



МИНОБРНАУКИ РОССИИ

*Федеральное государственное бюджетное образовательное учреждение
высшего образования*

«МИРЭА – Российский технологический университет»

РТУ МИРЭА

**Итоговый проект по дисциплине
«Технологии разработки программных приложений»**

Тема: «Социальная сеть для IT специалистов»

Выполнили студенты группы ИКБО-20-21:

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Тема проекта и используемые технологии

Используемые технологии:

Полная тема проекта:

Социальная сеть для IT специалистов

Такой проект включает:

1. Клиентскую часть
2. Серверную часть
3. Администрирование
4. Загрузку на облачный хостинг

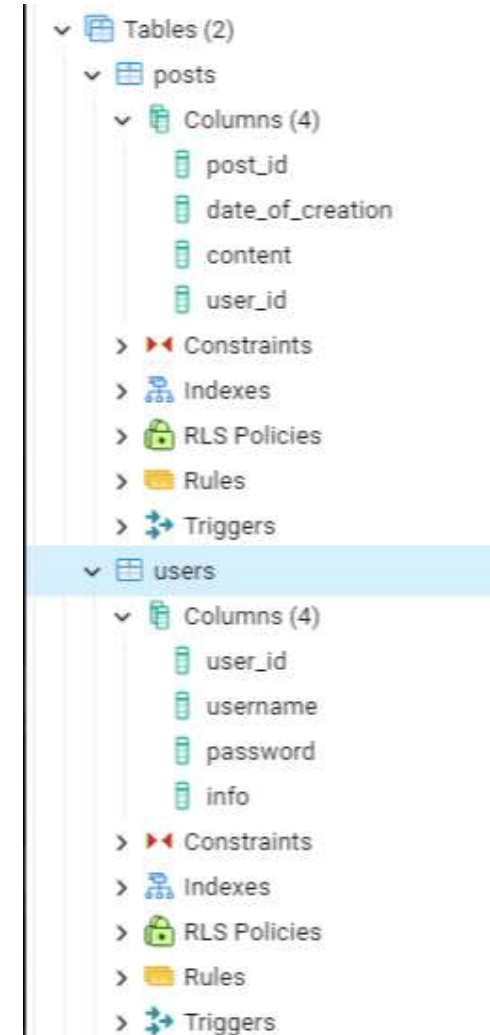
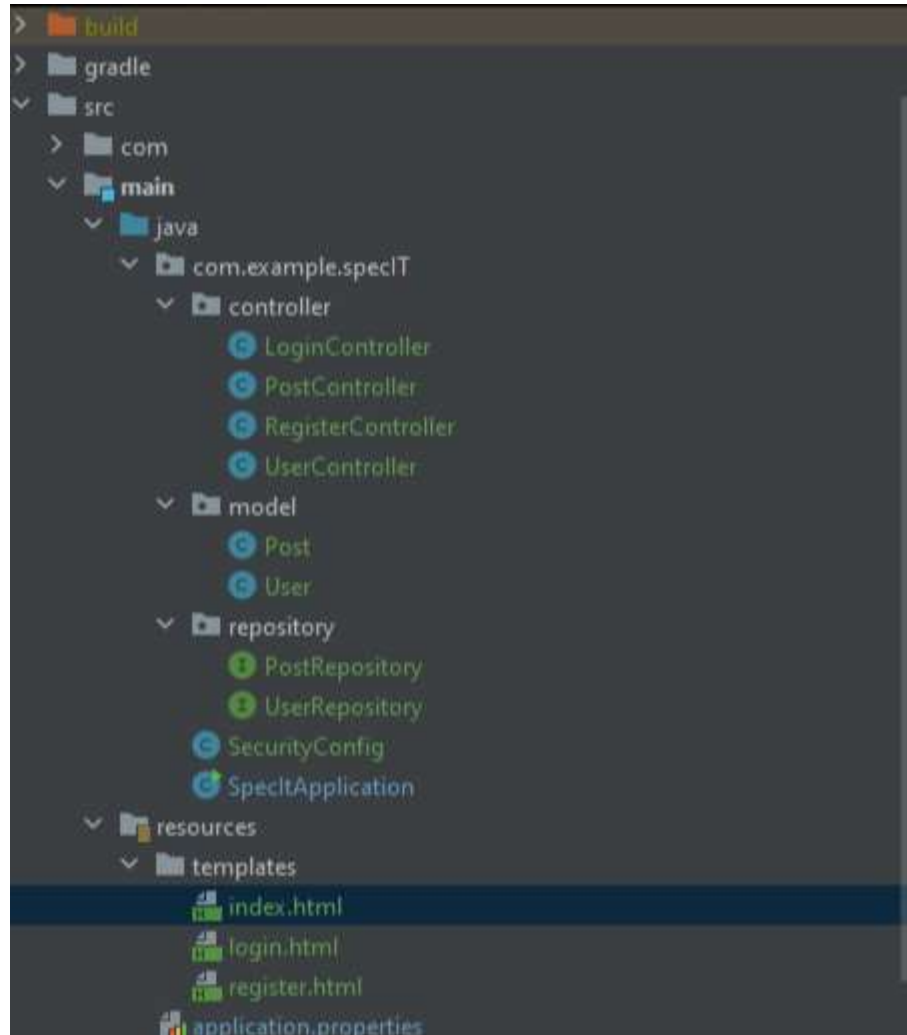
1. Для клиентской части

