

实训个人作业

Restful API 设计及使用说明

1. 用户注册以及登录场景

1) 注册用户

- 资源标识: /register
- 操作: POST
- 权限: 所有用户
- 请求 payload: 包括用户名、密码、联系方式、真实身份信息等
- 应答 payload: 注册成功或失败的消息
- url: <http://localhost:20000/register?username=ss&password=123456&roleId=1>

```
{
  "msg": "success",
  "result": "注册成功",
  "code": 0
}
```

2) 用户登录

- 资源标识: /login
- 操作: POST
- 权限: 所有用户
- 请求 payload: 用户名和密码
- 应答 payload: 登录成功后返回认证令牌 (JWT Token在Authorization头中)

Authorization



eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzUxMiJ9.eyJzdWUiOiJzcyIsImhhdCI...

以及用户信息

- url: <http://localhost:20000/login?username=ss&password=123456>

```
{
  "msg": "操作成功",
  "code": 200,
  "data": {
    "role": 1,
    "userId": 9,
    "password":
"$2a$10$7BuCskboFEy.P/F5OHhLhunkVnm3Cq1qM3yMUMUH022Rd8ePmvt2K",
    "username": "ss"
  }
}
```

3) 用户权限管理 (仅限 Admin 用户)

- **资源标识**: /admin/permission/role
- **操作**: PUT
- **权限**: Admin 用户
- **请求 payload**: userId
- **应答 payload**: 成功或失败的消息
- **说明**: 根据userId修改roleId, Admin变成User或者User变成Admin
- **url**: <http://localhost:20000/admin/permission/role>
- **鉴权**:
 - 先登录user:

HTTP 认证服务 / http://localhost:20000/login?username=ss&password=123456

POST

http://localhost:20000/login?username=user&password=user

Send

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

Cookies

Query Params

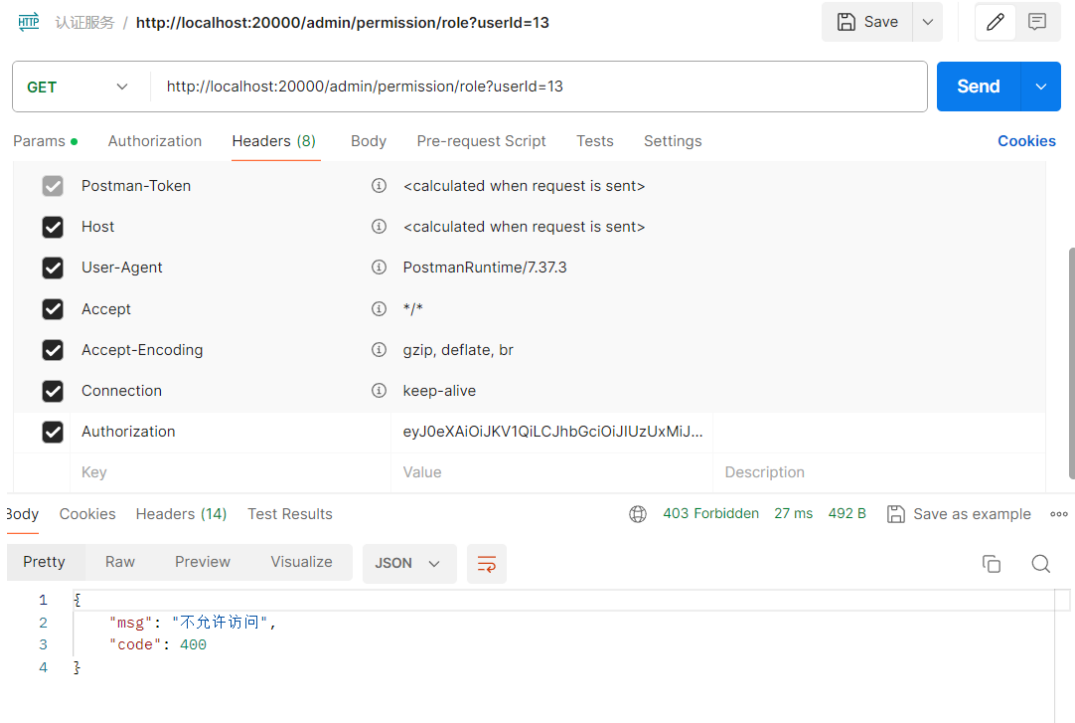
<input checked="" type="checkbox"/>	Key	Value	Description	...	Bulk Edit
<input checked="" type="checkbox"/>	username	user			
<input checked="" type="checkbox"/>	password	user			
	Key	Value	Description		

```
body    Cookies    Headers (15)    Test Results
200 OK  287 ms  1.21 KB  Save as example
Pretty  Raw  Preview  Visualize  JSON
{
  "msg": "操作成功",
  "code": 200,
  "data": {
    "role": 2,
    "contactInfo": "user",
    "userId": 12,
    "password": "$2a$10$3a2w1enebR0ym3ei8kibA0bjTDNzn/GzMxB.B2rN8QsKFG7IZbuQy",
    "realIdentity": "user",
    "username": "user"
  }
}
```

