dev/npm run start

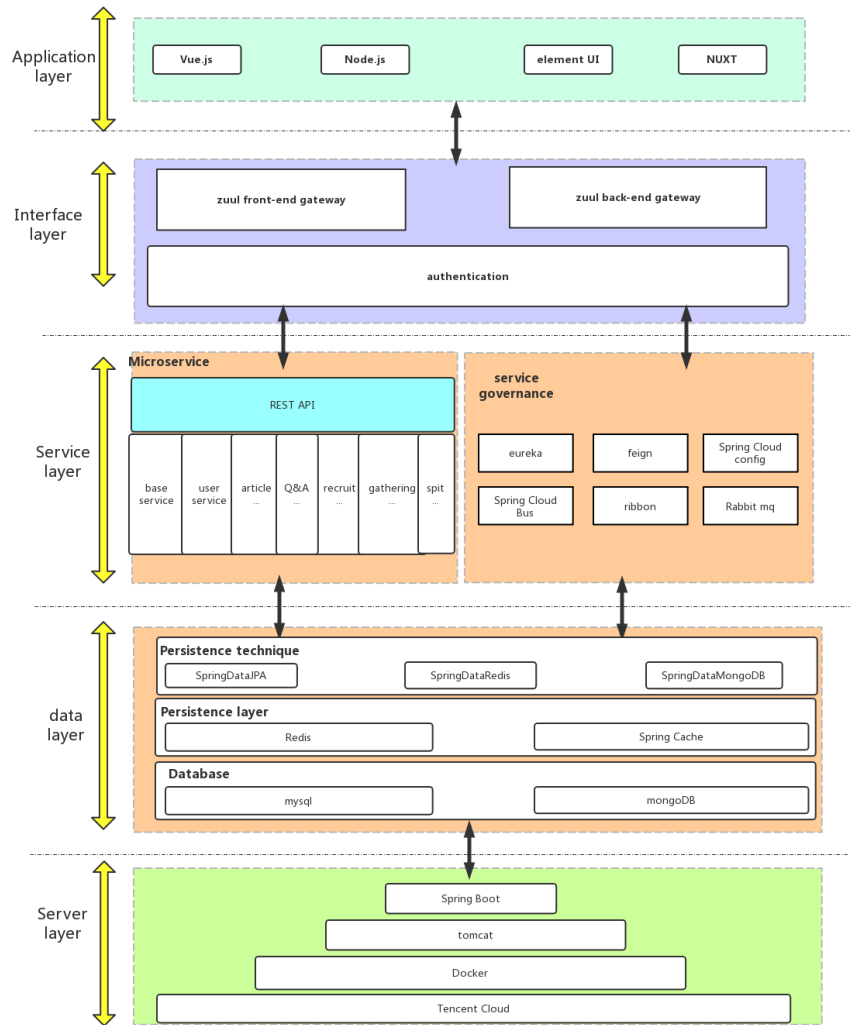
3.2.3 Server-side System

The server of the project has been deployed to Tencent cloud.

IP: 106.54.231.68, the user frontend service port is 9012, and the management backend service port is 9011.

