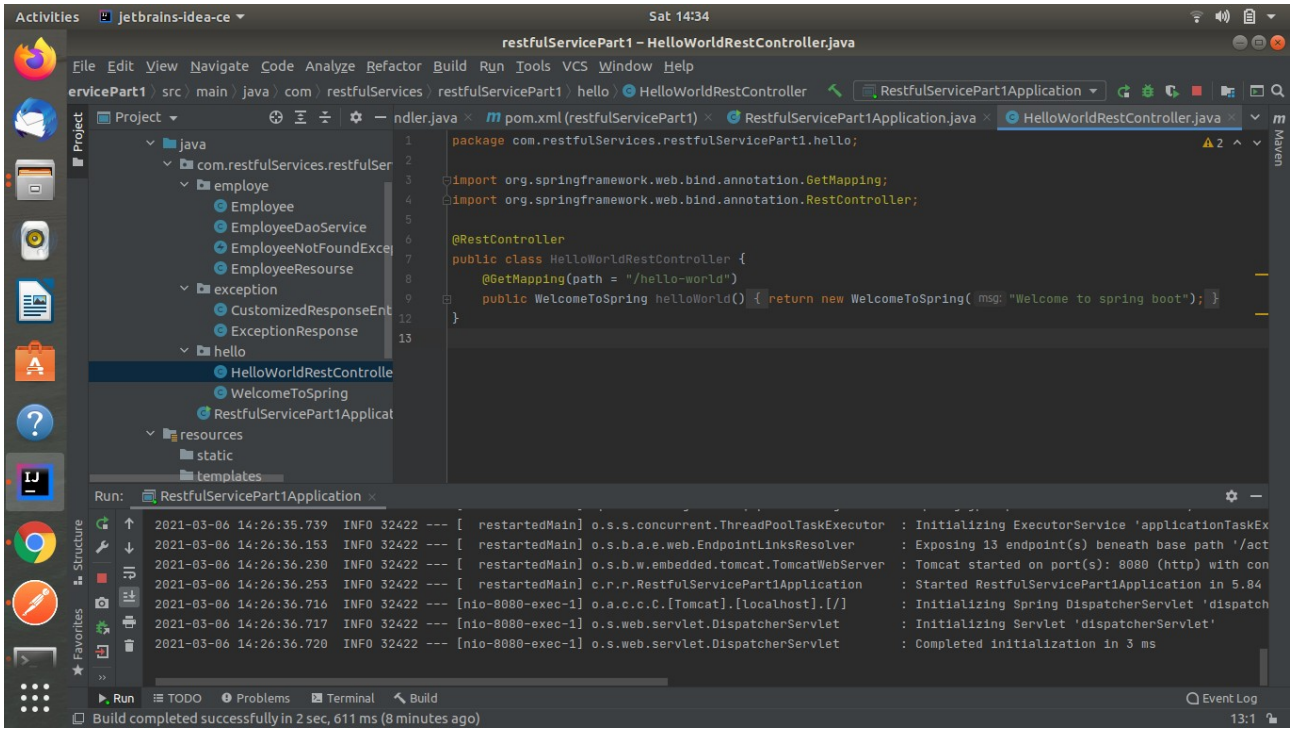
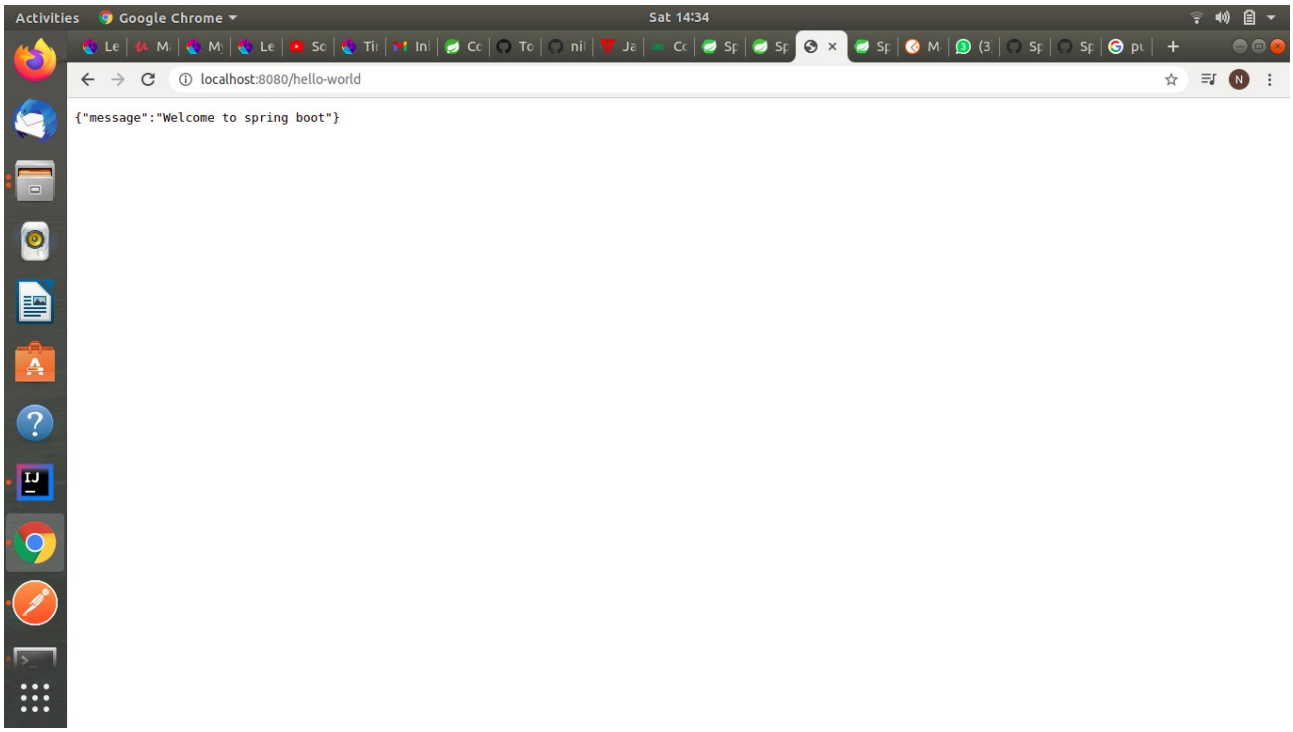
Create a simple REST ful service in Spring Boot which returns the Response "Welcome to spring boot".