- a) HTML, CSS, JS
- c) React
- d) Bootstrap

2. Для серверной части

- a) Java
- b) Spring Boot
- c) MySQL
- d) Postman
- e) Gradle

Структура директорий проекта



Примеры файлов клиентской части

```
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta name="color-scheme" content="dark light">
<meta name="theme-color" content="#F5F5F5" media="(prefers-color-scheme: light)">
<meta name="theme-color" content="#000000" media="(prefers-color-scheme: dark)">
<link rel="profile" href="https://gmpg.org/xfn/11">
```

```
<body class="company-template-default single single-company postid-72711 grid theme--dark">
<div class="push-modal" id="push-modal-entity" style="display: none;">
<div class="push-modal__wrapper">
<button class="push-modal__close" id="push-modal__close">
<span class="push-modal__wrapper-close-button"></span>
</button>
<div class="push-modal__container-icon">
<svg class="push-modal__icon" width="48" height="48">
```

```
<div class="subscribe-modal-container">
<div class="subscribe-modal" id="subscribe-modal-entity" style="...">
<div class="subscribe-modal__wrapper">
<button class="subscribe-modal__close" id="subscribe-modal__close">
<span class="subscribe-modal__wrapper-close-button"></span>
```

Примеры файлов серверной части

```
6 usages
@Entity
@Table(name = "posts")
public class Post {

    2 usages
    @Id
    @Column(name = "post_id")
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int postId;

    2 usages
    @Column(name = "date_of_creation")