- 返回jwt:

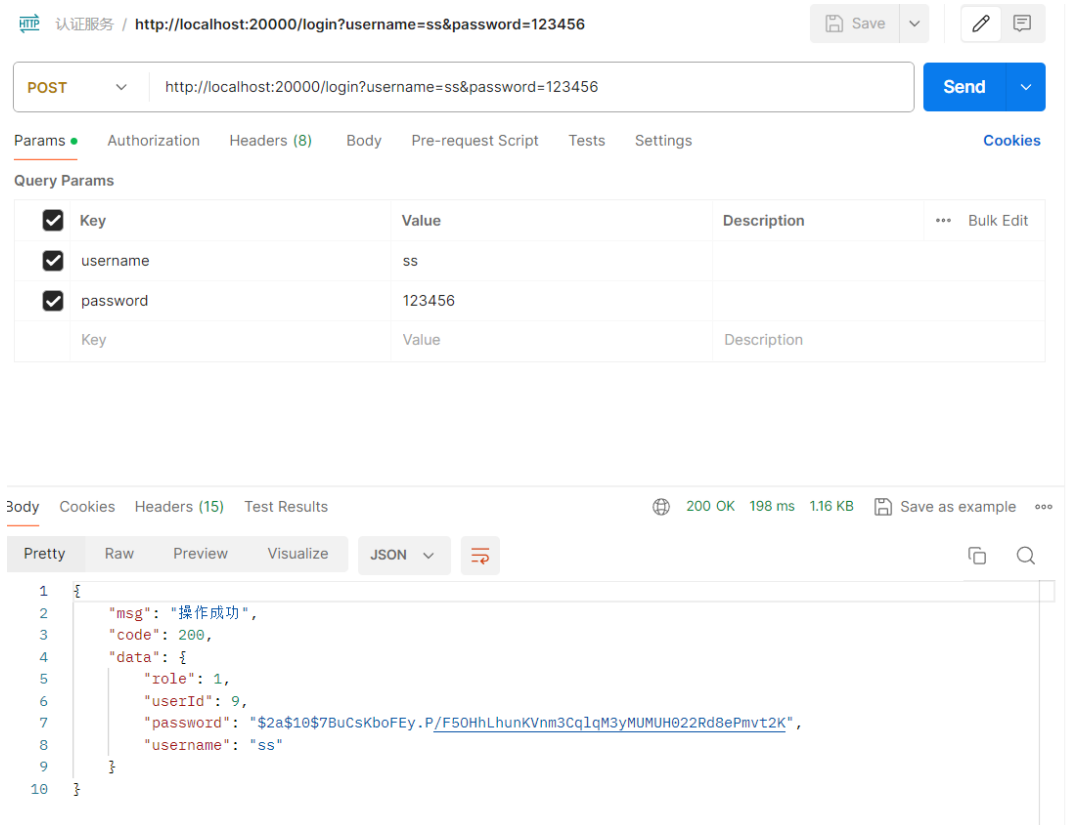
Authorization	①	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJ1c2VylwiWF0ljoXNzEiMDkzODk5LCJleHAiOiE3MTU0Tg2OTkslnVzZXliOnsidXNlcm5hbWUiOiJ1c2VylwicGFzc3dvcnQlOiikMmEKMtAkM2EyVzFlbmVlUk95bTNIaThraWJBt2JtQjVER0em4vR3pNeEluQjJyTjhRc0tGRzdJWmJVUxIiLCJ1c2VylSWQlOiEycjRhdXRob3JpdGllcyI6W3siYXV0aG9yaXR5IjoiaUk9MRV9VU0V5bn1dLCJlbmFibGVkIjoiOcnVILCjcmVkJW50aWwFsc05vbW4vcGlyZWQlOnRydWUsImFjY291bnR0b25FeHBpcmVklj0cnVILCjhy2NvdW50Tm9uTG9ja2Vklj0cnVlSwiYXV0aG9yaXRpZXMiOit7lmF1dGhvcml0eSI6IlJPTeVfVNFUiJ9XX0.qaz_2JLIX5i5dpMtTStkgocxk7j3Wv00v0RLT3TmtDjvxVmyj36CdJ3089YAT1xjUPCS22sAJgWHsFUOsAbsQ
X-Content-Type-Options	①	deny
X-XSS-Protection	①	1; mode=block
Cache-Control	①	no-store, no-cache, must-revalidate, max-age=0
Pragma	①	no-cache
Expires	①	0
X-Frame-Options	①	DENY