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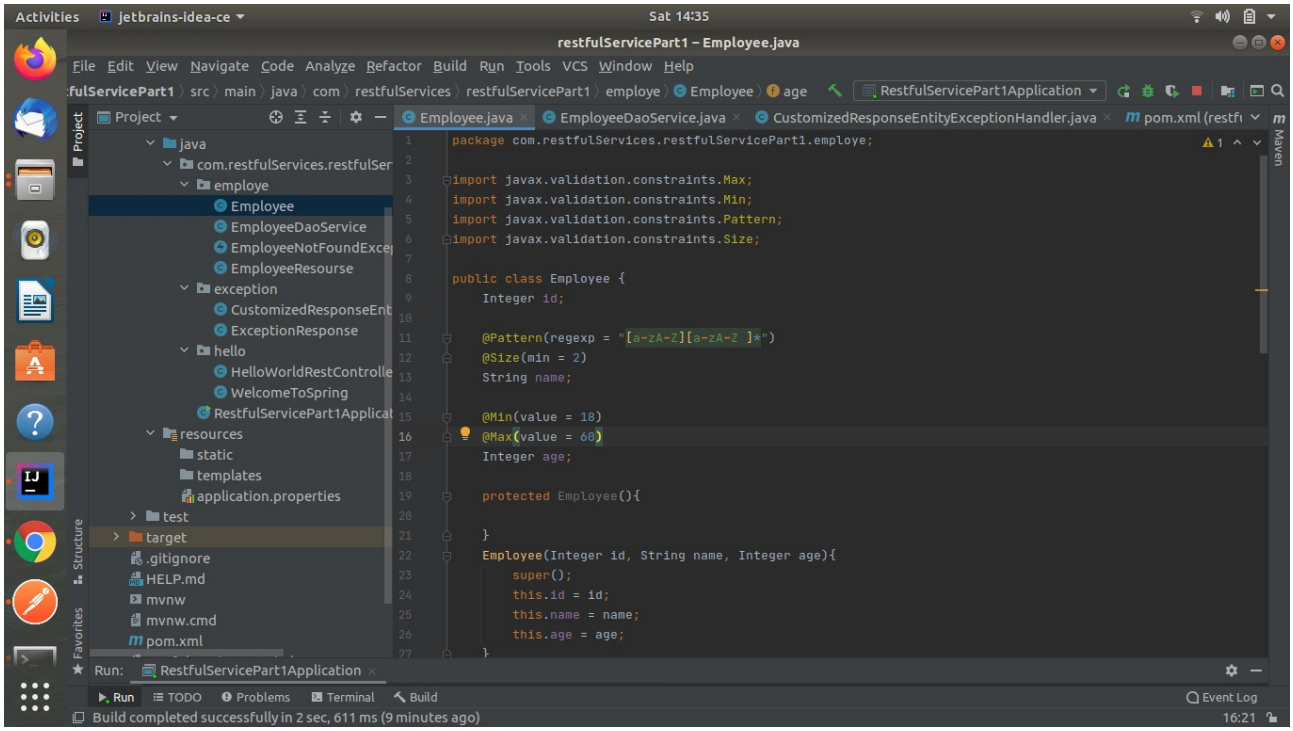
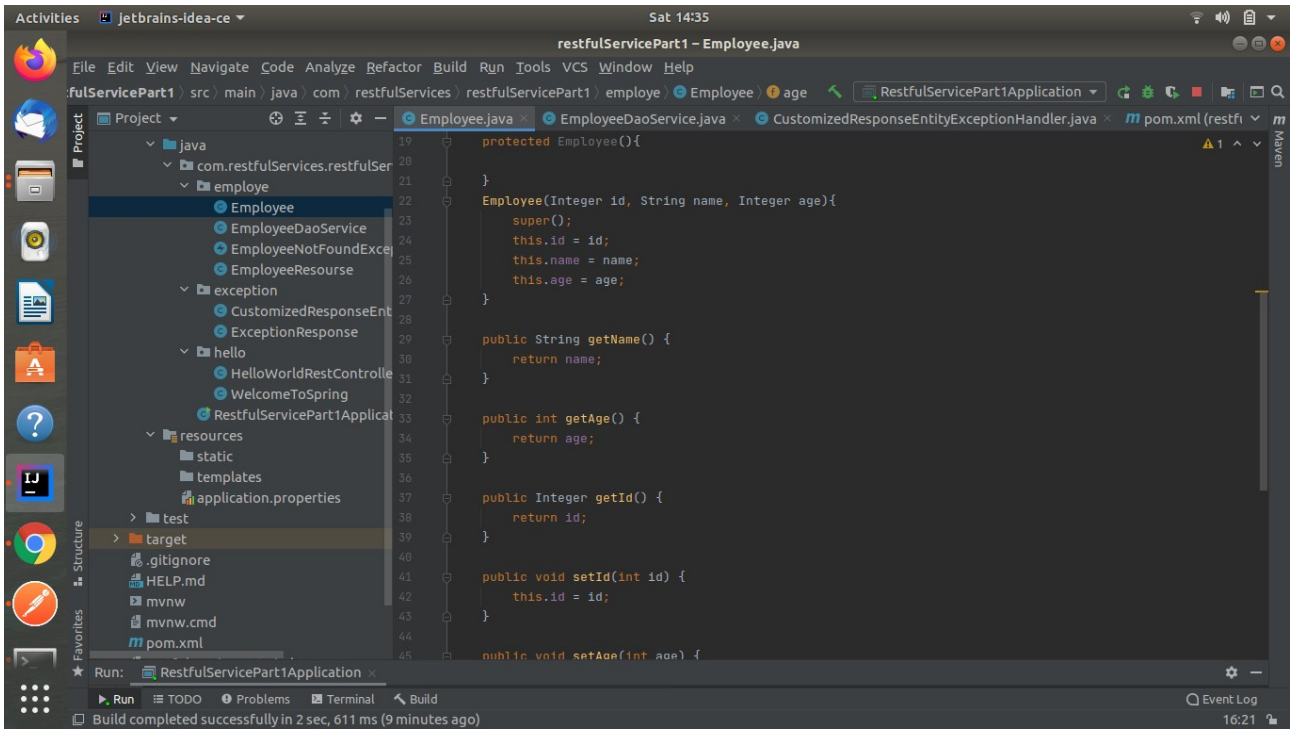
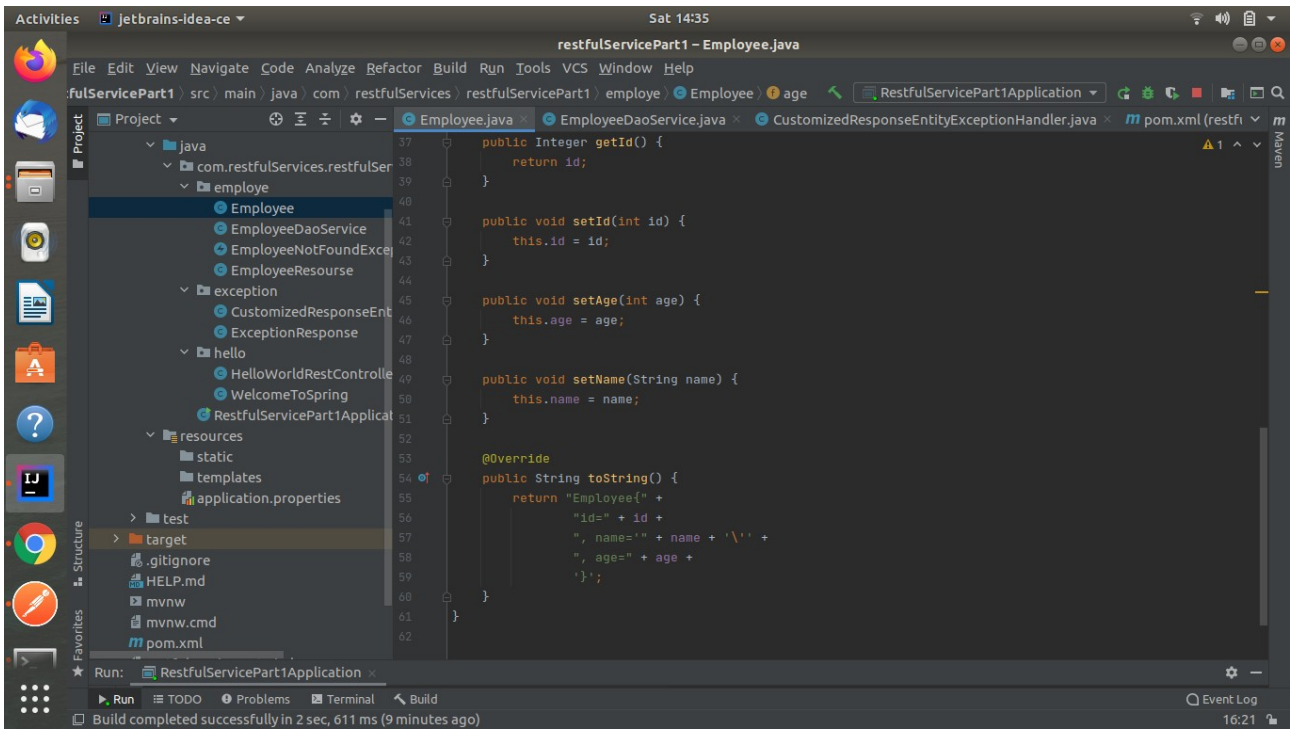
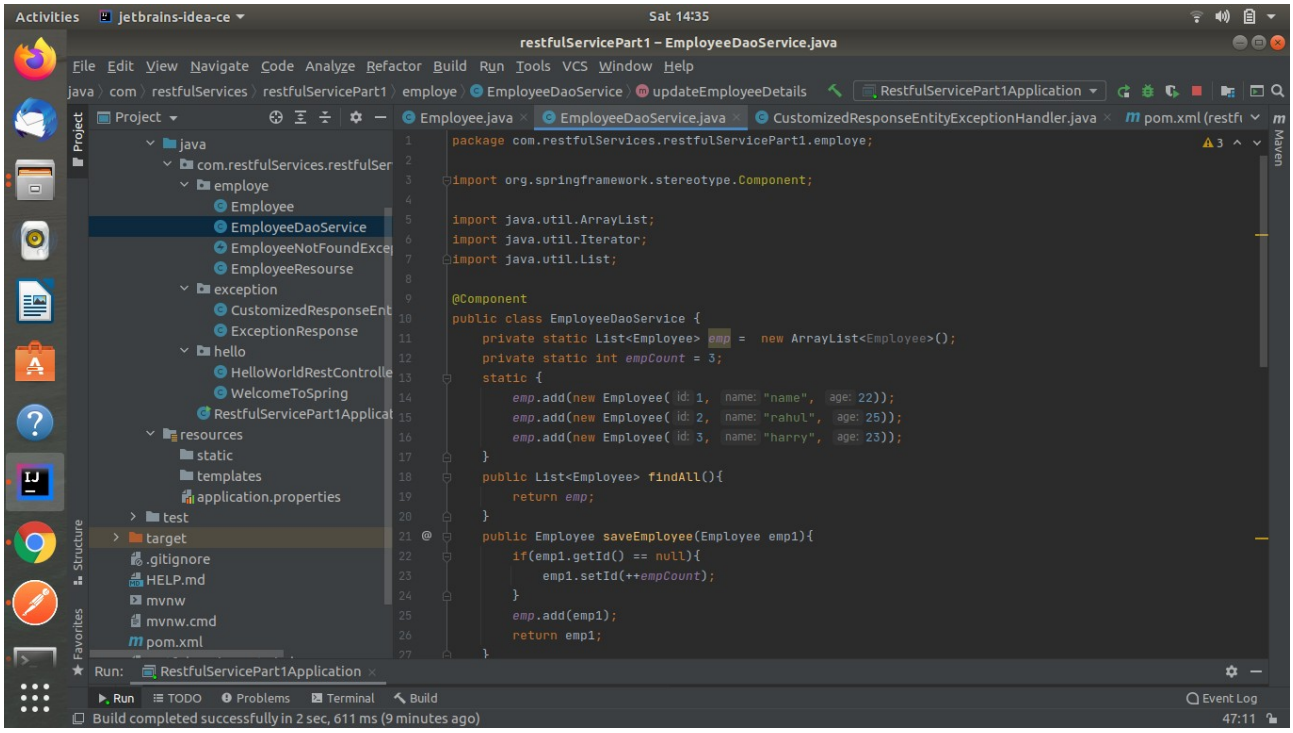
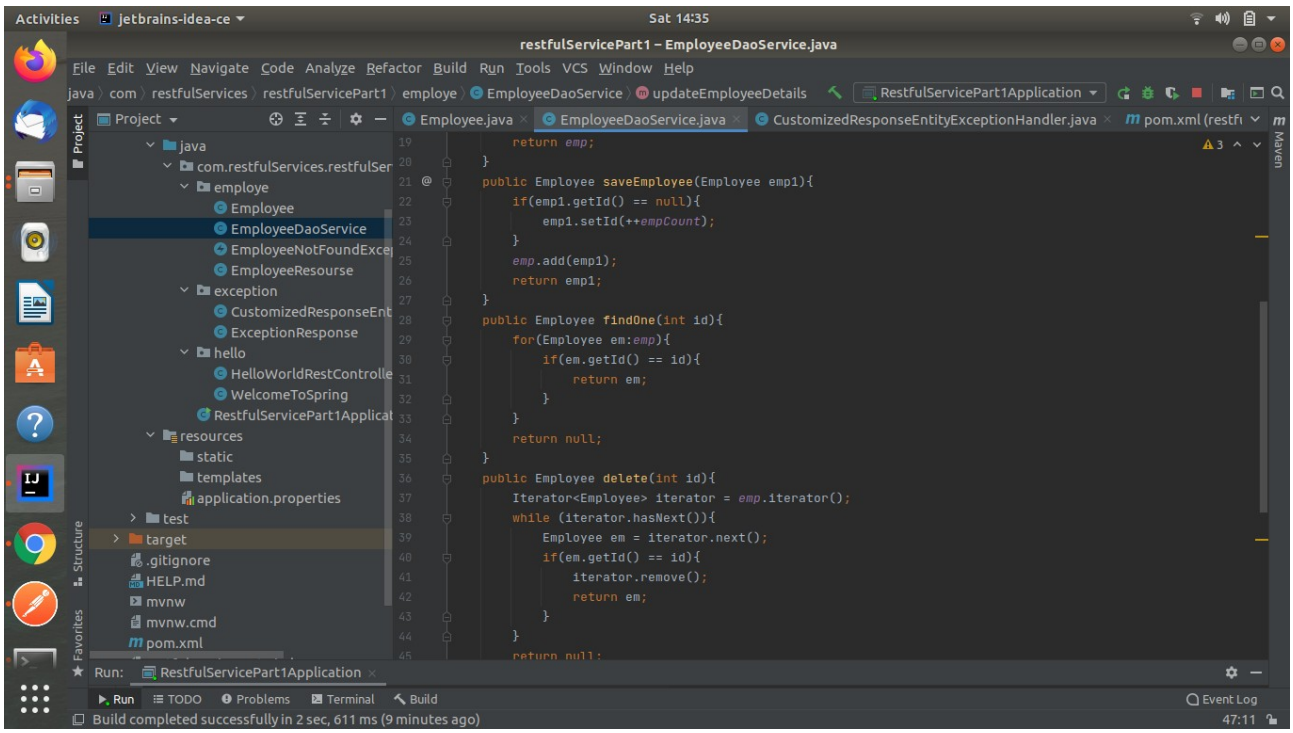
Q2:Create an Employee Bean(id, name, age) and service to perform different operations related to employee.