    private String dateOfCreation;

    2 usages
    @Column(name = "content")
    private String content;

    2 usages
    @ManyToOne
    @JoinColumn(name = "user_id")
    private User user;
```

```
14 usages
@Entity
@Table(name = "users")
public class User {

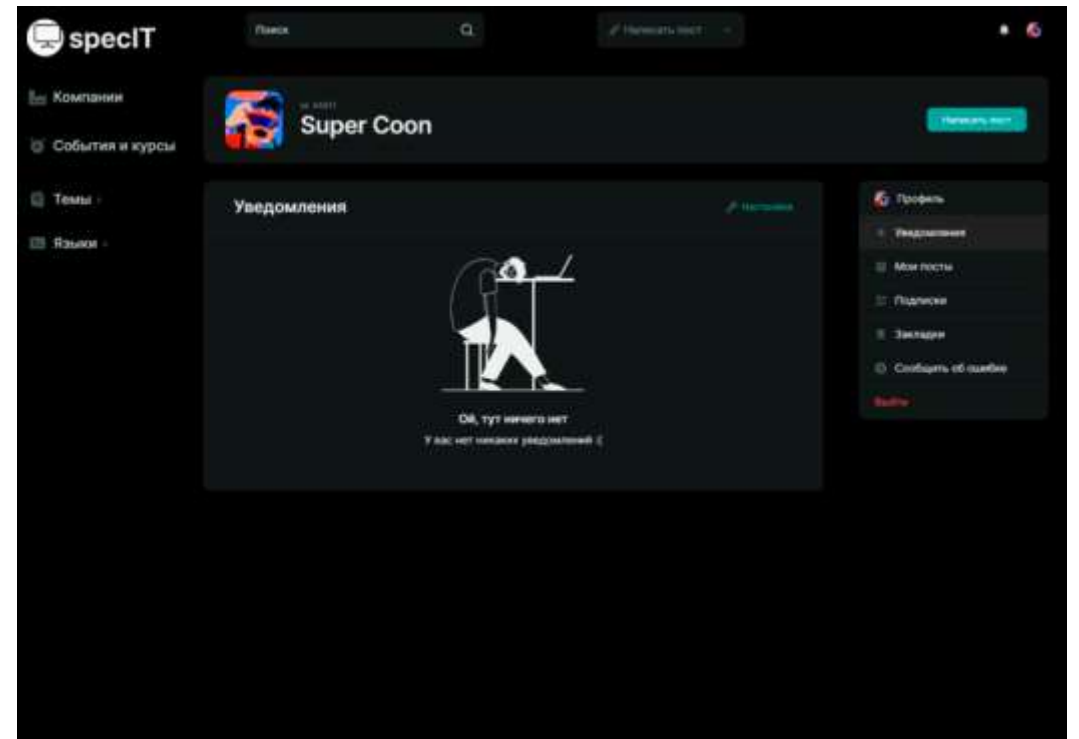
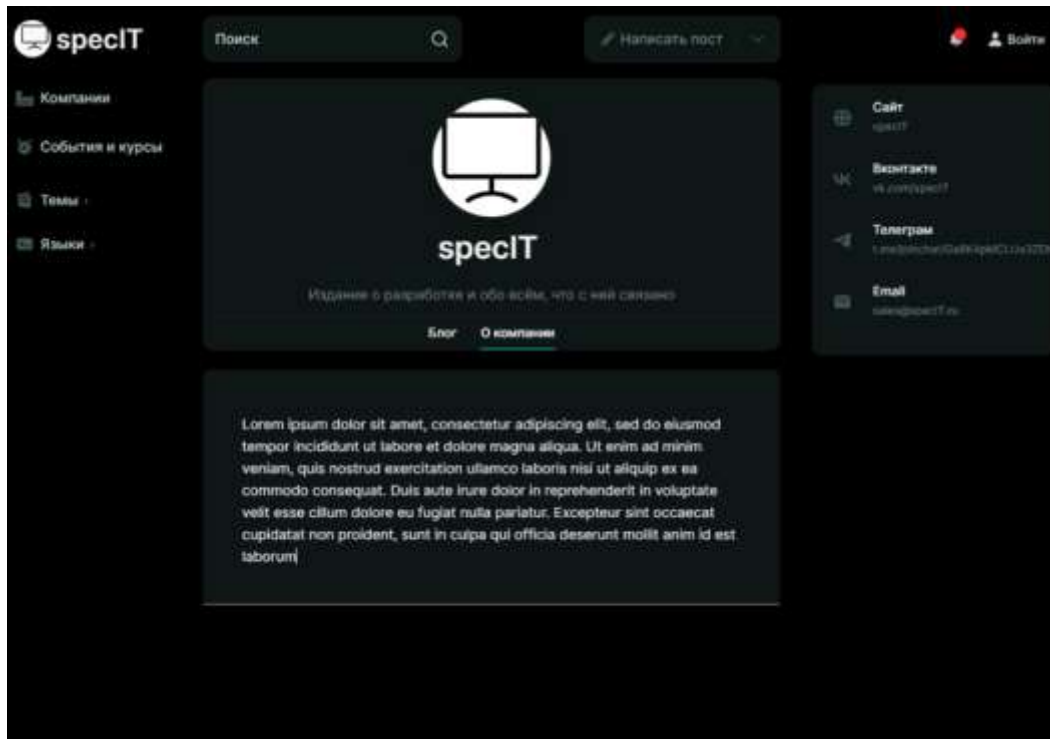
    2 usages
    @Id
    @Column(name = "user_id")
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long userId;

    2 usages
    @Column(name = "username")
    private String username;

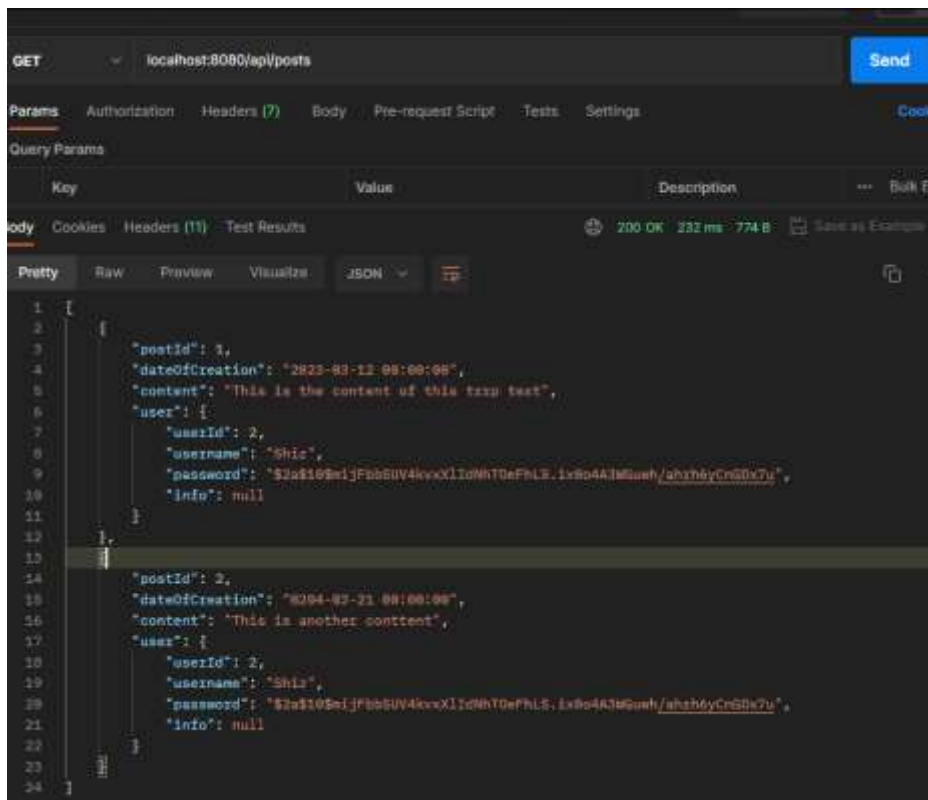
    2 usages
    @Column(name = "password")
    private String password;

    2 usages
    @Column(name = "info")
    private String info;
```