- 用这个jwt: 去访问该接口:



出现不允许访问

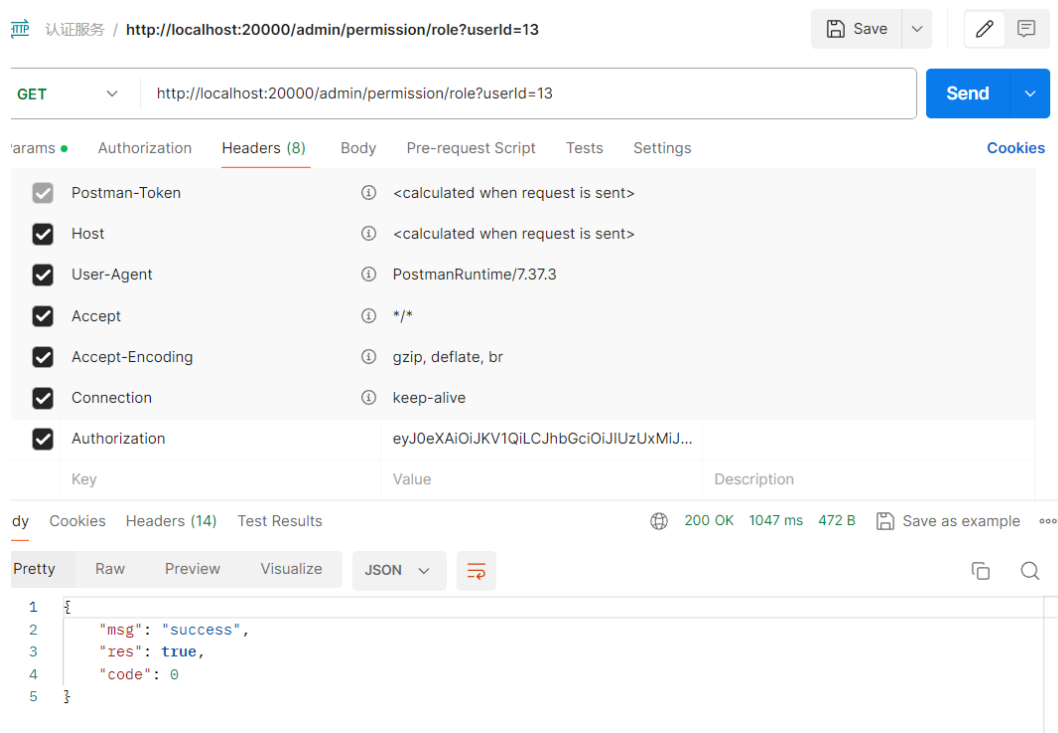
- 再登录ss (ADMIN)