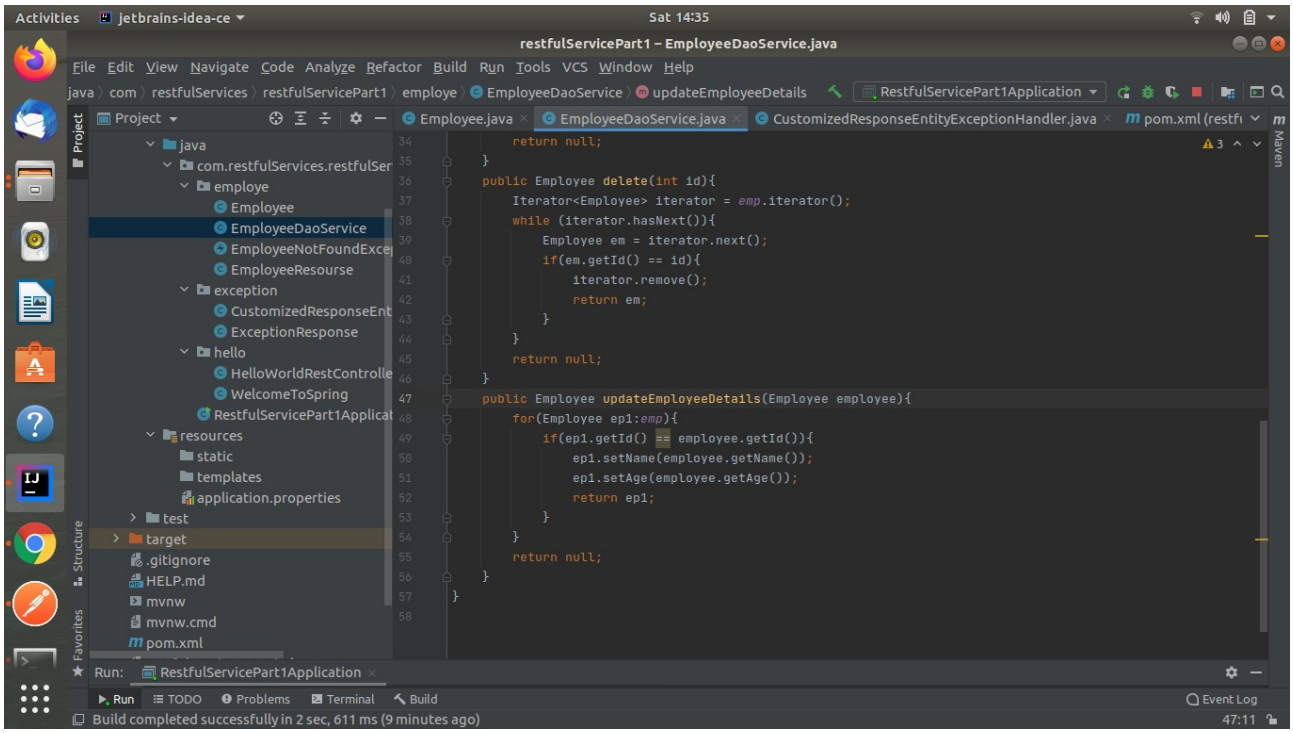




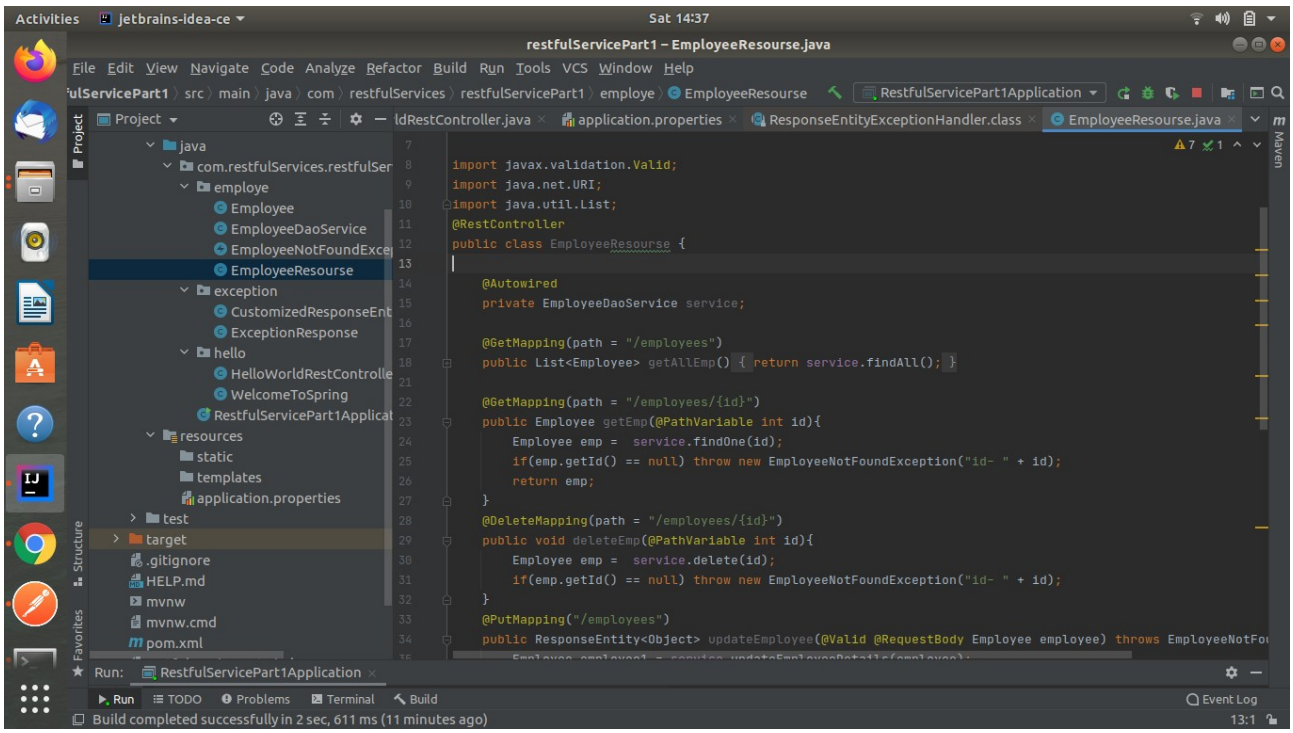

Activities
jetbrains-idea-ce
Sat 14:35
restfulServicePart1 – Employee.java
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
RestfulServicePart1Application
Project
Employee.java
EmployeeDaoService.java
CustomizedResponseEntityExceptionHandler.java
pom.xml (restfi
public Integer getId() {
return id;
}
public void setId(int id) {
this.id = id;
}
public void setAge(int age) {
this.age = age;
}
public void setName(String name) {
this.name = name;
}
@Override
public String toString() {
return "Employee{" +
"id=" + id +
", name='" + name + '\'' +
", age=" + age +
'}';
}
}
Run: RestfulServicePart1Application
Run TODO Problems Terminal Build
Event Log
Build completed successfully in 2 sec, 611 ms (9 minutes ago)
16:21

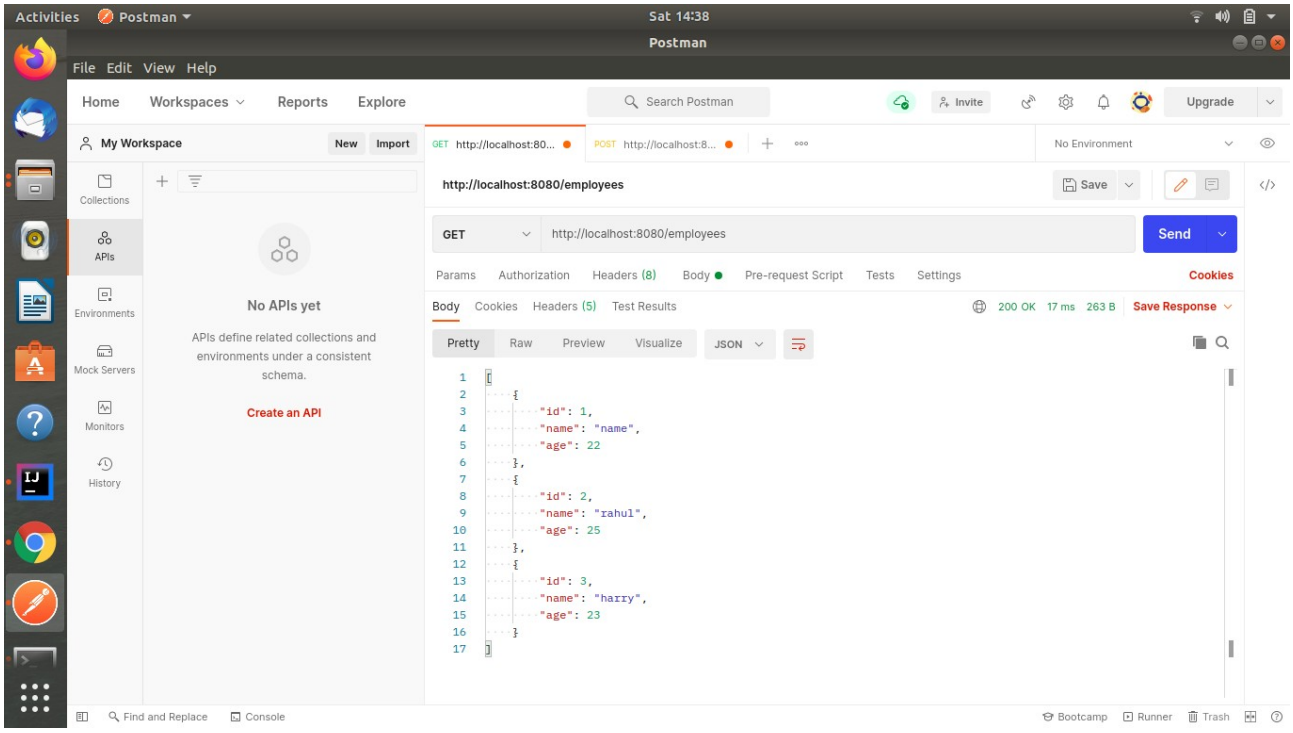

Activities
jetbrains-idea-ce
Sat 14:35
restfulServicePart1 – EmployeeDaoService.java
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
RestfulServicePart1Application
Project
Employee.java
EmployeeDaoService.java
CustomizedResponseEntityExceptionHandler.java
pom.xml (restfi
package com.restfulServices.restfulServicePart1.employe;
import org.springframework.stereotype.Component;
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
@Component
public class EmployeeDaoService {
private static List<Employee> emp = new ArrayList<Employee>();
private static int empCount = 3;
static {
emp.add(new Employee(id: 1, name: "name", age: 22));
emp.add(new Employee(id: 2, name: "rahul", age: 25));
emp.add(new Employee(id: 3, name: "harry", age: 23));
}
public List<Employee> findAll(){
return emp;
}
public Employee saveEmployee(Employee emp1){
if(emp1.getId() == null){
emp1.setId(++empCount);
}
emp.add(emp1);
return emp1;
}
Run: RestfulServicePart1Application
Run TODO Problems Terminal Build
Event Log
Build completed successfully in 2 sec, 611 ms (9 minutes ago)
47:11