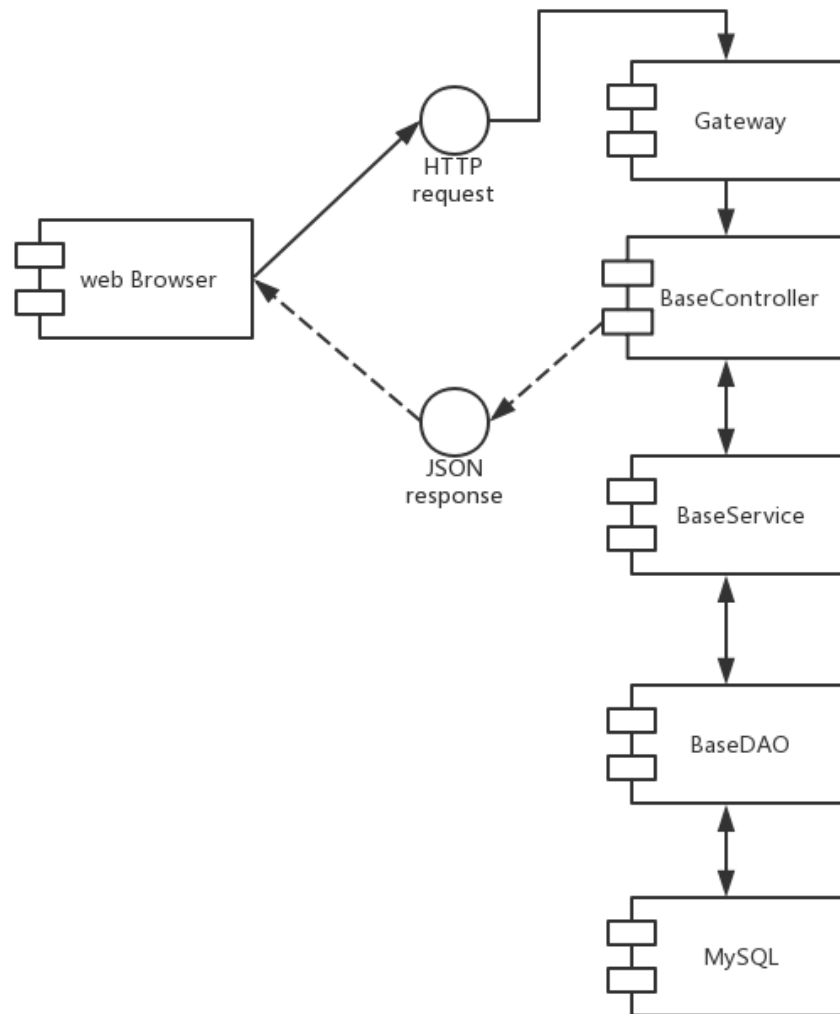
4. System Architecture and Component Design