- 用jwt去访问

Authorization	(i)	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJjcyt1smldhdC16MTcxNTA5NDA1NiwiZXhwIjozE1Njk4ODU2LCJc1c2VyIp7InVzZXRJYXNpdCI6MjQyOTg1bktWbm0zQ3FscU0zeU1VTVMIMdlyUmQ4ZVBtdnQySylslmVzZXJJZC16OSwiYXV0aG9yaXRpZXMiOlt7ImF1dGhvcmcl0eSl6IlJPTEVfQURNSU4ifv0slmVuYXJsZWQlOnRydWUsImNjZWRIbnRpYXZmT29uRXhwaXIJC16dHJ1ZSwiYWNPbj3VudE5vbKv4GlcYXZlQlOnRydWUsImFjY291bnRob25Mb2NrZWQlOnRydWV9LCJhdXRob3JpdGIllcy16W3siYXV0aG9yaXR5Ijoiek9MRV9BRE1TIj9XX0.7C6DazBYKak2tSJSRiHjlgzr1e6h0R64b89cvJ8IcTY0gPBrr2bfJfyIppLFCFIbz_g_A3VQ2Tlxoenlw5Tzg
X-Content-Type-Options	(i)	YNw1lIjoc3MiLCJwYXNpd29yZC16IjQyYSQxMCQ3QnVDc0tib0ZFeS5qLOYT10hoTGh1bktWbm0zQ3FscU0zeU1VTVMIMdlyUmQ4ZVBtdnQySylslmVzZXJJZC16OSwiYXV0aG9yaXRpZXMiOlt7ImF1dGhvcmcl0eSl6IlJPTEVfQURNSU4ifv0slmVuYXJsZWQlOnRydWUsImNjZWRIbnRpYXZmT29uRXhwaXIJC16dHJ1ZSwiYWNPbj3VudE5vbKv4GlcYXZlQlOnRydWUsImFjY291bnRob25Mb2NrZWQlOnRydWV9LCJhdXRob3JpdGIllcy16W3siYXV0aG9yaXR5Ijoiek9MRV9BRE1TIj9XX0.7C6DazBYKak2tSJSRiHjlgzr1e6h0R64b89cvJ8IcTY0gPBrr2bfJfyIppLFCFIbz_g_A3VQ2Tlxoenlw5Tzg
X-XSS-Protection	(i)	ySylslmVzZXJJZC16OSwiYXV0aG9yaXRpZXMiOlt7ImF1dGhvcmcl0eSl6IlJPTEVfQURNSU4ifv0slmVuYXJsZWQlOnRydWUsImNjZWRIbnRpYXZmT29uRXhwaXIJC16dHJ1ZSwiYWNPbj3VudE5vbKv4GlcYXZlQlOnRydWUsImFjY291bnRob25Mb2NrZWQlOnRydWV9LCJhdXRob3JpdGIllcy16W3siYXV0aG9yaXR5Ijoiek9MRV9BRE1TIj9XX0.7C6DazBYKak2tSJSRiHjlgzr1e6h0R64b89cvJ8IcTY0gPBrr2bfJfyIppLFCFIbz_g_A3VQ2Tlxoenlw5Tzg
Cache-Control	(i)	WxzTm29uRXhwaXIJC16dHJ1ZSwiYWNPbj3VudE5vbKv4GlcYXZlQlOnRydWUsImFjY291bnRob25Mb2NrZWQlOnRydWV9LCJhdXRob3JpdGIllcy16W3siYXV0aG9yaXR5Ijoiek9MRV9BRE1TIj9XX0.7C6DazBYKak2tSJSRiHjlgzr1e6h0R64b89cvJ8IcTY0gPBrr2bfJfyIppLFCFIbz_g_A3VQ2Tlxoenlw5Tzg
Pragma	(i)	lly16W3siYXV0aG9yaXR5Ijoiek9MRV9BRE1TIj9XX0.7C6DazBYKak2tSJSRiHjlgzr1e6h0R64b89cvJ8IcTY0gPBrr2bfJfyIppLFCFIbz_g_A3VQ2Tlxoenlw5Tzg
Expires	(i)	u