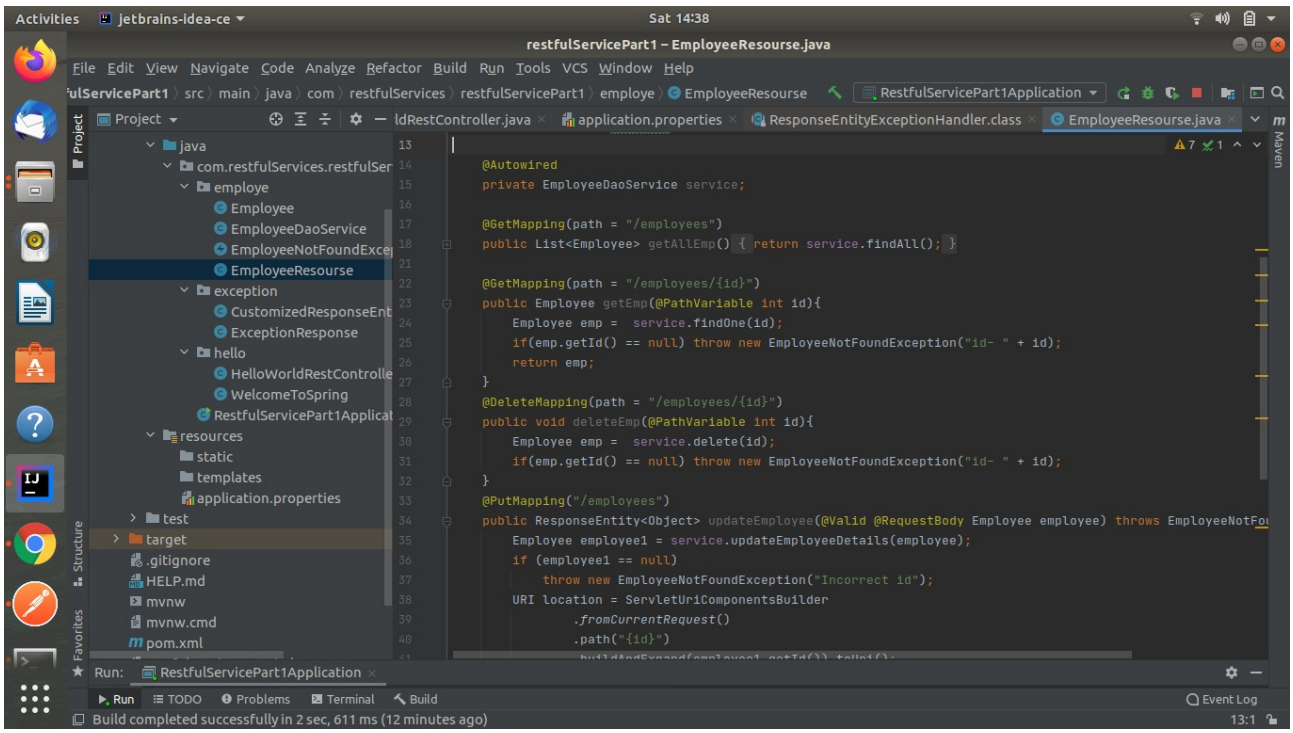


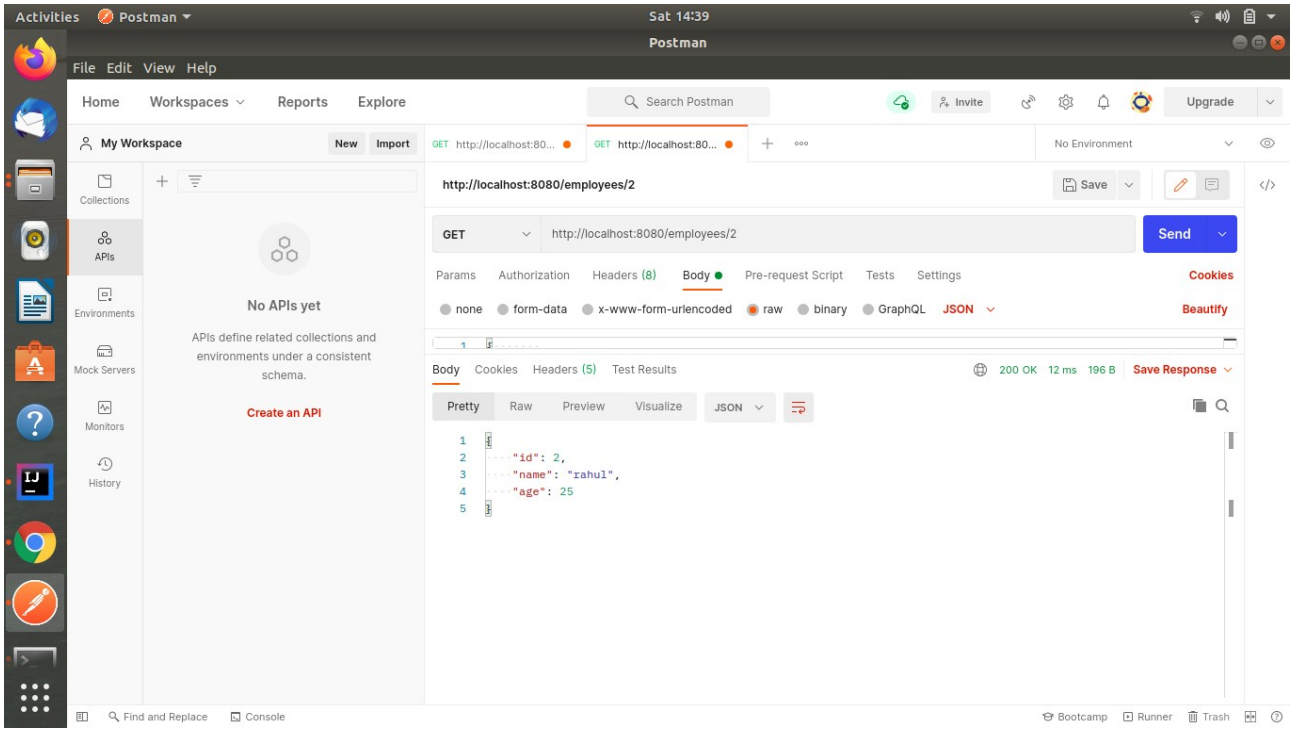
•Implement GET http request for Employee to get list of employees.



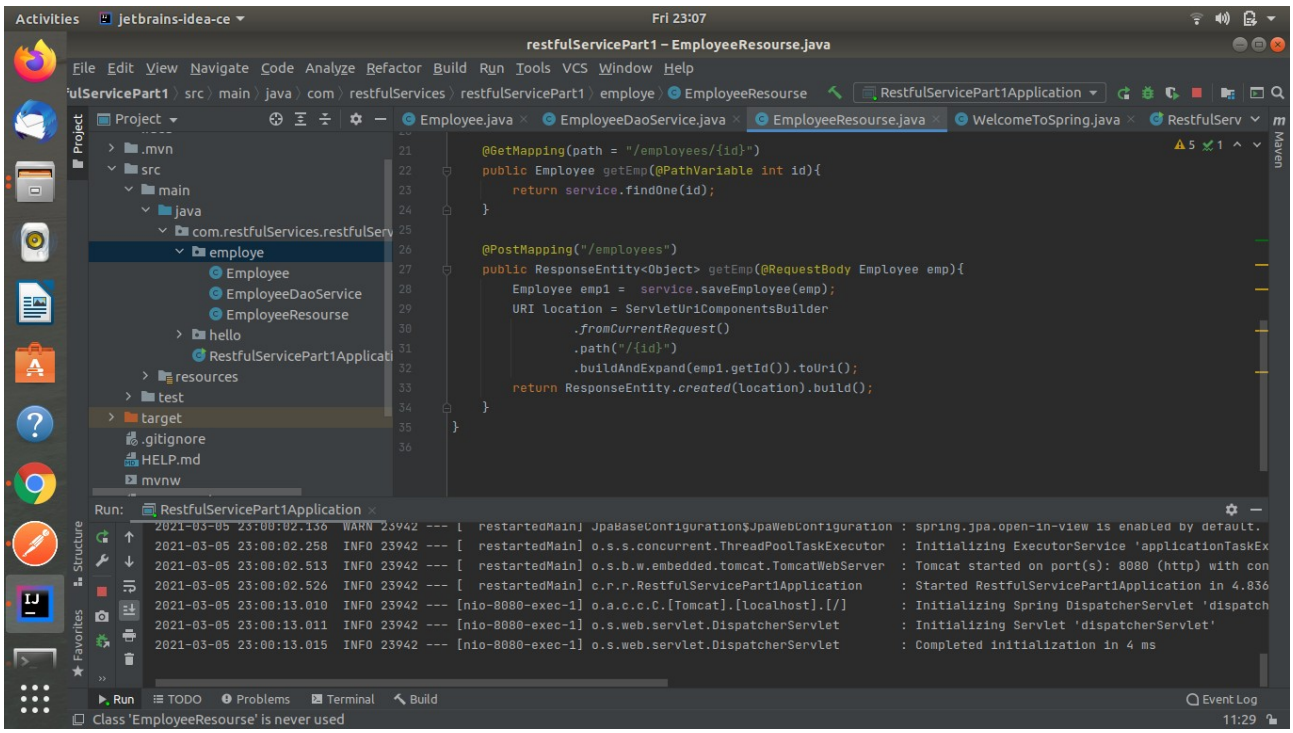


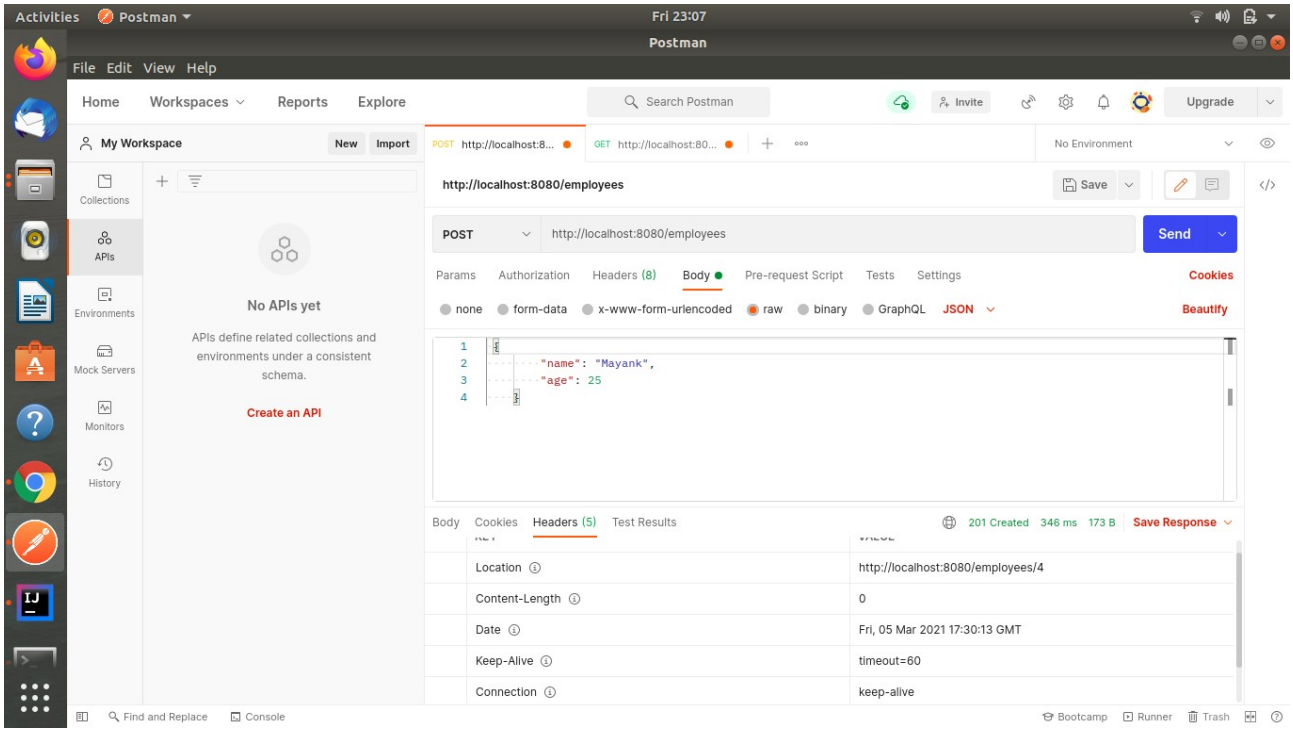
Q4: Implement GET http request using path variable top get one employee





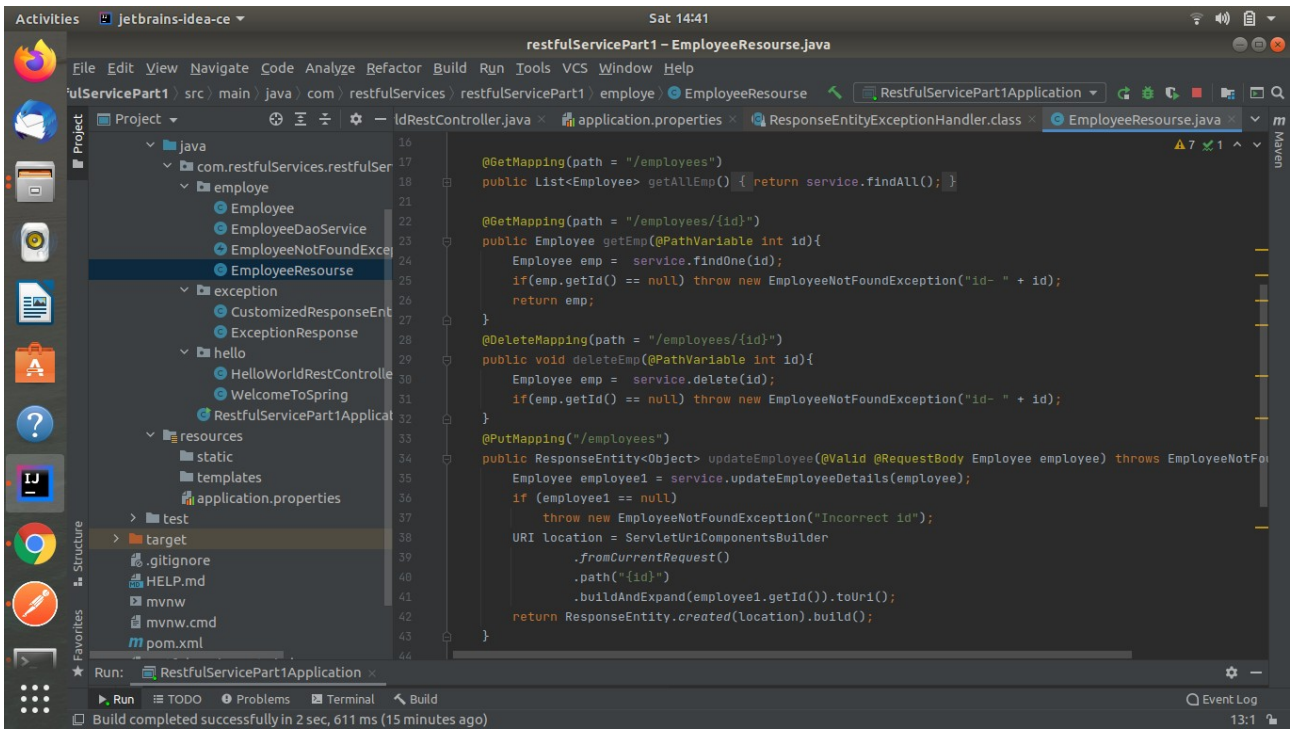
Q5:Implement POST http request for Employee to create a new employee.