Результат работы клиентской части



Результат работы серверной части



GET localhost:8080/api/posts

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Query Params

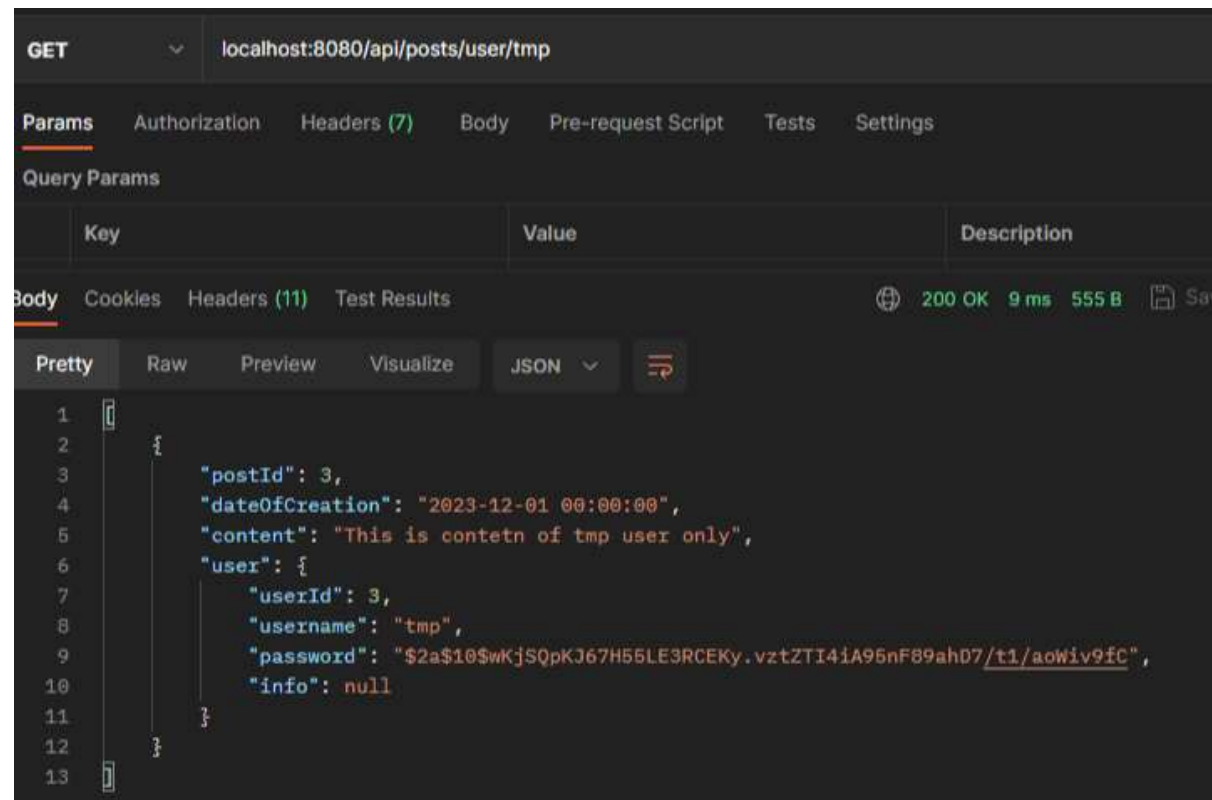
Key	Value	Description
-----	-------	-------------

Body Cookies Headers (11) Test Results

200 OK 232 ms 774 B

Pretty Raw Preview Visualize JSON

```
1 {
2   [
3     {
4       "postId": 1,
5       "dateOfCreation": "2023-03-11 00:00:00",
6       "content": "This is the content of this tmp test",
7       "user": {
8         "userId": 2,
9         "username": "Shic",
10        "password": "$2a$10$ciJFbbSUv4kxxX1i0Nht0ePhLS.1xRo4A3MGuwh/ahrh6yCn60x7u",
11        "info": null
12      }
13    },
14    {
15      "postId": 2,
16      "dateOfCreation": "2024-03-21 00:00:00",
17      "content": "This is another content",
18      "user": {
19        "userId": 2,
20        "username": "Shic",
21        "password": "$2a$10$ciJFbbSUv4kxxX1i0Nht0ePhLS.1xRo4A3MGuwh/ahrh6yCn60x7u",
22        "info": null
23      }
24    }
25  ]
26 }
```



GET localhost:8080/api/posts/user/tmp

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Query Params

Key	Value	Description
-----	-------	-------------

Body Cookies Headers (11) Test Results

200 OK 9 ms 555 B

Pretty Raw Preview Visualize JSON

```
1 {
2   {
3     "postId": 3,
4     "dateOfCreation": "2023-12-01 00:00:00",
5     "content": "This is contetn of tmp user only",
6     "user": {
7       "userId": 3,
8       "username": "tmp",
9       "password": "$2a$10$wKj$QpKJ67H56LE3RCEKy.vztZTI4iA96nF89ahD7/t1/aowiv9fC",
10      "info": null
11    }
12  }
13 }
```