4.1 System Architecture

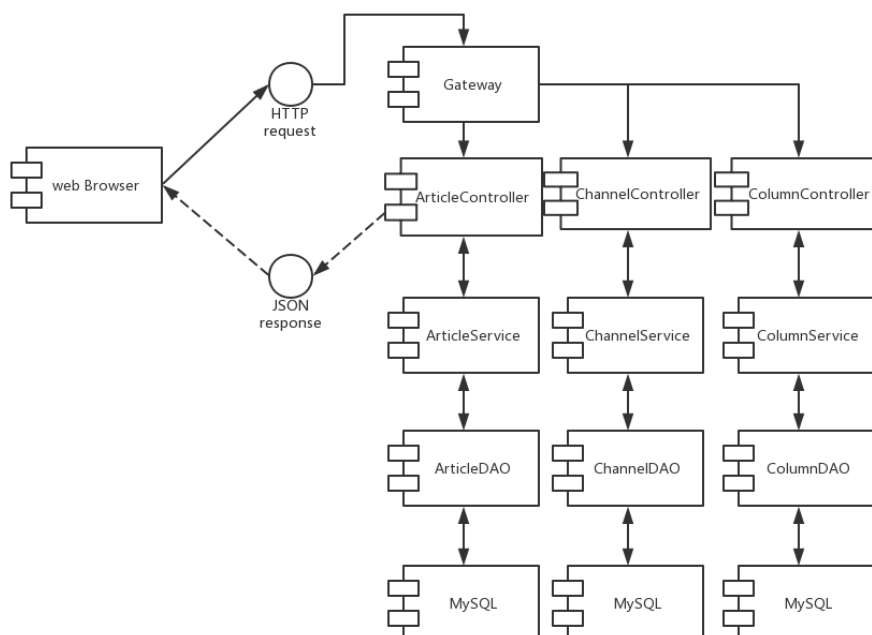


4.2 Component Design

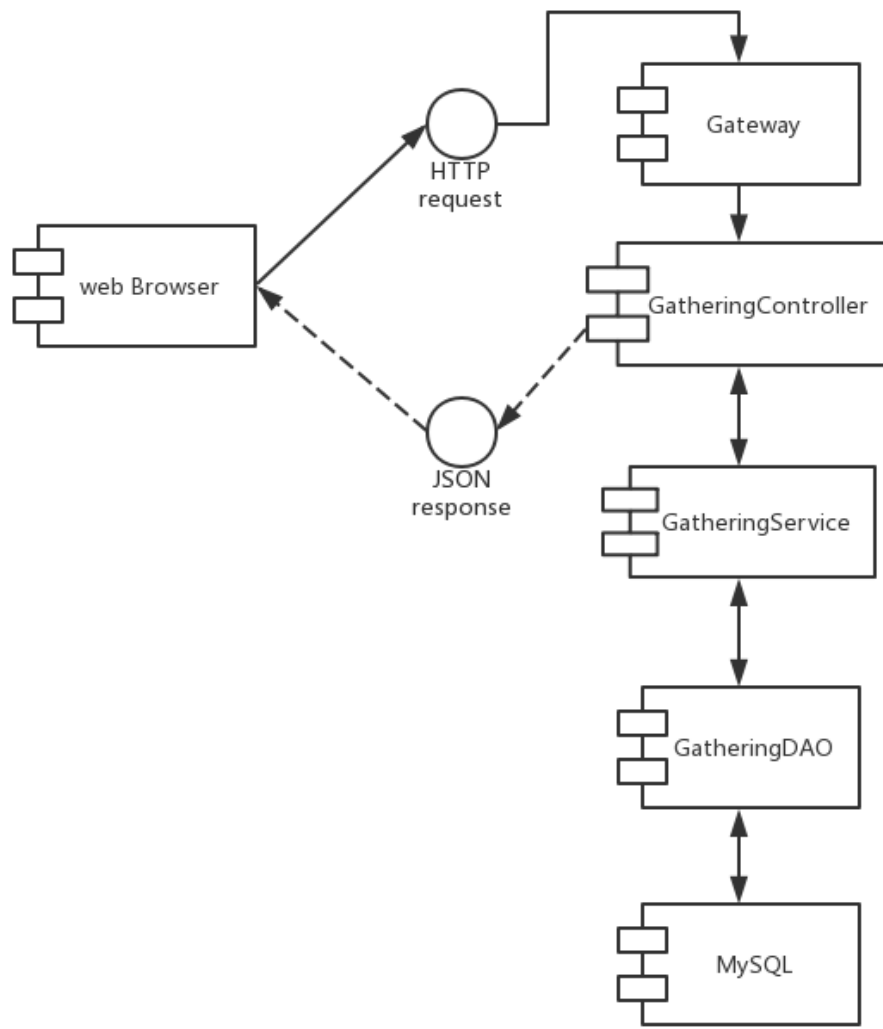
4.2.1 Base Component



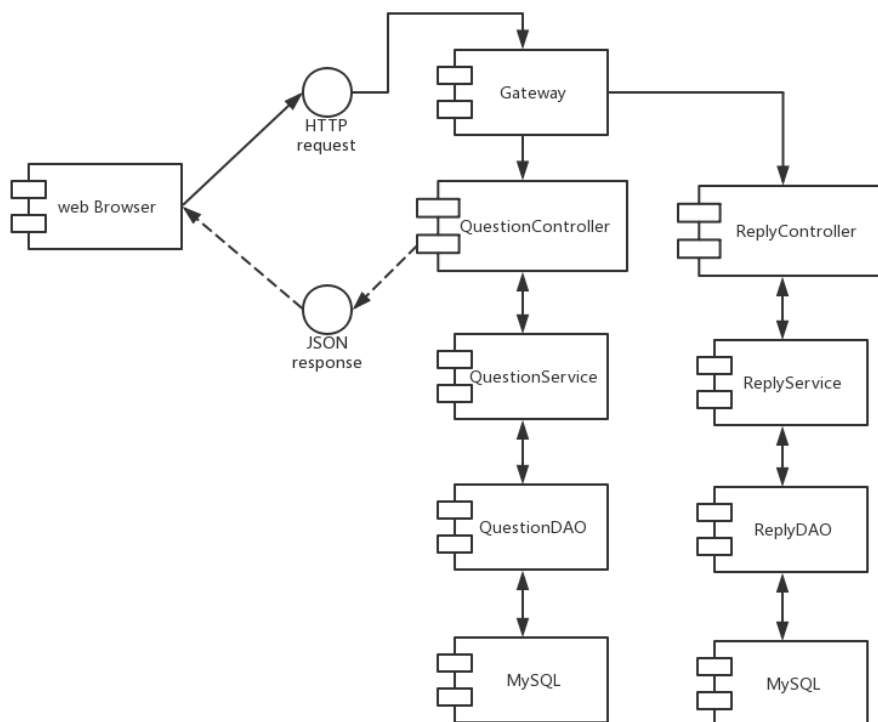
4.2.2 Article Component



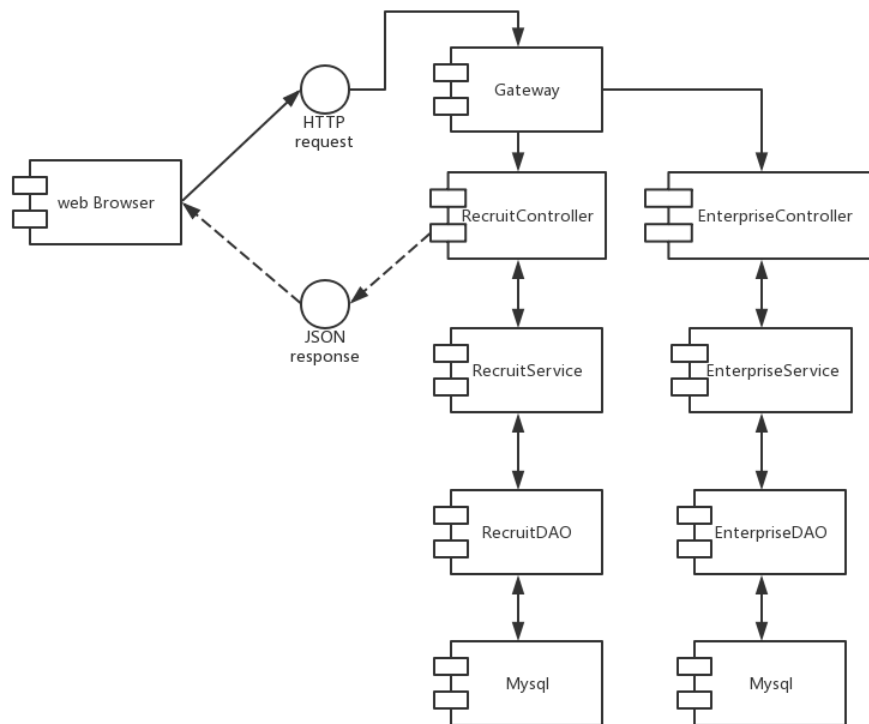
4.2.3 Gathering Component



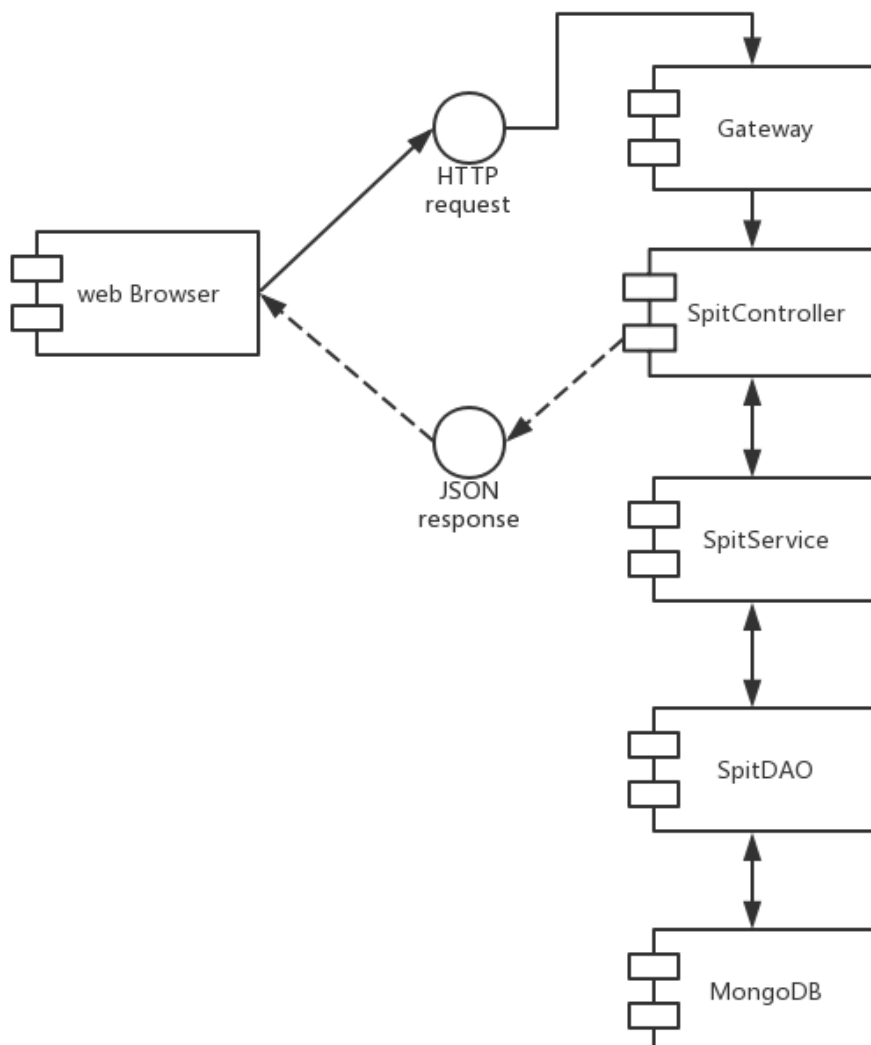
4.2.4 Q&A Component



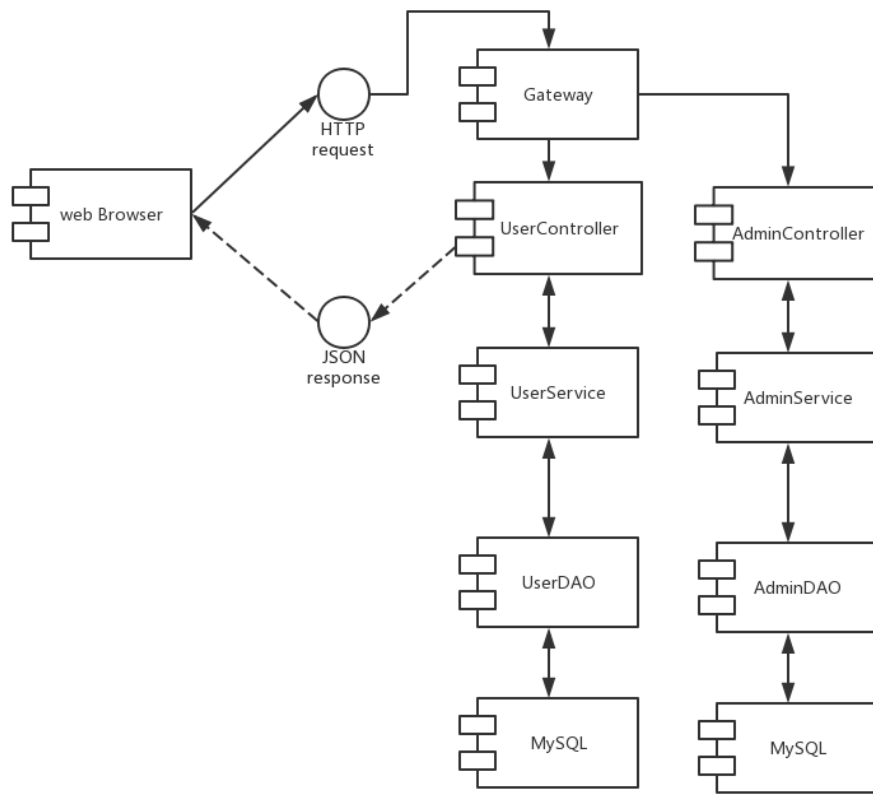
4.2.5 Recruit Component



4.2.6 Spit Component



4.2.7 User Component



5.Database Design

5.1 database:article

1. tb_article

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	article id	primary key
columnid	varchar	20	column id	
title	varchar	100	article title	
content	text		article content	
image	varchar	100	article cover	
createtime	datetime		published date	
updatetime	datetime		updated date	
ispublic	varchar	1	is public	
istop	varchar	1	is top	
visits	int	20	page view	
thumbup	int	20	number of thumbup	
comment	int	20	number of comments	
state	varchar	1	is approved	
channelid	varchar	20	subordinate to which channel	

2. tb_channel

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	id	primary key
name	varchar	100	the name of the channel	
state	varchar	1	is approved	