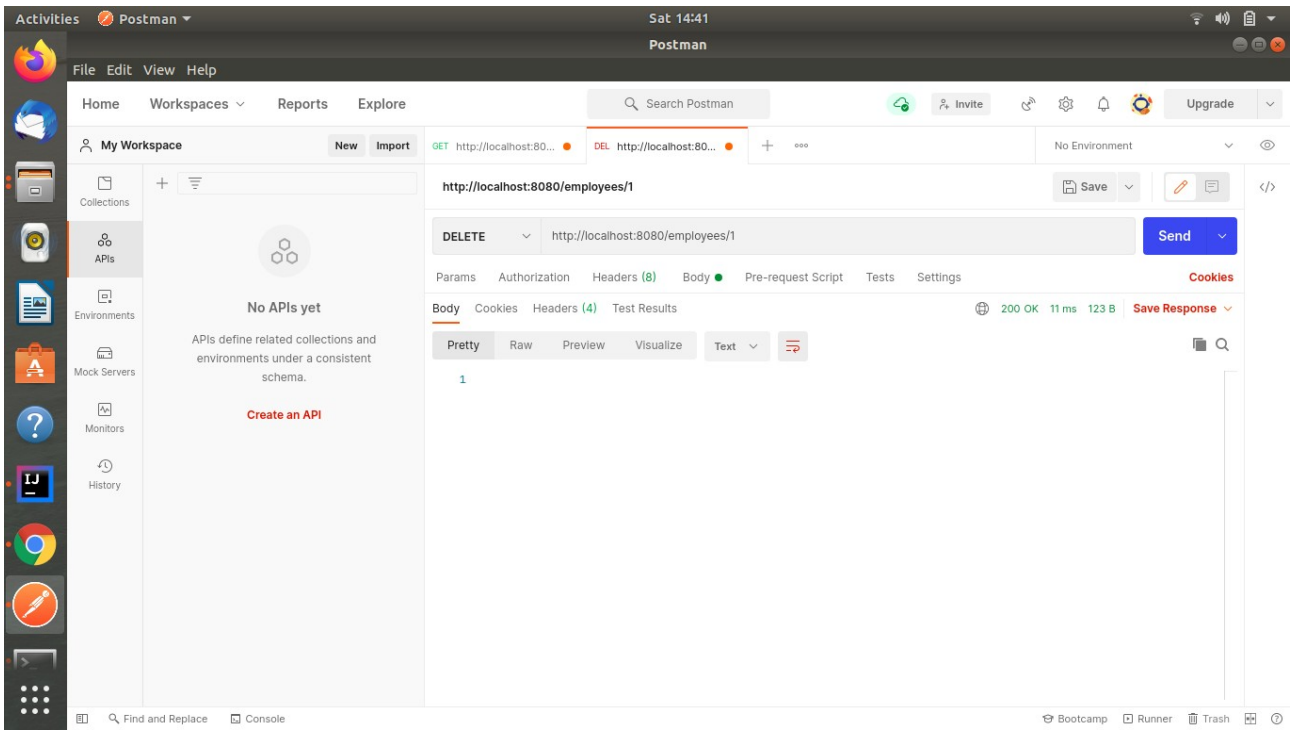


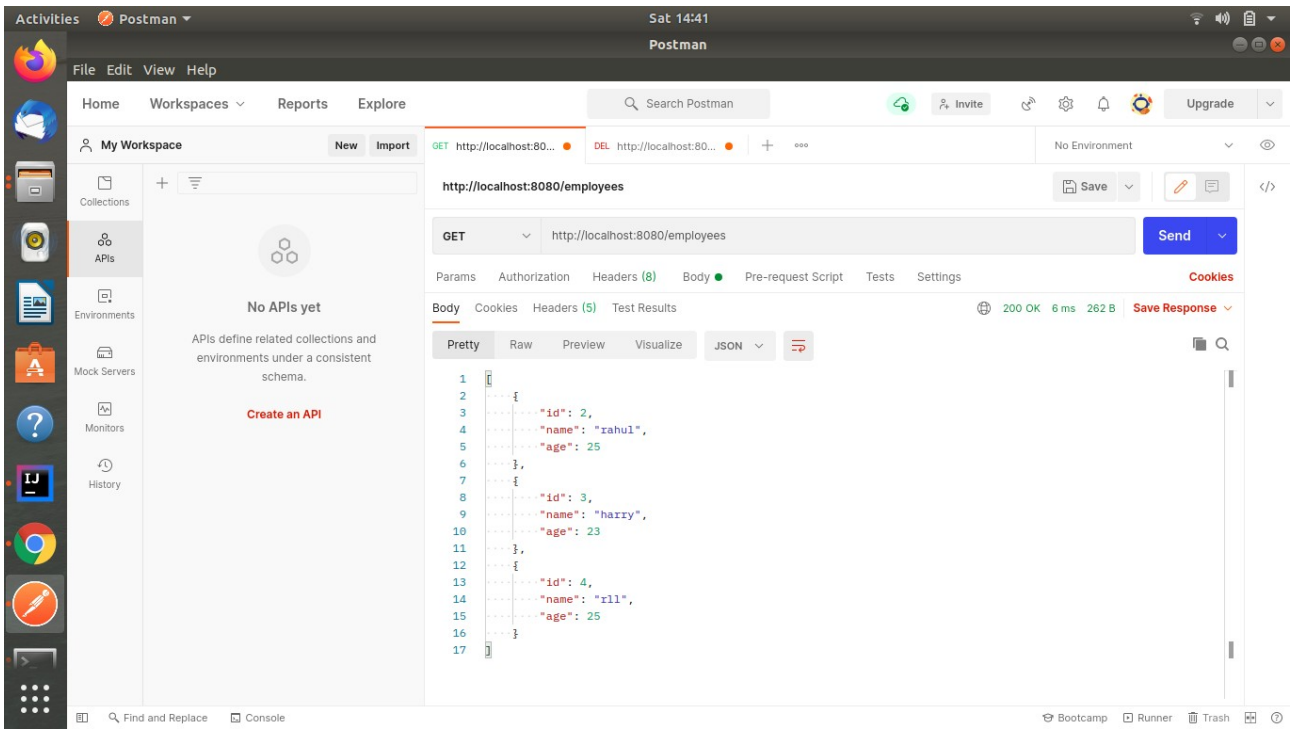


Q6Imploement Exception Handling for resource not found

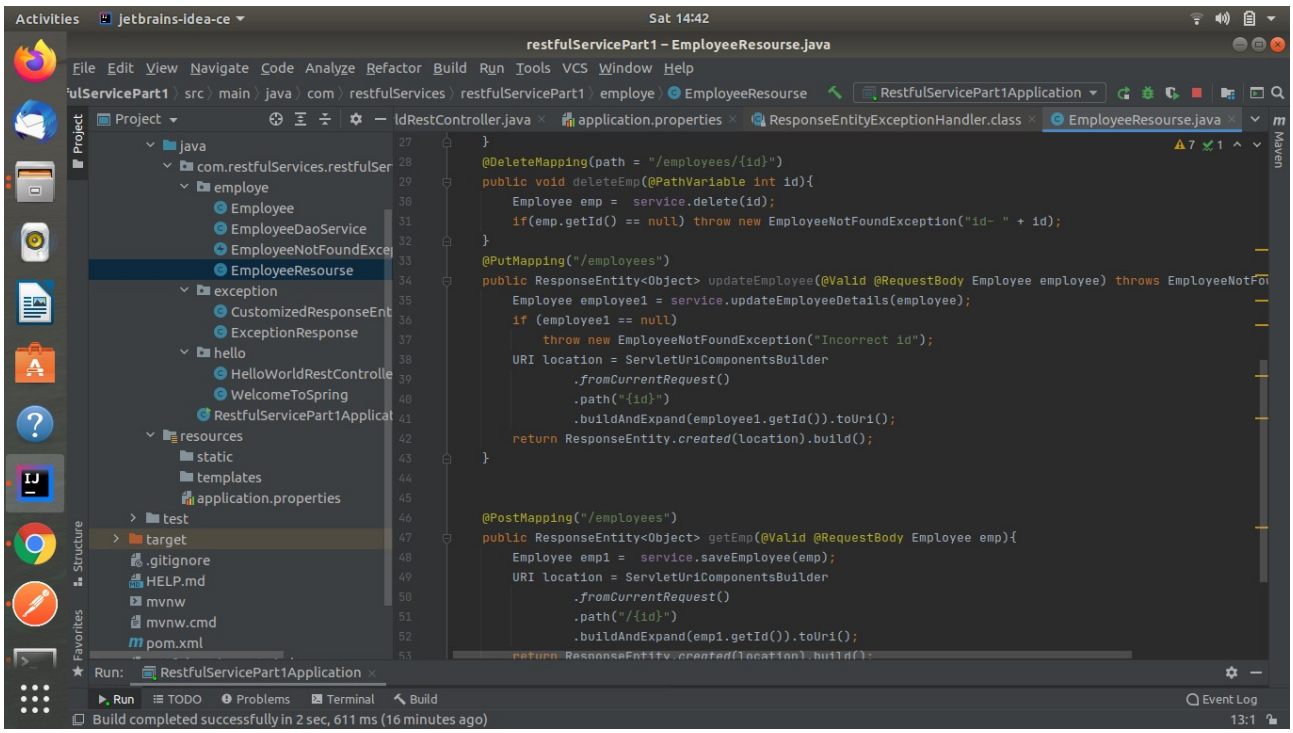
Q7: Implement DELETE http request for Employee to delete employee

