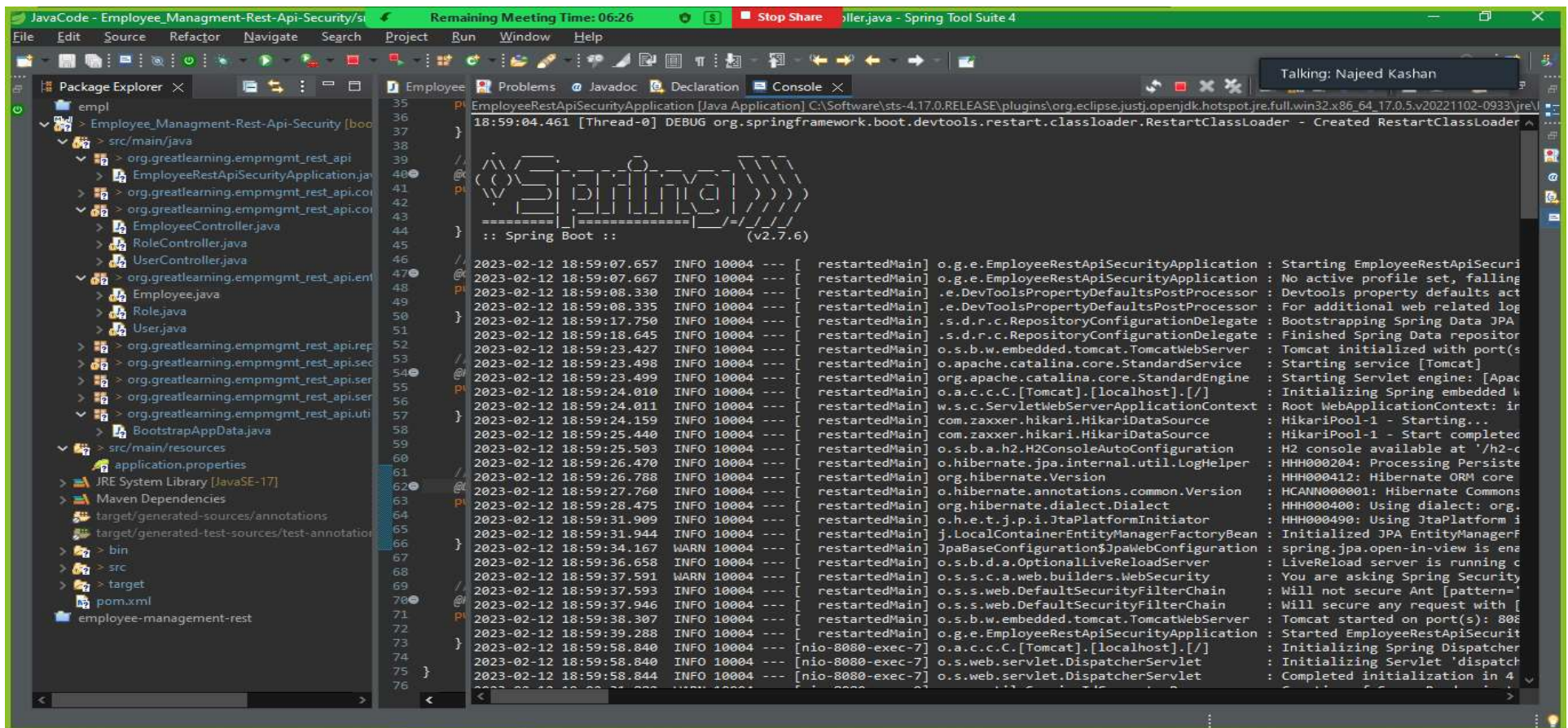


Employee Management Rest Api based Web Application(G3B6)



JavaCode - Employee_Management-Rest-API-Security/st... Remaining Meeting Time: 06:26 Stop Shareoller.java - Spring Tool Suite 4

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer

- empl
- Employee_Management-Rest-API-Security [boo
- src/main/java
- org.greatlearning.empmngmt_rest_api
- EmployeeRestApiSecurityApplication.java
- org.greatlearning.empmngmt_rest_api.co
- org.greatlearning.empmngmt_rest_api.co
- EmployeeController.java
- RoleController.java
- UserController.java
- org.greatlearning.empmngmt_rest_api.ent
- Employee.java
- Role.java
- User.java
- org.greatlearning.empmngmt_rest_api.rep
- org.greatlearning.empmngmt_rest_api.sec
- org.greatlearning.empmngmt_rest_api.ser
- org.greatlearning.empmngmt_rest_api.ser
- org.greatlearning.empmngmt_rest_api.uti
- BootstrapAppData.java
- src/main/resources
- application.properties
- JRE System Library [JavaSE-17]
- Maven Dependencies
- target/generated-sources/annotations
- target/generated-test-sources/test-annotation
- bin
- src
- target
- pom.xml
- employee-management-rest

Employee

```
35 EmployeeRestApiSecurityApplication [Java Application] C:\Software\sts-4.17.0.RELEASE\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.5.v20221102-0933\jre\
36 18:59:04.461 [Thread-0] DEBUG org.springframework.boot.devtools.restart.classloader.RestartClassLoader - Created RestartClassLoader
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```

Spring Boot (v2.7.6)