3. tb_column

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	ID	primary key
name	varchar	100	column name	
summary	varchar	1000	column introduction	
userid	varchar	20	user id	
createtime	datetime		create date	
checktime	datetime		check date	
state	varchar	1	is approved	

5.2 database:base

1. tb_city

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	id	primary key
name	varchar	20	city name	
ishot	varchar	1	is hot	

2. tb_label

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	label id	primary key
labelname	varchar	100	label name	
state	varchar	20	is approved	
recommend	varchar	20	is recommendable	

5.3 database:gathering

1. tb_gathering

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	id	primary key
name	varchar	100	activity name	

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
summary	text		activity introduction	
detail	text		details	
sponsor	varchar	100	sponsor	
Image	varchar	100	activity image	
starttime	datetime		begin time	
endtime	datetime		end time	
address	varchar	100	address	
enrolltime	datetime		registration deadline	
state	varchar	1	is visible	
city	varchar	20	city	

5.4 database:qa

1. tb_pl

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
problemid	varchar	20	problem id	primary key
labelid	varchar	20	label id	

2. tb_problem

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	id	primary key
title	varchar	100	title	
content	text		content	
createtime	datetime		create date	
updatetime	datetime		update date	
userid	varchar	20	user id	
Nickname	varchar	100	nickname	
visits	bigint	20	number of being visited	
thumbup	bigint	20	thumbup	
reply	bigint	20	reply number	
replytime	datetime		reply time	
labellist	varchar	50	the list of label	

3. tb_reply

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	number	primary key
problemid	varchar	20	problem id	

problemid FIELD NAME	varchar DATA TYPE	20 LENGTH	problem id FIELD DESCRIPTION	NOTE
content	text		answer	
createtime	datetime		create date	
updatetime	datetime		update date	
userid	varchar	20	id of user who answers	

Nickname varchar 100 nickname of user who answers

5.5 database:recruit

1. tb_enterprise

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	id	primary key
name	varchar	100	enterprise name	
summary	varchar	1000	introduction	
address	varchar	100	business address	
labels	varchar	100	labels list	
coordinate	varchar	100	coordinate	
ishot	varchar	1	ishot	
logo	varchar	100	logo	
jobcount	int	11	number of positions	
url	varchar	100	web url	

2. tb_recruit

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	id	primary key
jobname	varchar	100	job title	
salary	varchar	100	salary range	
mycondition	varchar	100	experience required	
education	varchar	100	education requirements	
address	varchar	100	office address	
eid	varchar	20	business ID	
createtime	datetime		create date	
state	varchar	1	is approved	
label	varchar	100	label	
content1	varchar	100	job description	
content2	varchar	100	job requirement	

5.6 database:user

1. tb_admin

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	id	primary key
loginname	varchar	100	login name	
password	varchar	100	password	
state	varchar	1	state	

2. tb_user

FIELD NAME	DATA TYPE	LENGTH	FIELD DESCRIPTION	NOTE
id	varchar	20	id	primary key
mobile	varchar	100	mobile phone number	
password	varchar	100	password	
Nickname	varchar	100	nickname	
sex	varchar	2	sex	
Birthday	datetime		birthday	
avatar	varchar	100	avatar	
email	varchar	100	E-mail	
regdate	datetime		register date	
updatedate	datetime		update date	
lastdate	datetime		last login date	
interest	varchar	100	interest	
personality	varchar	100	personality	

5.7 mongoDB:spit

1. collection:spitdb

FIELD NAME	FIELD DESCRIPTION	NOTE
_id	id	primary key
content	content	
nickname	nickname	
visits	number of visiting	
thumbup	number of thumbup	
share	number of being shared	
state	be approved	
parentid	parent id	

6. Other

6.1 Interface Doc

Our interface doc is generated by Swagger, you can browse them via:

Q&A: <http://106.54.231.68:9012/qa/swagger-ui.html>

Article: <http://106.54.231.68:9012/article/swagger-ui.html>

Gathering: <http://106.54.231.68:9012/gathering/swagger-ui.html>

Recruit: <http://106.54.231.68:9012/recruit/swagger-ui.html>

Spit: <http://106.54.231.68:9012/spit/swagger-ui.html>

Base: <http://106.54.231.68:9012/base/swagger-ui.html>

User: <http://106.54.231.68:9012/user/swagger-ui.html>

6.2 Ali SMS Service