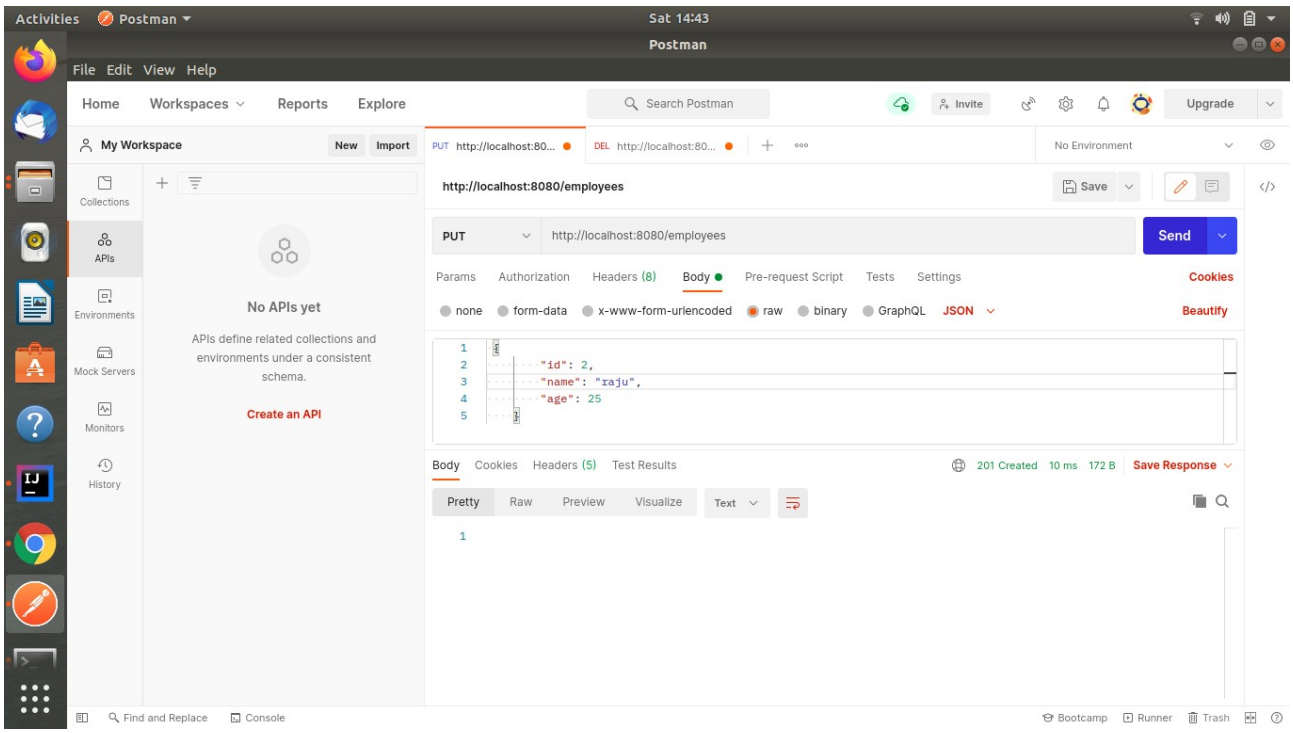

Activities
jetbrains-idea-ce
Sat 14:41
restfulServicePart1 – EmployeeResourse.java
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
RestfulServicePart1Application
Project
ldRestController.java
application.properties
ResponseEntityExceptionHandler.class
EmployeeResourse.java
java
com.restfulServices.restfulSer
employe
Employee
EmployeeDaoService
EmployeeNotFoundExce
EmployeeResourse
exception
CustomizedResponseEnt
ExceptionResponse
hello
HelloWorldRestControlle
WelcomeToSpring
RestfulServicePart1Applicat
resources
static
templates
application.properties
test
target
.gitignore
HELP.md
mvnw
mvnw.cmd
pom.xml
@GetMapping(path = "/employees")
public List<Employee> getAllEmp() { return service.findAll(); }
@GetMapping(path = "/employees/{id}")
public Employee getEmp(@PathVariable int id){
Employee emp = service.findOne(id);
if(emp.getId() == null) throw new EmployeeNotFoundException("id- " + id);
return emp;
}
@DeleteMapping(path = "/employees/{id}")
public void deleteEmp(@PathVariable int id){
Employee emp = service.delete(id);
if(emp.getId() == null) throw new EmployeeNotFoundException("id- " + id);
}
@PutMapping("/employees")
public ResponseEntity<Object> updateEmployee(@Valid @RequestBody Employee employee) throws EmployeeNotFo
Employee employee1 = service.updateEmployeeDetails(employee);
if (employee1 == null)
throw new EmployeeNotFoundException("Incorrect id");
URI location = ServletUriComponentsBuilder
.fromCurrentRequest()
.path("{id}")
.buildAndExpand(employee1.getId()).toUri();
return ResponseEntity.created(location).build();
}
Run: RestfulServicePart1Application
Run TODO Problems Terminal Build
Event Log
Build completed successfully in 2 sec, 611 ms (15 minutes ago)
13:1

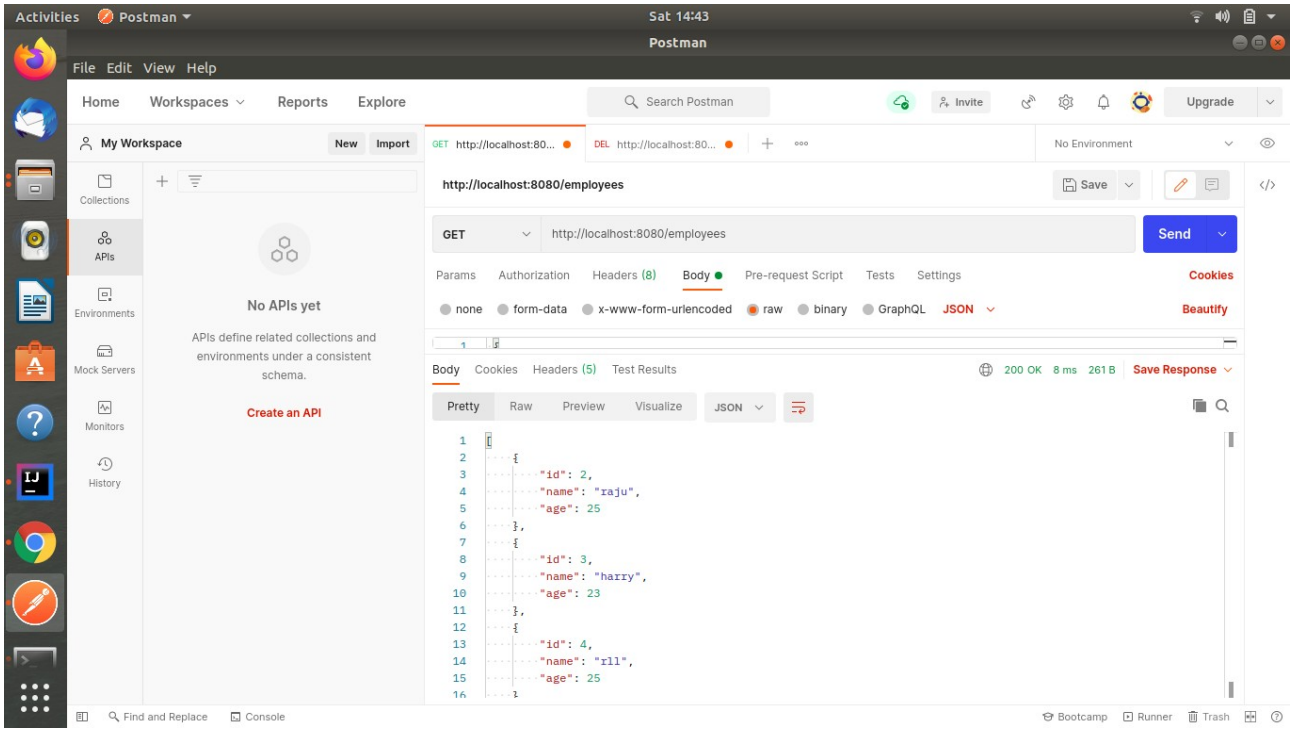

Activities
Postman
Sat 14:41
Postman
File Edit View Help
Home
Workspaces
Reports
Explore
Search Postman
Invite
Upgrade
My Workspace
New
Import
GET http://localhost:80...
DEL http://localhost:80...
No Environment
Collections
APIs
Environments
Mock Servers
Monitors
History
No APIs yet
APIs define related collections and environments under a consistent schema.
Create an API
http://localhost:8080/employees/1
Save
DELETE
http://localhost:8080/employees/1
Send
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
Cookies
Body
Cookies
Headers (4)
Test Results
200 OK
11 ms
123 B
Save Response
Pretty
Raw
Preview
Visualize
Text
1
Find and Replace
Console
Bootcamp
Runner
Trash



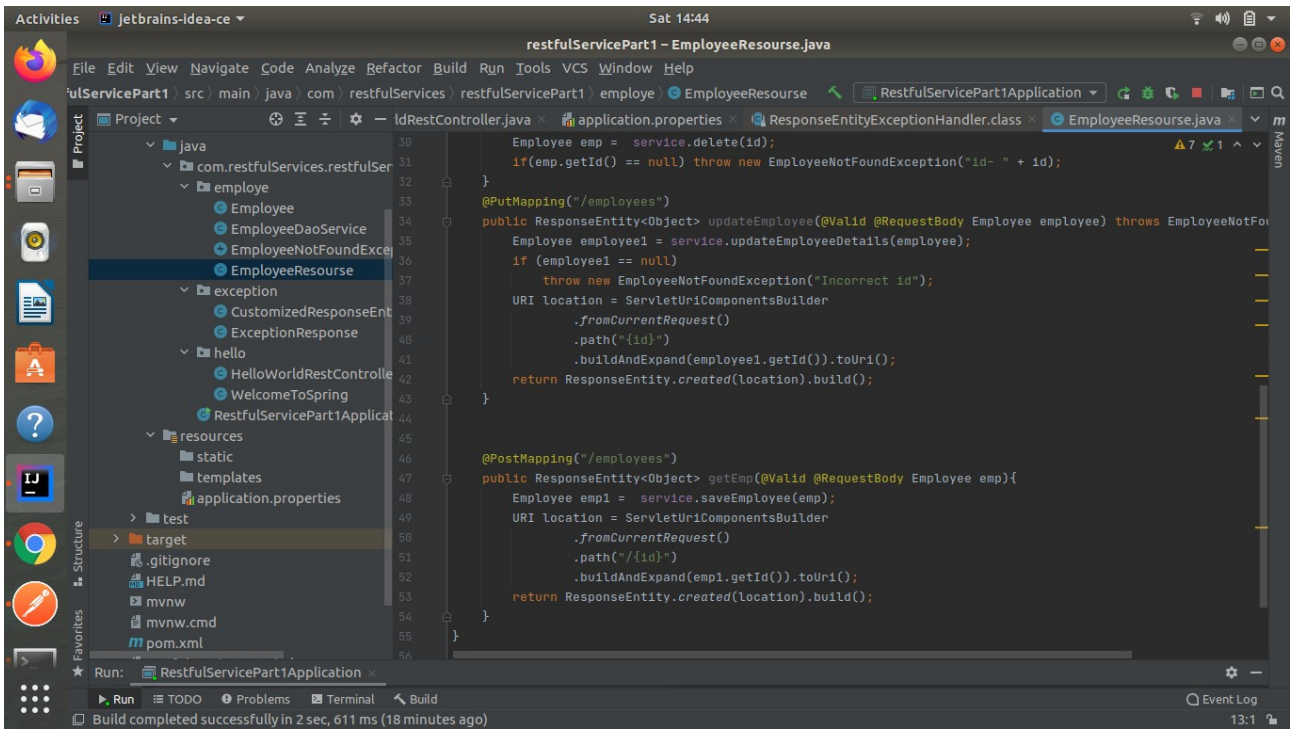
Q8: Implement PUT http request for Employee to update employee