```
2023-02-12 18:59:07.657 INFO 10004 --- [ restartedMain] o.g.e.EmployeeRestApiSecurityApplication : Starting EmployeeRestApiSecur
2023-02-12 18:59:07.667 INFO 10004 --- [ restartedMain] o.g.e.EmployeeRestApiSecurityApplication : No active profile set, falling
2023-02-12 18:59:08.330 INFO 10004 --- [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : DevTools property defaults act
2023-02-12 18:59:08.335 INFO 10004 --- [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web related log
2023-02-12 18:59:17.750 INFO 10004 --- [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA
2023-02-12 18:59:18.645 INFO 10004 --- [ restartedMain] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repositor
2023-02-12 18:59:23.427 INFO 10004 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s)
2023-02-12 18:59:23.498 INFO 10004 --- [ restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2023-02-12 18:59:23.499 INFO 10004 --- [ restartedMain] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apac
2023-02-12 18:59:24.010 INFO 10004 --- [ restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded W
2023-02-12 18:59:24.011 INFO 10004 --- [ restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: in
2023-02-12 18:59:24.159 INFO 10004 --- [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2023-02-12 18:59:25.440 INFO 10004 --- [ restartedMain] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed
2023-02-12 18:59:25.503 INFO 10004 --- [ restartedMain] o.s.b.a.h2.H2ConsoleAutoConfiguration : H2 console available at '/h2-c
2023-02-12 18:59:26.470 INFO 10004 --- [ restartedMain] o.hibernate.jpa.internal.util.LogHelper : HHH0000204: Processing Persiste
2023-02-12 18:59:26.788 INFO 10004 --- [ restartedMain] org.hibernate.Version : HHH0000412: Hibernate ORM core
2023-02-12 18:59:27.760 INFO 10004 --- [ restartedMain] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons
2023-02-12 18:59:28.475 INFO 10004 --- [ restartedMain] org.hibernate.dialect.Dialect : HHH0000400: Using dialect: org.
2023-02-12 18:59:31.909 INFO 10004 --- [ restartedMain] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform i
2023-02-12 18:59:31.944 INFO 10004 --- [ restartedMain] j.LocalContainerEntityManagerFactoryBean : Initializing JPA EntityManagerF
2023-02-12 18:59:34.167 WARN 10004 --- [ restartedMain] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is ena
2023-02-12 18:59:36.658 INFO 10004 --- [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running c
2023-02-12 18:59:37.591 WARN 10004 --- [ restartedMain] o.s.s.c.a.web.builders.WebSecurity : You are asking Spring Security
2023-02-12 18:59:37.593 INFO 10004 --- [ restartedMain] o.s.s.web.DefaultSecurityFilterChain : Will not secure Ant [pattern=
2023-02-12 18:59:37.946 INFO 10004 --- [ restartedMain] o.s.s.web.DefaultSecurityFilterChain : Will secure any request with '
2023-02-12 18:59:38.307 INFO 10004 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 808
2023-02-12 18:59:39.288 INFO 10004 --- [ restartedMain] o.g.e.EmployeeRestApiSecurityApplication : Started EmployeeRestApiSecur
2023-02-12 18:59:58.840 INFO 10004 --- [nio-8080-exec-7] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring Dispatcher
2023-02-12 18:59:58.840 INFO 10004 --- [nio-8080-exec-7] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispatch
2023-02-12 18:59:58.844 INFO 10004 --- [nio-8080-exec-7] o.s.web.servlet.DispatcherServlet : Completed initialization in 4
```

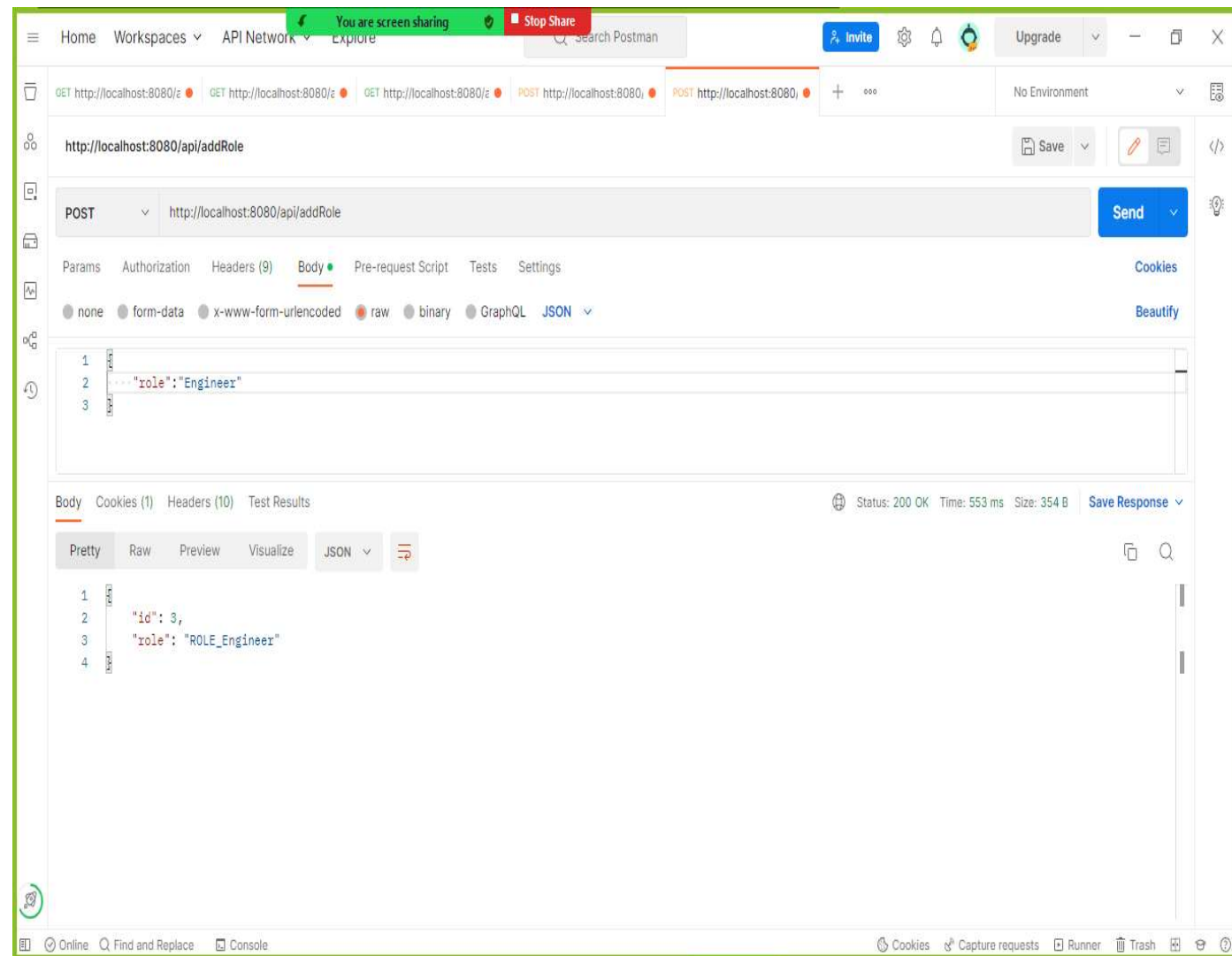
Talking: Najeed Kashan

Adding Role:

```
{  
  "role": "Engineer"  
}
```

URL:

<http://localhost:8080/api/addRole>

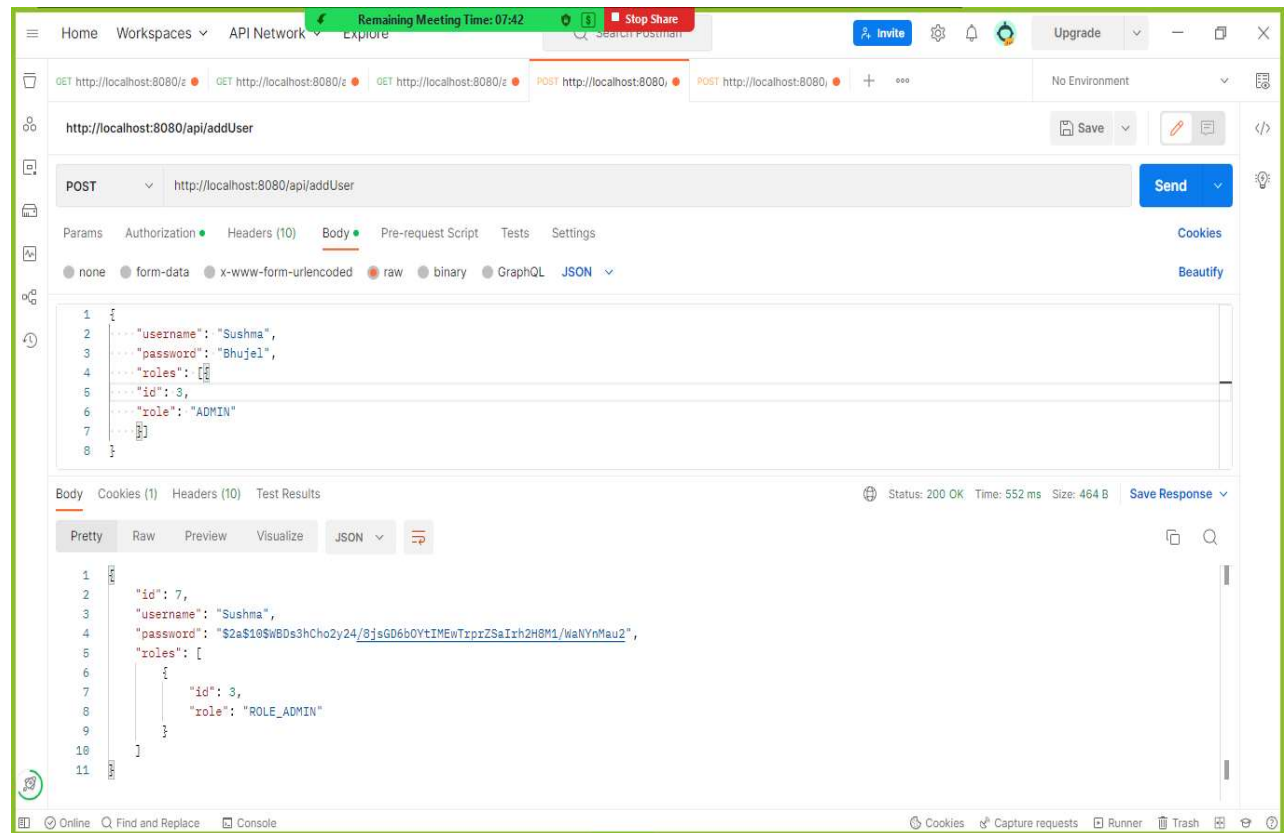


Adding User:

```
{  
  "username": "Sushma",  
  "password": "Bhujel",  
  "roles": [{  
    "id": 3,  
    "role": "ADMIN"  
  }]  
}
```

URL:

<http://localhost:8080/api/addUser>

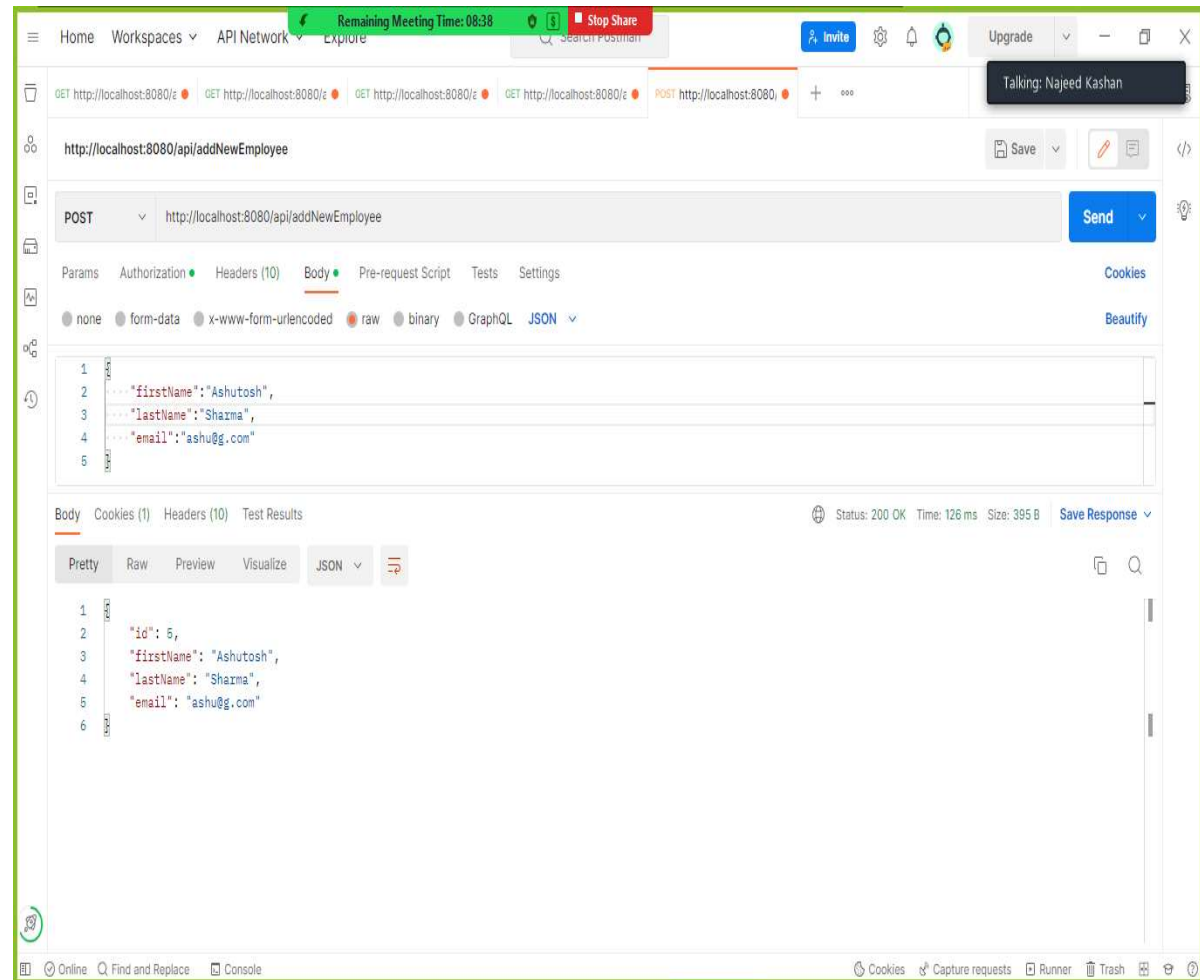


Add new Employee:

```
{  
  "firstName": "Ashutosh",  
  "lastName": "Sharma",  
  "email": "ashu@g.com"  
}
```

URL:

<http://localhost:8080/api/addNewEmployee>



List All Employees:

```
{
  "id": 1,
  "firstName": "Najeed",
  "lastName": "Kashan",
  "email": "nk@gmail.com"
},
{
  "id": 2,
  "firstName": "Ayushi",
  "lastName": "Sharma",
  "email": "ayushi@gmail.com"
},
{
  "id": 3,
  "firstName": "Praveen",
  "lastName": "Bandi",
  "email": "bandi@gmail.com"
},
{
  "id": 4,
  "firstName": "Sushma",
  "lastName": "Bhujel",
  "email": "sushma@gmail.com"
}
```

URL:

<http://localhost:8080/api/listAllEmployees>

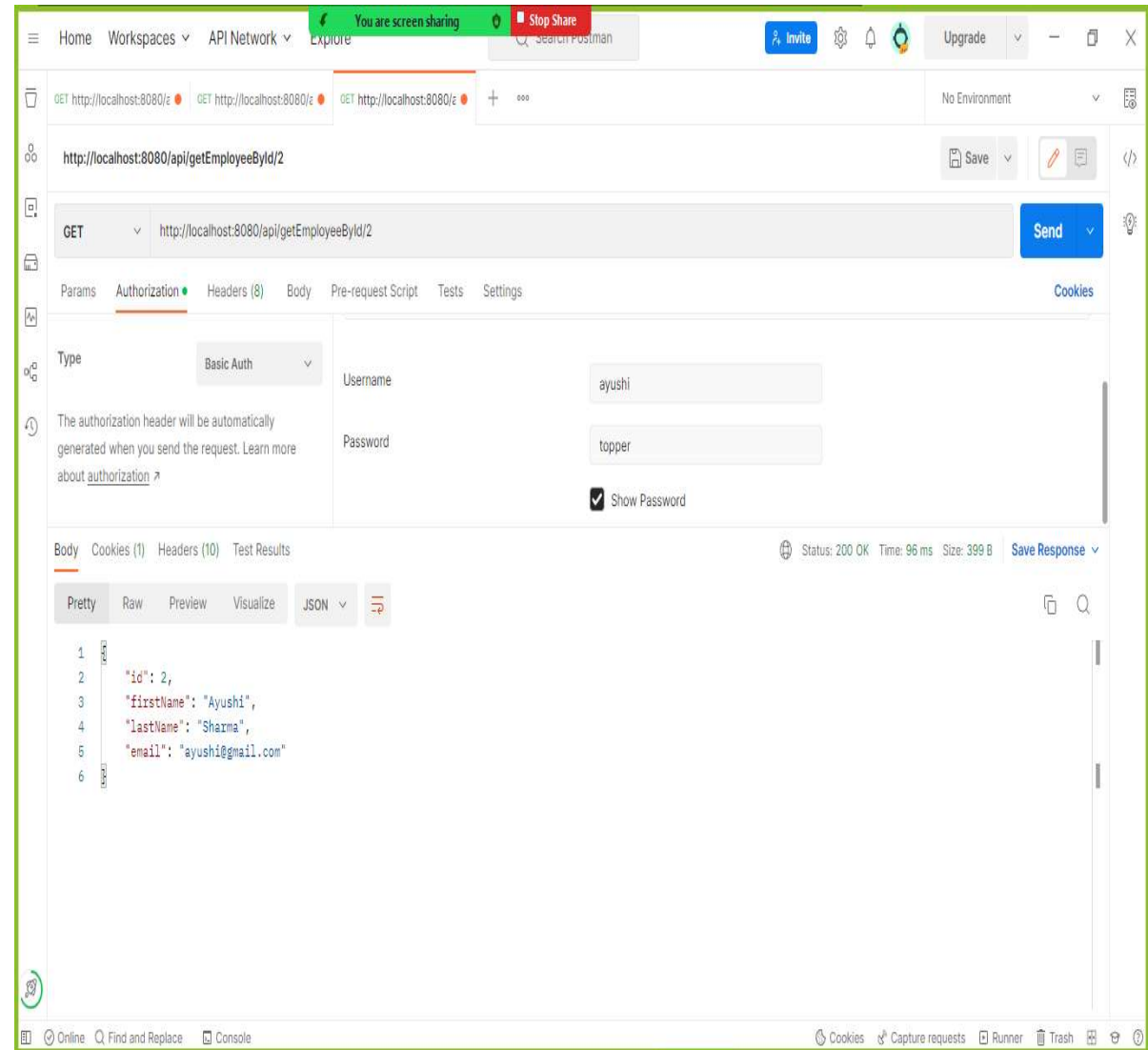
The screenshot shows the Postman interface with a GET request to `http://localhost:8080/api/listAllEmployees` executed successfully. The response is a JSON array of four employee objects. The status is 200 OK, and the response is displayed in the 'Body' tab using the 'Pretty' format.