- 出现success:



- 鉴权流程完毕

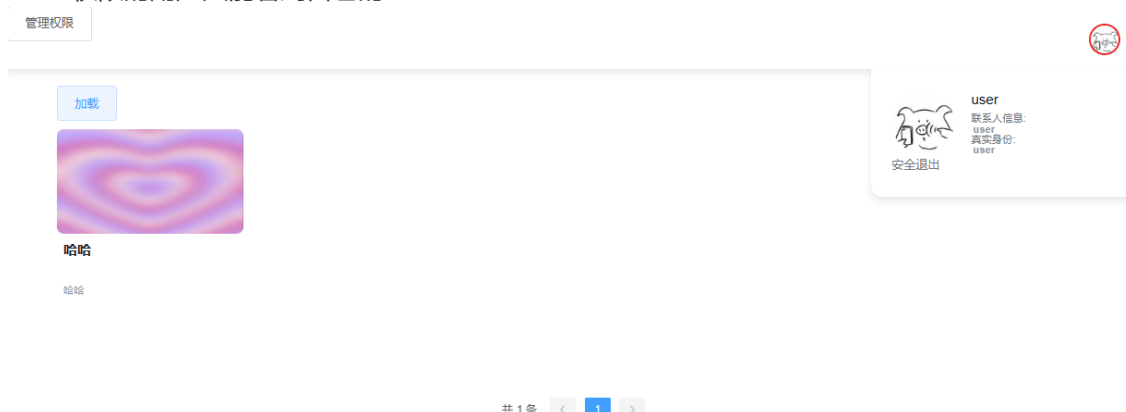
4) 用户权限列表 (仅限 Admin 用户)

- 资源标识: /admin/permission/list
- 操作: GET
- 权限: Admin 用户
- 请求 payload: page, limit
- 应答 payload: 所有 user 和它们的 role
- 鉴权: 同上

2. 博客或内容应用场景

1) 获取用户内容信息

- 资源标识: /user/content/list
- 操作: GET
- 权限: 所有用户
- 请求 payload: userId
- 应答 payload: 用户的内容信息, 包括 id、title、contents、images 等
- USER 权限的用户只能看到自己的 content



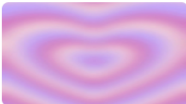
2) 获取所有用户内容信息

- **资源标识**: /admin/content/list
- **操作**: GET
- **权限**: Admin用户
- **请求 payload**: page, limit
- **应答 payload**: 所有用户的内容信息, 包括 id、title、contents、images 等

```
{
  "msg": "success",
  "code": 0,
  "page": {
    "totalCount": 2,
    "pageSize": 10,
    "totalPage": 1,
    "currPage": 1,
    "list": [
      {
        "id": 1,
        "title": "哈哈",
        "content": "哈哈",
        "image": "https://img.qovv.cn/2024/05/07/6639db4138b0d.png",
        "userid": 12
      },
      {
        "id": 2,
        "title": "嘎嘎",
        "content": "嘎嘎",
        "image": "https://img2.imgtp.com/2024/05/07/zdkM1nAz.png",
        "userid": 9
      }
    ]
  }
}
```


管理权限

加载



哈哈

哈哈



嘎嘎

嘎嘎

SS

联系人信息:

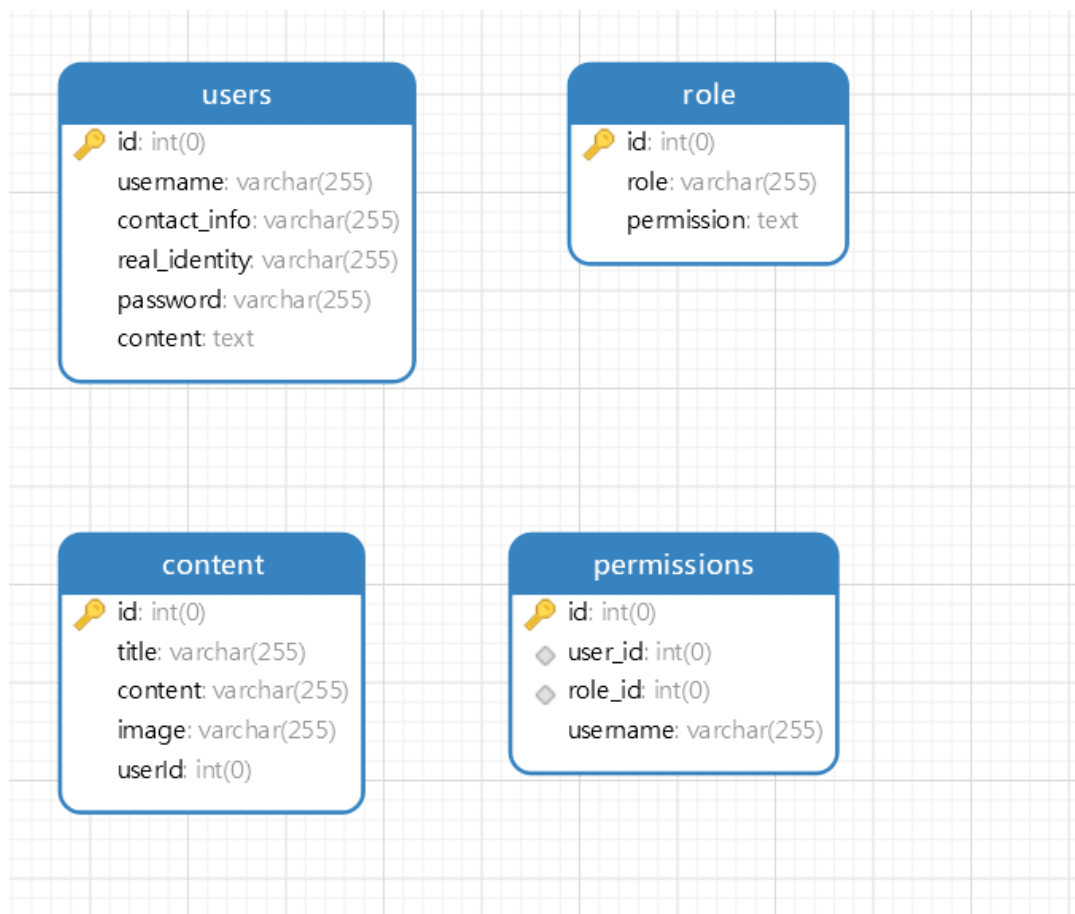
真实身份:

安全退出

共 2 条 < 1 >

Restful API 的后端设计与实现

- springboot+security+jwt+mybatis+redis实现
- 数据库信息



- 见具体数据见sql文件

博客/内容前端的实现

- vue+elementUI实现
 - axios请求后端接口
- 功能
 - 用户登录

登录 **注册** ✕

请输入用户名

请输入密码

☒ 七天内自动登录 找回密码 无法登陆

登录

- 用户注册

登录注册

请输入用户名

请输入密码

请再次输入密码

请输入联系人信息

请输入真实身份


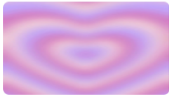
☐ 同意《用户注册协议》

注册

前端内容展示：

管理权限

加载



哈哈

嘎嘎

哈哈

嘎嘎

共 2 条

Admin用户修改权限

管理权限

roleId为1是admin，为2是user

userid	username	roleId	操作
1	ada	1	切换role
9	ss	1	切换role
10	ssa	2	切换role
12	user	2	切换role
13	content	1	切换role

共 5 条

user用户加载不出来



roleId为1是admin，为2是user

userId	username	roleId	操作
暂无数据			



user
联系人信息:
userId
真实身份:
userId

安全退出