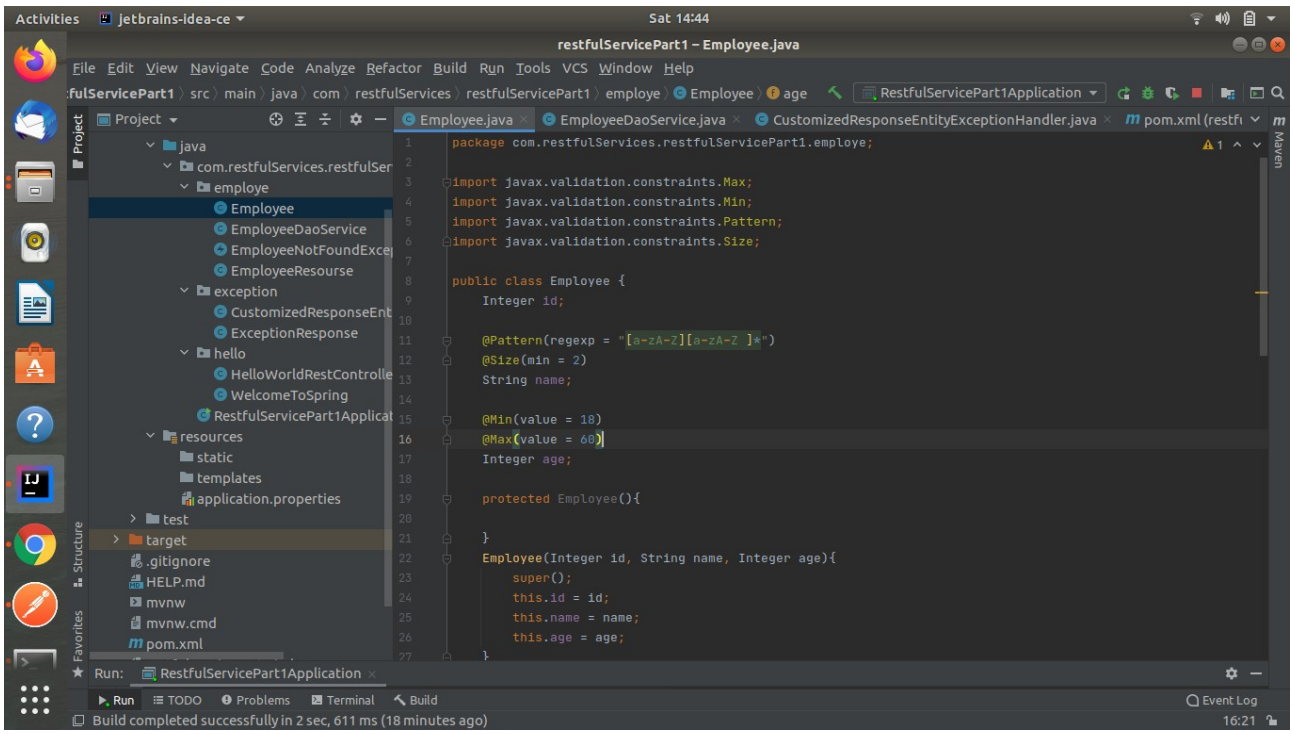


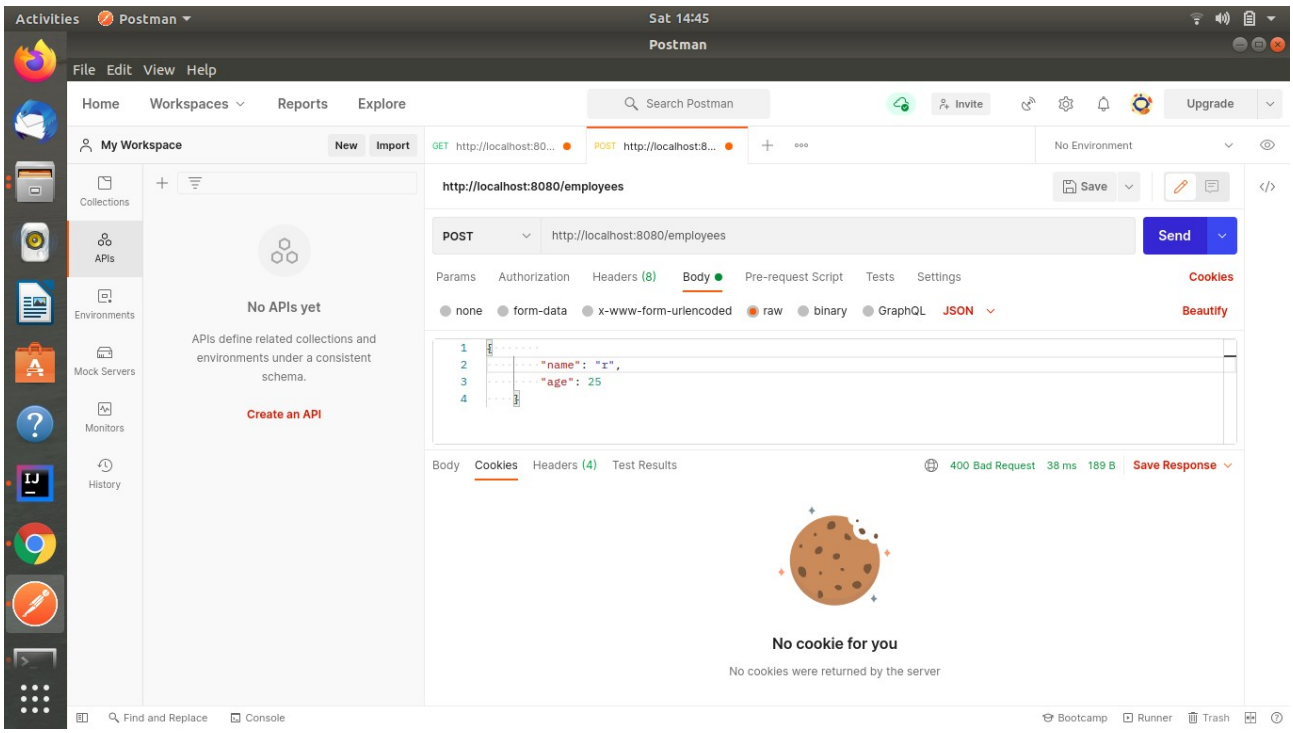




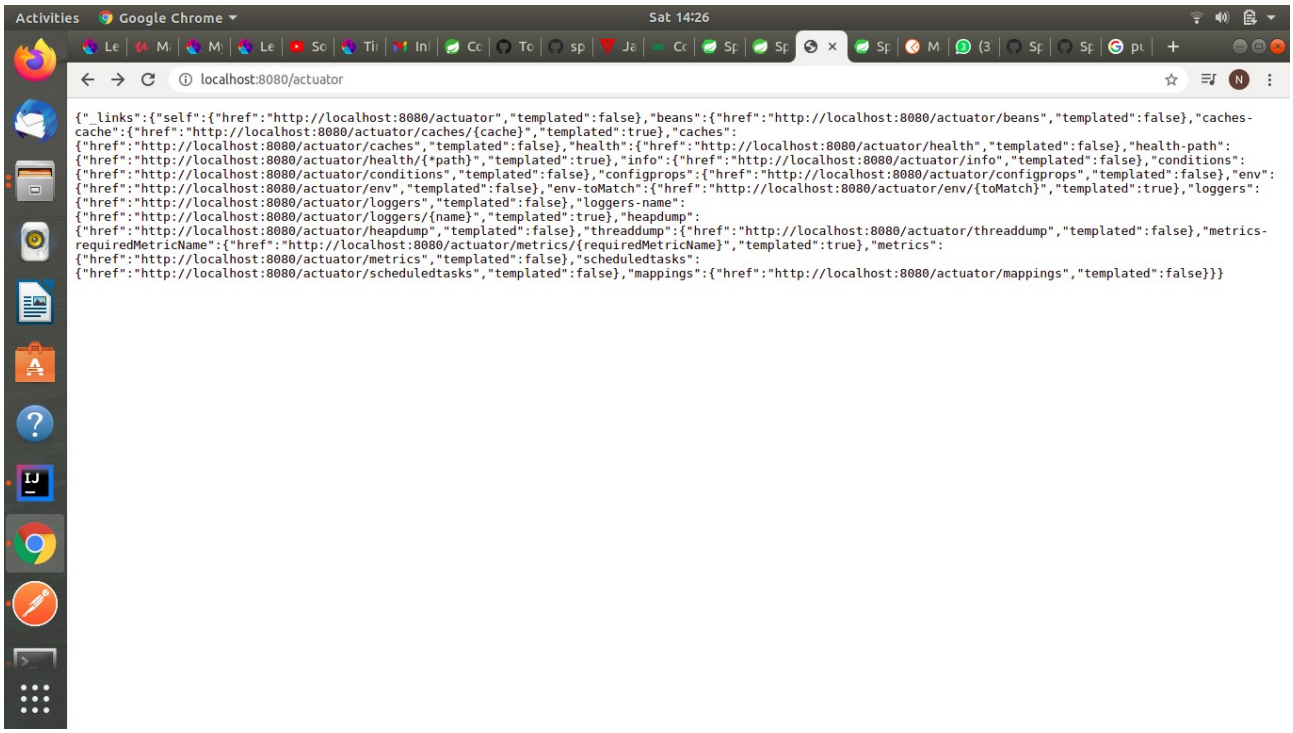
Q9Apply validation while create a new employee using POST http Request.

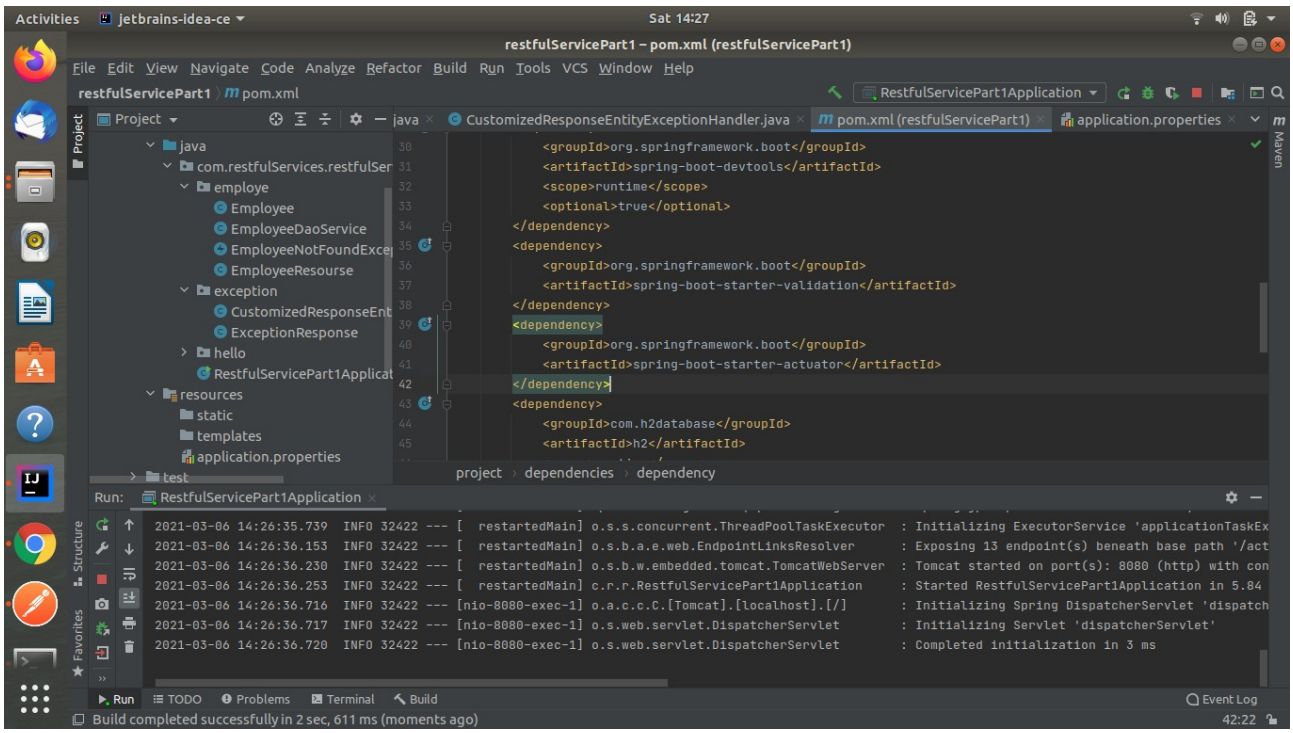

Activities
jetbrains-idea-ce
Sat 14:44
restfulServicePart1 – EmployeeResourse.java
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
RestfulServicePart1Application
Project
ldRestController.java
application.properties
ResponseEntityExceptionHandler.class
EmployeeResourse.java
java
com.restfulServices.restfulSer
employe
Employee
EmployeeDaoService
EmployeeNotFoundExce
EmployeeResourse
exception
CustomizedResponseEnt
ExceptionResponse
hello
HelloWorldRestControlle
WelcomeToSpring
RestfulServicePart1Applicat
resources
static
templates
application.properties
test
target
.gitignore
HELP.md
mvnw
mvnw.cmd
pom.xml
Employee emp = service.delete(id);
if(emp.getId() == null) throw new EmployeeNotFoundException("id- " + id);
}
@PutMapping("/employees")
public ResponseEntity<Object> updateEmployee(@Valid @RequestBody Employee employee) throws EmployeeNotFo
Employee employee1 = service.updateEmployeeDetails(employee);
if (employee1 == null)
throw new EmployeeNotFoundException("Incorrect id");
URI location = ServletUriComponentsBuilder
.fromCurrentRequest()
.path("{id}")
.buildAndExpand(employee1.getId()).toUri();
return ResponseEntity.created(location).build();
}
@PostMapping("/employees")
public ResponseEntity<Object> getEmp(@Valid @RequestBody Employee emp){
Employee emp1 = service.saveEmployee(emp);
URI location = ServletUriComponentsBuilder
.fromCurrentRequest()
.path("/{id}")
.buildAndExpand(emp1.getId()).toUri();
return ResponseEntity.created(location).build();
}
}
Run: RestfulServicePart1Application
Run TODO Problems Terminal Build
Event Log
Build completed successfully in 2 sec, 611 ms (18 minutes ago)
13:1