Результат работы серверной части

GET localhost:8080/api/users

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Query Params

Key	Value	Description
-----	-------	-------------

Body Cookies Headers (11) Test Results 200 OK 210 ms 568 B

Pretty Raw Preview Visualize JSON

```
1 {
2   "userId": 2,
3   "username": "Shiz",
4   "password": "$2a$10$mijFbbSUV4kvxXlIdNhT0eFhLS.ix0o4A3WGuwh/ahrh6yCnGDx7u",
5   "info": null
6 },
7 {
8   "userId": 3,
9   "username": "tmp",
10  "password": "$2a$10$wKjSQpKJ67H55LE3RCEKy.vztZTI4iA95nF89ahD7/t1/aoWiv9fc",
11  "info": null
12 }
13
14
```

GET localhost:8080/api/users/Shiz

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Query Params

Key	Value	Description
-----	-------	-------------

Body Cookies Headers (11) Test Results 200 OK 34 ms 4

Pretty Raw Preview Visualize JSON

```
1 {
2   "userId": 2,
3   "username": "Shiz",
4   "password": "$2a$10$mijFbbSUV4kvxXlIdNhT0eFhLS.ix0o4A3WGuwh/ahrh6yCnGDx7u",
5   "info": null
6 }
```


Упаковка приложения – создание образов

Dockerfile клиентской части проекта

```
FROM node:current-slim

WORKDIR /client

COPY /src ./src
COPY index.html .
COPY package*.json .
COPY tsconfig*.json .
COPY vite.config.ts .
COPY /.storybook .

RUN npm i && npm cache clean --force \
  && npm i @esbuild/linux-x64 esbuild-linux-64 \
  && npm run build

EXPOSE 80

# development
# CMD ["npm", "run", "dev"]

# production
CMD ["npm", "run", "preview"]
```

Dockerfile серверной части проекта

```
FROM openjdk:17-alpine
FROM maven:3.8.5-openjdk-17-slim

WORKDIR /server

COPY . .

RUN mvn clean package -DskipTests

EXPOSE 8080

# development
# CMD ["mvn", "spring-boot:run"]

# production
CMD ["java", "-jar", "/server/target/specIT-0.1.0.jar"]
```

Упаковка приложения – docker-compose

```
version: '3'

services:
  mysql:
    image: mysql:8
    environment:
      MYSQL_ROOT_PASSWORD: password
      MYSQL_DATABASE: group-queues-database
    volumes:
      - mysql-data:/var/lib/mysql
    networks:
      - specIT


  server:
    build: specIT
    ports:
      - '8080:8080'
    environment:
      SPRING_DATASOURCE_URL: jdbc:mysql://mysql:3306/specIT
      SPRING_DATASOURCE_USERNAME: root
      SPRING_DATASOURCE_PASSWORD: password
      SERVER_PORT: 8080
    volumes:
      - ./specIT/src:/server/src
      - ./specIT/target/classes:/server/target/classes
      - ./specIT/target/generated-sources:/server/target/generated-sources
      - ./specIT/target/generated-test-sources:/server/target/generated-test-sources
      - ./specIT/target/maven-status:/server/target/maven-status
      - ./specIT/target/test-classes:/server/target/test-classes
    depends_on:
      - mysql
    networks:
      - specIT

  client:
    build: specIT
    ports:
      - '80:80'
    volumes:
      - ./specIT/src:/client/src
      - ./specIT/vite.config.ts:/client/vite.config.ts
    depends_on:
      - server
    networks:
      - specIT

networks:
  group-queues-network:
```