```
{
  "id": 1,
  "firstName": "Najeed",
  "lastName": "Kashan",
  "email": "nk@gmail.com"
},
{
  "id": 2,
  "firstName": "Ayushi",
  "lastName": "Sharma",
  "email": "ayushi@gmail.com"
},
{
  "id": 3,
  "firstName": "Praveen",
  "lastName": "Bandi",
  "email": "bandi@gmail.com"
},
{
  "id": 4,
  "firstName": "Sushma",
  "lastName": "Bhujel",
  "email": "sushma@gmail.com"
}
```


Fetch Employee by Id:

Url:

<http://localhost:8080/api/getEmployeeById/2>

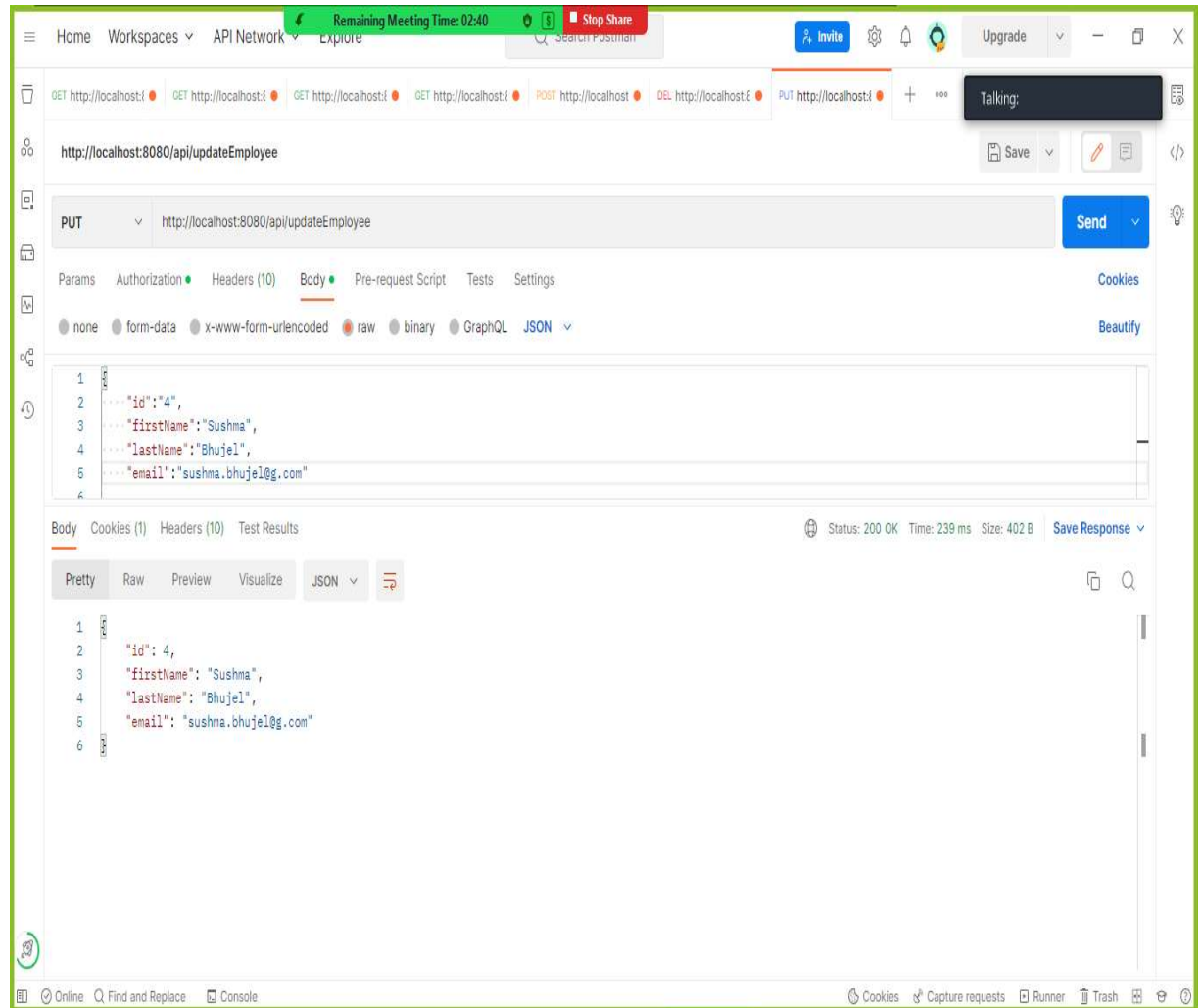


Update Employee:

```
{  
  "id":4,  
  "firstName":"Sushma",  
  "lastName":"Bhujel",  
  "email":"sushma.bhujel@g.com"  
}
```

URL:

<http://localhost:8080/api/updateEmployee>

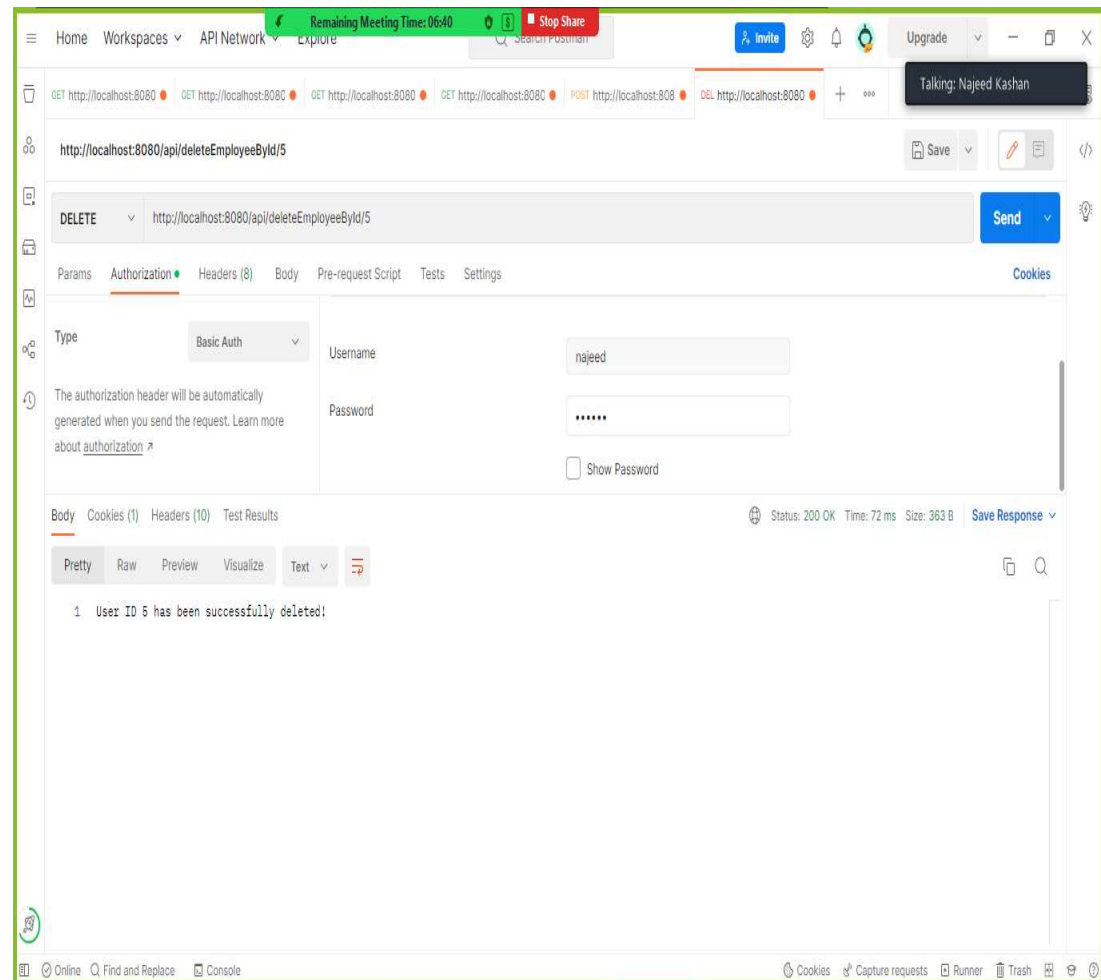


Delete by Id:

“ User ID 5 has been successfully deleted! “

Url:

<http://localhost:8080/api/deleteEmployeeById/5>



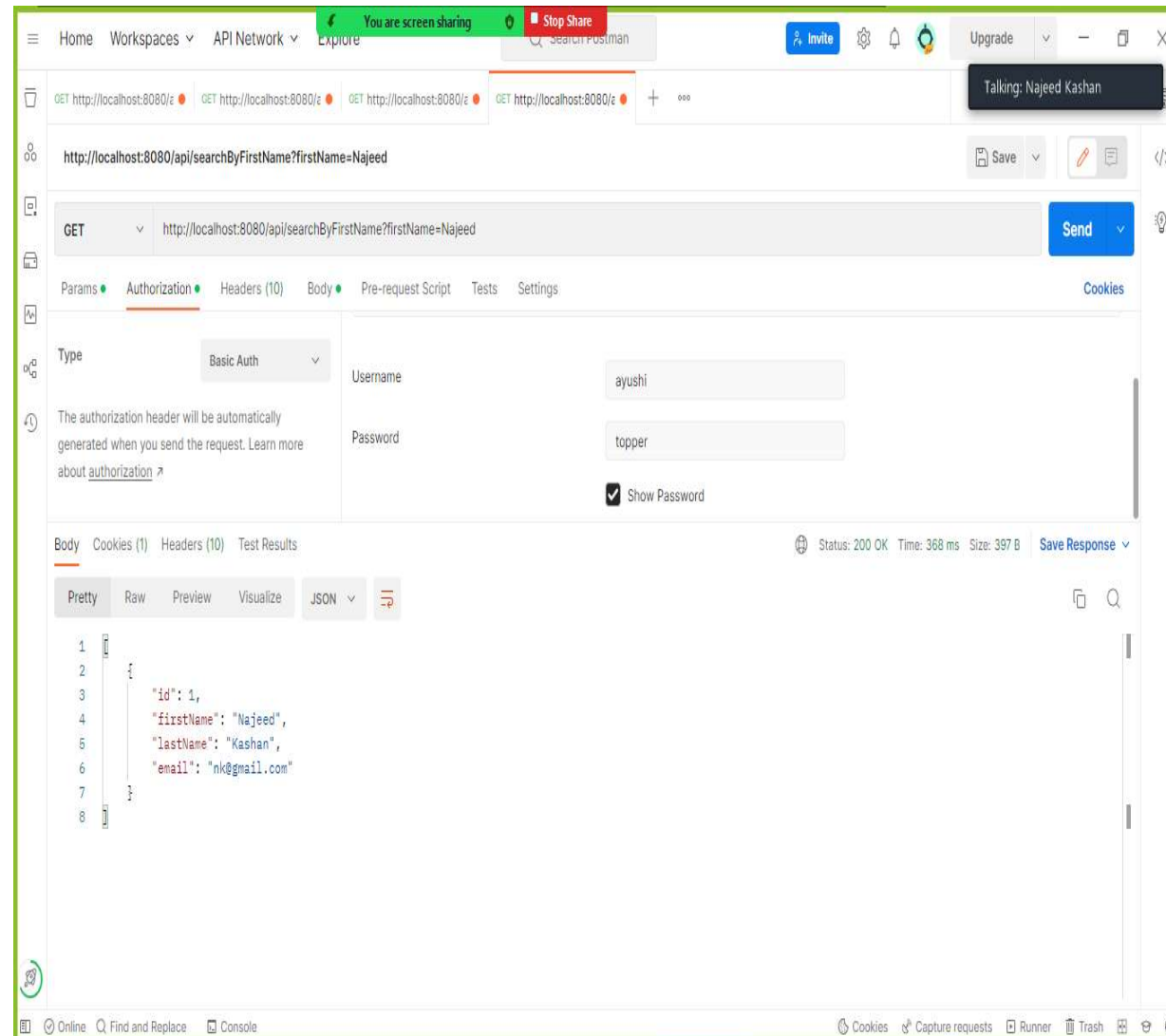
Search Employee by first name:

Response Body:

```
{
  "id": 1,
  "firstName": "Najeed",
  "lastName": "Kashan",
  "email": "nk@gmail.com"
}
```

Url:

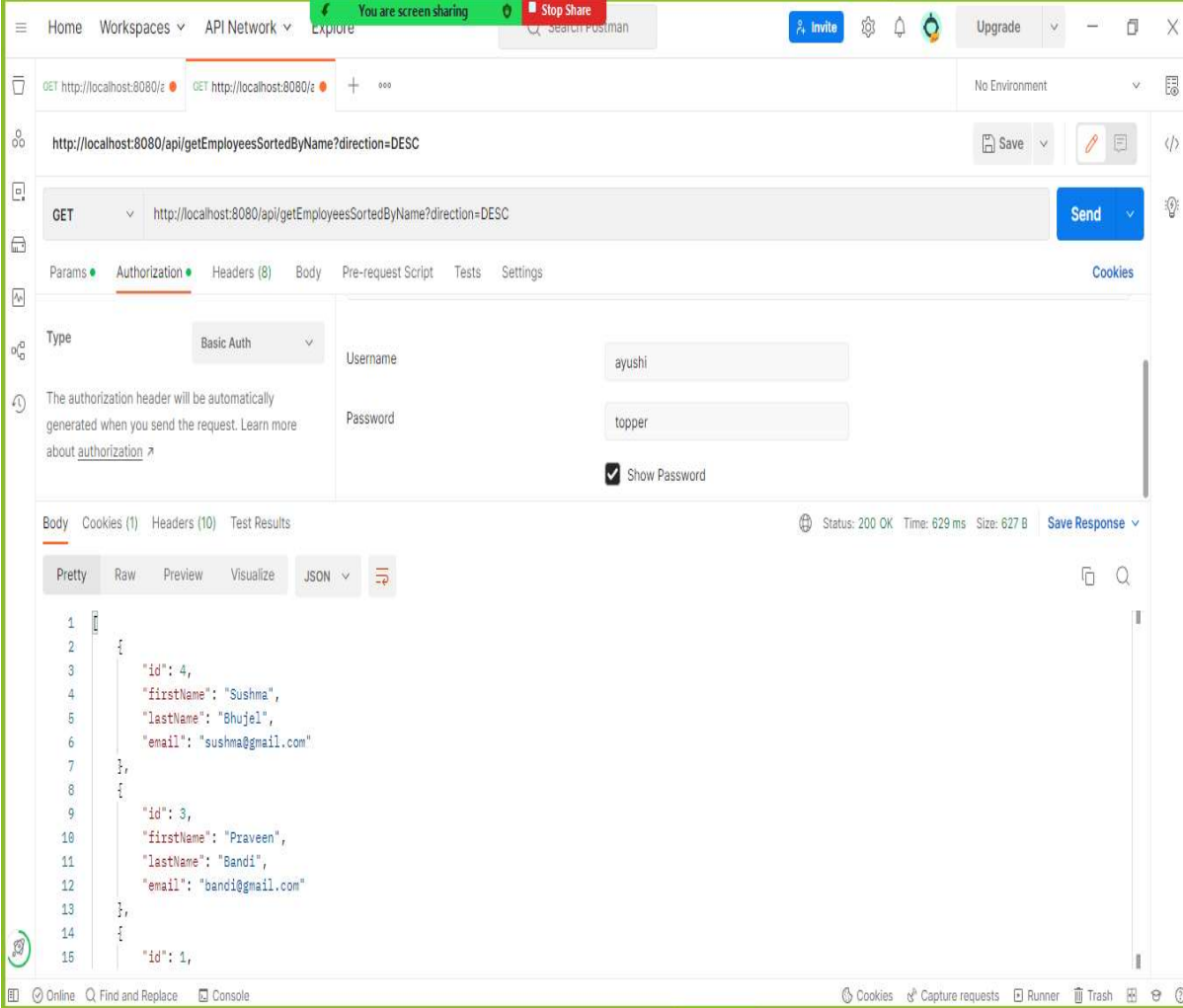
<http://localhost:8080/api/searchByFirstName?firstName=Najeed>



Fetching Employee Sorted in Descending Order:

Url:

<http://localhost:8080/api/getEmployeesSortedByName?direction=DESC>



The screenshot shows the Postman API client interface. The request is a GET to `http://localhost:8080/api/getEmployeesSortedByName?direction=DESC`. The Authorization tab is selected, showing Basic Auth with Username `ayushi` and Password `topper`. The response is a JSON array of employee objects, displayed in the Body tab.

```
1 {
2   {
3     "id": 4,
4     "firstName": "Sushma",
5     "lastName": "Bhujel",
6     "email": "sushma@gmail.com"
7   },
8   {
9     "id": 3,
10    "firstName": "Praveen",
11    "lastName": "Bandi",
12    "email": "bandi@gmail.com"
13  },
14  {
15    "id": 1,
```

Fetching Employee Sorted in Ascending Order:

Url:

<http://localhost:8080/api/getEmployeesSortedByName?direction=ASC>

The screenshot displays a REST client interface with a GET request to `http://localhost:8080/api/getEmployeesSortedByName?direction=ASC`. The response status is 200 OK, and the body contains a JSON array of four employee objects, sorted by name in ascending order.

```
2 {
3   "id": 2,
4   "firstName": "Ayushi",
5   "lastName": "Sharma",
6   "email": "ayushi.das@gmail.com"
7 },
8 {
9   "id": 1,
10  "firstName": "Najeed",
11  "lastName": "Kashan",
12  "email": "nk@gmail.com"
13 },
14 {
15   "id": 3,
16   "firstName": "Praveen",
17   "lastName": "Bandi",
18   "email": "bandi@gmail.com"
19 },
20 {
21   "id": 4,
22   "firstName": "Sushma",
23   "lastName": "Bhujel",
```

The interface also shows tabs for Params, Authorization, Headers (8), Body, Pre-request Script, Tests, and Settings. The response is displayed in the Body tab, with options to view it in Pretty, Raw, Preview, Visualize, or JSON format. The status bar at the bottom indicates the response is 200 OK, took 6.26 s, and is 706 B in size.