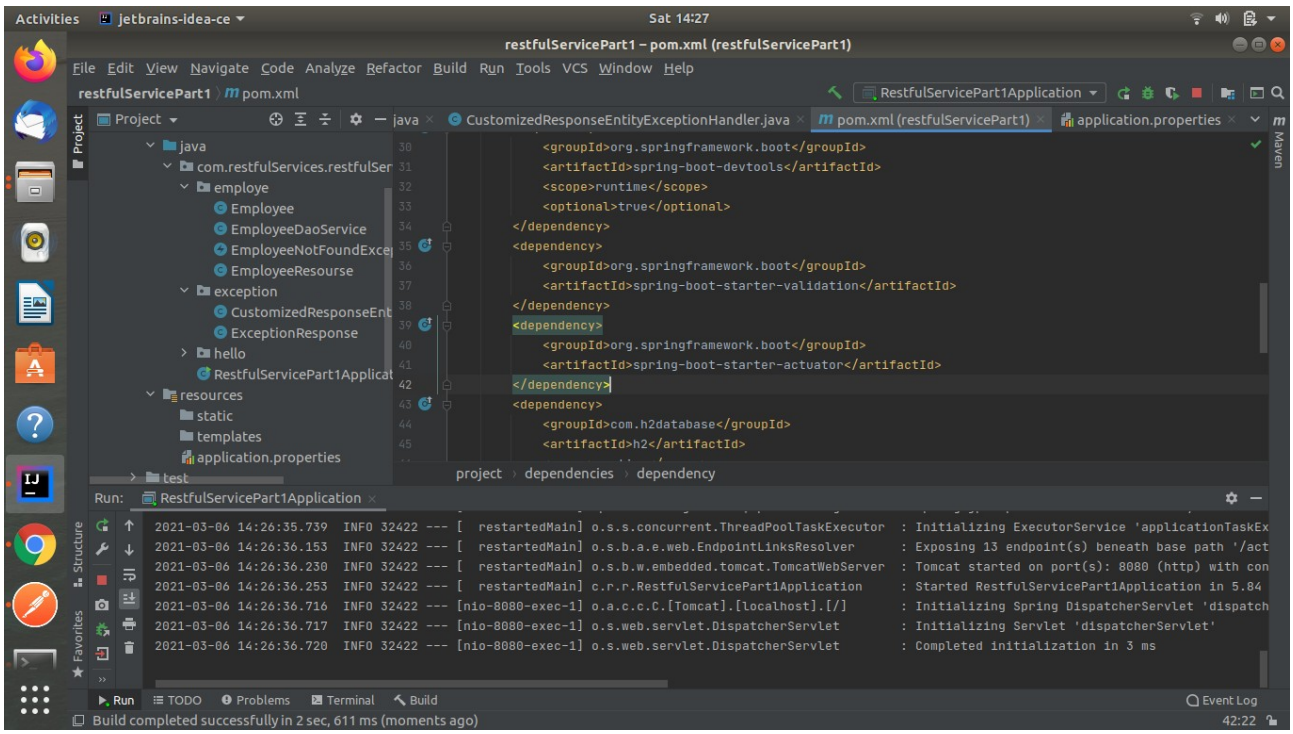

Activities
jetbrains-idea-ce
Sat 14:44
restfulServicePart1 – Employee.java
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
RestfulServicePart1Application
Project
Employee.java
EmployeeDaoService.java
CustomizedResponseEntityExceptionHandler.java
pom.xml (restfi
java
com.restfulServices.restfulSer
employe
Employee
EmployeeDaoService
EmployeeNotFoundExce
EmployeeResourse
exception
CustomizedResponseEnt
ExceptionResponse
hello
HelloWorldRestControlle
WelcomeToSpring
RestfulServicePart1Applicat
resources
static
templates
application.properties
test
target
.gitignore
HELP.md
mvnw
mvnw.cmd
pom.xml
package com.restfulServices.restfulServicePart1.employe;
import javax.validation.constraints.Max;
import javax.validation.constraints.Min;
import javax.validation.constraints.Pattern;
import javax.validation.constraints.Size;
public class Employee {
Integer id;
@Pattern(regexp = "[a-zA-Z][a-zA-Z]*")
@Size(min = 2)
String name;
@Min(value = 18)
@Max(value = 60)
Integer age;
protected Employee(){
}
Employee(Integer id, String name, Integer age){
super();
this.id = id;
this.name = name;
this.age = age;
}
Run: RestfulServicePart1Application
Run TODO Problems Terminal Build
Event Log
Build completed successfully in 2 sec, 611 ms (18 minutes ago)
16:21



Q10Configure actuator in your project to check the health of application and get the information about various beans configured in your application




Activities
jetbrains-idea-ce
Sat 14:27
restfulServicePart1 – pom.xml (restfulServicePart1)
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
restfulServicePart1 › pom.xml
RestfulServicePart1Application
Project
java
CustomizedResponseEntityExceptionHandler.java
pom.xml (restfulServicePart1)
application.properties
com.restfulServices.restfulSer
employe
Employee
EmployeeDaoService
EmployeeNotFoundExce
EmployeeResourse
exception
CustomizedResponseEnt
ExceptionResponse
hello
RestfulServicePart1Applicat
resources
static
templates
application.properties
test
<groupId>org.springframework.boot</groupId>
<artifactId>spring-boot-devtools</artifactId>
<scope>runtime</scope>
<optional>true</optional>
</dependency>
<dependency>
<groupId>org.springframework.boot</groupId>
<artifactId>spring-boot-starter-validation</artifactId>
</dependency>
<dependency>
<groupId>org.springframework.boot</groupId>
<artifactId>spring-boot-starter-actuator</artifactId>
</dependency>
<dependency>
<groupId>com.h2database</groupId>
<artifactId>h2</artifactId>
project › dependencies › dependency
Run: RestfulServicePart1Application
2021-03-06 14:26:35.739 INFO 32422 --- [restartedMain] o.s.s.concurrent.ThreadPoolTaskExecutor : Initializing ExecutorService 'applicationTaskEx
2021-03-06 14:26:36.153 INFO 32422 --- [restartedMain] o.s.b.a.e.web.EndpointLinksResolver : Exposing 13 endpoint(s) beneath base path '/act
2021-03-06 14:26:36.230 INFO 32422 --- [restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with con
2021-03-06 14:26:36.253 INFO 32422 --- [restartedMain] c.r.r.RestfulServicePart1Application : Started RestfulServicePart1Application in 5.84
2021-03-06 14:26:36.716 INFO 32422 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring DispatcherServlet 'dispatch
2021-03-06 14:26:36.717 INFO 32422 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispatcherServlet'
2021-03-06 14:26:36.720 INFO 32422 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Completed initialization in 3 ms
Run
TODO
Problems
Terminal
Build
Event Log
Build completed successfully in 2 sec, 611 ms (moments ago)
42:22


Activities
jetbrains-idea-ce
Sat 14:27
restfulServicePart1 – pom.xml (restfulServicePart1)
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
restfulServicePart1 › pom.xml
RestfulServicePart1Application
Project
java
CustomizedResponseEntityExceptionHandler.java
pom.xml (restfulServicePart1)
application.properties
com.restfulServices.restfulSer
employe
Employee
EmployeeDaoService
EmployeeNotFoundExce
EmployeeResourse
exception
CustomizedResponseEnt
ExceptionResponse
hello
RestfulServicePart1Applicat
resources
static
templates
application.properties
test
<groupId>org.springframework.boot</groupId>
<artifactId>spring-boot-devtools</artifactId>
<scope>runtime</scope>
<optional>true</optional>
</dependency>
<dependency>
<groupId>org.springframework.boot</groupId>
<artifactId>spring-boot-starter-validation</artifactId>
</dependency>
<dependency>
<groupId>org.springframework.boot</groupId>
<artifactId>spring-boot-starter-actuator</artifactId>
</dependency>
<dependency>
<groupId>com.h2database</groupId>
<artifactId>h2</artifactId>
project › dependencies › dependency
Run: RestfulServicePart1Application
2021-03-06 14:26:35.739 INFO 32422 --- [restartedMain] o.s.s.concurrent.ThreadPoolTaskExecutor : Initializing ExecutorService 'applicationTaskEx
2021-03-06 14:26:36.153 INFO 32422 --- [restartedMain] o.s.b.a.e.web.EndpointLinksResolver : Exposing 13 endpoint(s) beneath base path '/act
2021-03-06 14:26:36.230 INFO 32422 --- [restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with con
2021-03-06 14:26:36.253 INFO 32422 --- [restartedMain] c.r.r.RestfulServicePart1Application : Started RestfulServicePart1Application in 5.84
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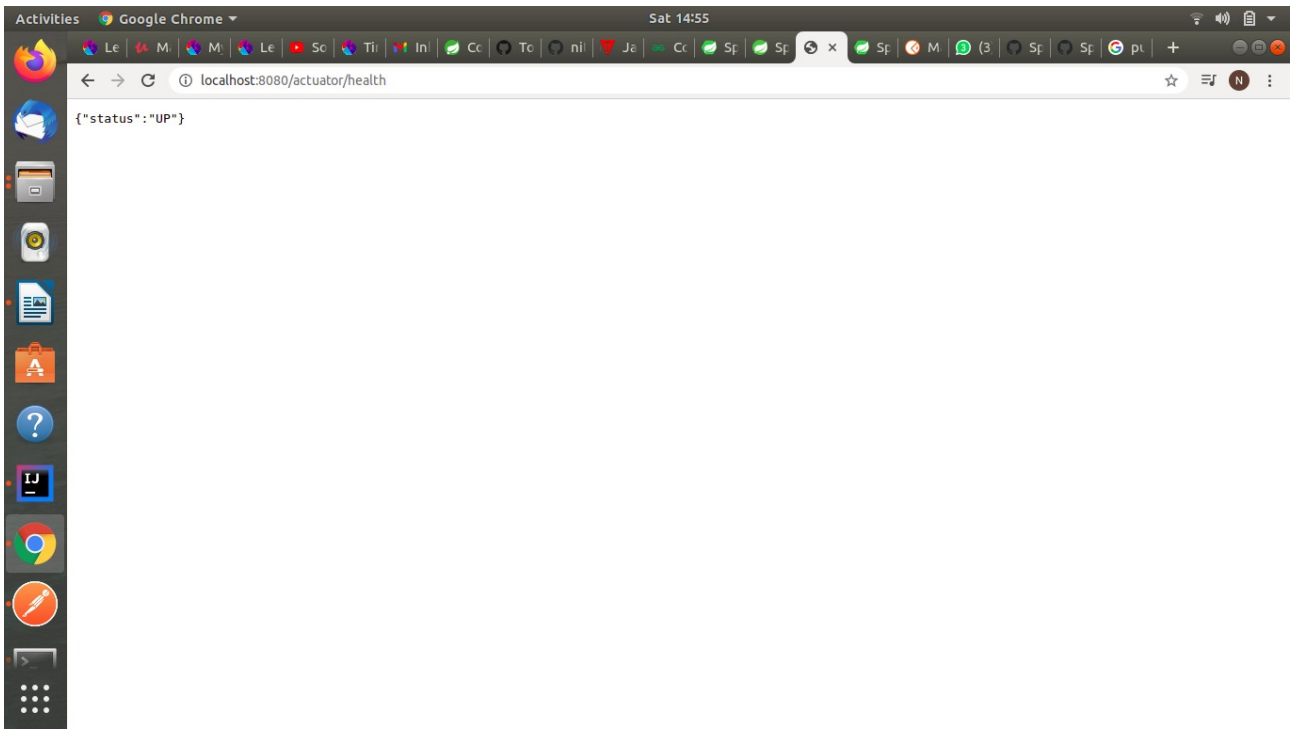
2021-03-06 14:26:36.717 INFO 32422 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispatcherServlet'
2021-03-06 14:26:36.720 INFO 32422 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Completed initialization in 3 ms
Run
TODO
Problems
Terminal
Build
Event Log
Build completed successfully in 2 sec, 611 ms (moments ago)
42:22


Activities
Google Chrome
Sat 14:55
localhost:8080/actuator/health
{"status":"UP"}