Сборка приложения

```
mysql Pullled
- 328ba78bf27 Pull complete
- 03f54908b73 Pull complete
- 0470546b0b7 Pull complete
- 70b5ab8750a Pull complete
- c9c4afad3ad Pull complete
- 3eb7c0a1d87 Pull complete
- 06c8a0b4807 Pull complete
- 073b2ca0872 Pull complete
- ad33ad5b306 Pull complete
- 04612d55d6a Pull complete
- 1886c42e3b Pull complete

Network group-qauser group-qauser-network Created 0.2s
Volume "group-qauser_mysql-data" Created 0.1s
Container group-qauser-mysql-1 Created 1.1s
Container group-qauser-server-1 Created 0.2s
Container group-qauser-client-1 Created 0.2s
Attaching to group-qauser-client-1, group-qauser-mysql-1, group-qauser-server-1
group-qauser-mysql-1 | 2023-04-08 18:43:46.00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 8.0.32-1.0-1.0 started.
group-qauser-mysql-1 | 2023-04-08 18:43:47.00 [Note] [Entrypoint]: Switching to dedicated user 'mysql'
group-qauser-mysql-1 | 2023-04-08 18:43:47.00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 8.0.32-1.0-1.0 started.
group-qauser-mysql-1 | 2023-04-08 19:43:48.00 [Note] [Entrypoint]: Initializing database files
group-qauser-mysql-1 | 2023-04-08T19:43:48.207132Z 0 [Warning] [MY-010848] [Server] The syntax '--skip-host-cache' is deprecated and will be removed in a future release. Please use SET GLOBAL, but
group-qauser-mysql-1 | 2023-04-08T19:43:48.207440Z 0 [System] [MY-013568] [Server] /usr/sbin/mysqld (mysqld 8.0.32) initializing of server in progress as process 80
group-qauser-mysql-1 | 2023-04-08T19:43:48.928490Z 1 [System] [MY-013776] [InnoDB] InnoDB initialization has started.
group-qauser-mysql-1 | 2023-04-08T19:43:55.218192Z 1 [System] [MY-013777] [InnoDB] InnoDB initialization has ended.
group-qauser-client-1 |
> group-mysql@3.0 preview
> vite preview


```

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-- Spring Boot --
2023-04-08T19:43:59.554Z INFO 1 --- [
main] c.p.s.StudentsQueueApplication : Starting StudentsQueueApplication v0.1.0 using Java 17.0.2 with PID 1 (fo
group-qauser-mysql-1 | 2023-04-08T19:44:01.954893Z 0 [Warning] [MY-010855] [Server] root@localhost is created with an empty password ! Please consider switching off the --initialize-insecure opt
group-qauser-mysql-1 | 2023-04-08T19:44:02.6531Z INFO 1 --- [
main] c.p.s.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repository in DEFERRED mode.
group-qauser-mysql-1 | 2023-04-08T19:44:02.9732Z INFO 1 --- [
main] c.p.s.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 269 ms. Found 2 JPA repository
group-qauser-client-1 | @ Local: http://localhost:8080/
group-qauser-client-1 | @ Network: http://172.17.0.1:8080/
group-qauser-mysql-1 | 2023-04-08T19:44:06.6137Z INFO 1 --- [
main] o.a.h.b.embedded.tomcat.Tomcat850Server : Tomcat initialized with port(s): 8080 (http)
group-qauser-mysql-1 | 2023-04-08T19:44:06.6332Z INFO 1 --- [
main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
group-qauser-mysql-1 | 2023-04-08T19:44:06.6842Z INFO 1 --- [
main] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.1.5]

```


```

[illegible]























Управление проектом

Containers

[Give feedback](#)

A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. [Learn more](#)

☒ Only show running containers

<input type="checkbox"/>	Name 	Image	Status	Port(s)	Started	Actions
<input type="checkbox"/>	 group-queues	-	Running (3/3)			  
<input type="checkbox"/>	 mysql-1 de2b2048ff8b 	mysql:8	Running		7 seconds ago	  
<input type="checkbox"/>	 server-1 e1f8b9671112 	group-queues-server	Running	8080:8080 	6 seconds ago	  
<input type="checkbox"/>	 client-1 7abdd8074a84 	group-queues-client	Running	80:80 	6 seconds ago	  

Результаты работы

- Разработаны клиент и сервер приложения
- Обеспечена выгрузка приложения на облачный хостинг
- Написана документация к проекту

URL репозитория с кодом:

<https://github.com/SuperCoon666/specIT>

