TEAM CLOUD - GITHUB COPILOT – AI PAIR PROGRAMMING

OVERVIEW OF GITHUB COPILOT'S FEATURES AND BENEFITS

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KEY FEATURES OF GITHUB COPILOT

- Real-Time Code Suggestions
- Context-Aware Completions
- Support for Multiple Languages
- Learning from Code Comments
- Error Detection and Fixes
- Generating Documentation and Tests
- Faster Prototyping

BENEFITS OF AI PAIR PROGRAMMING WITH COPILOT

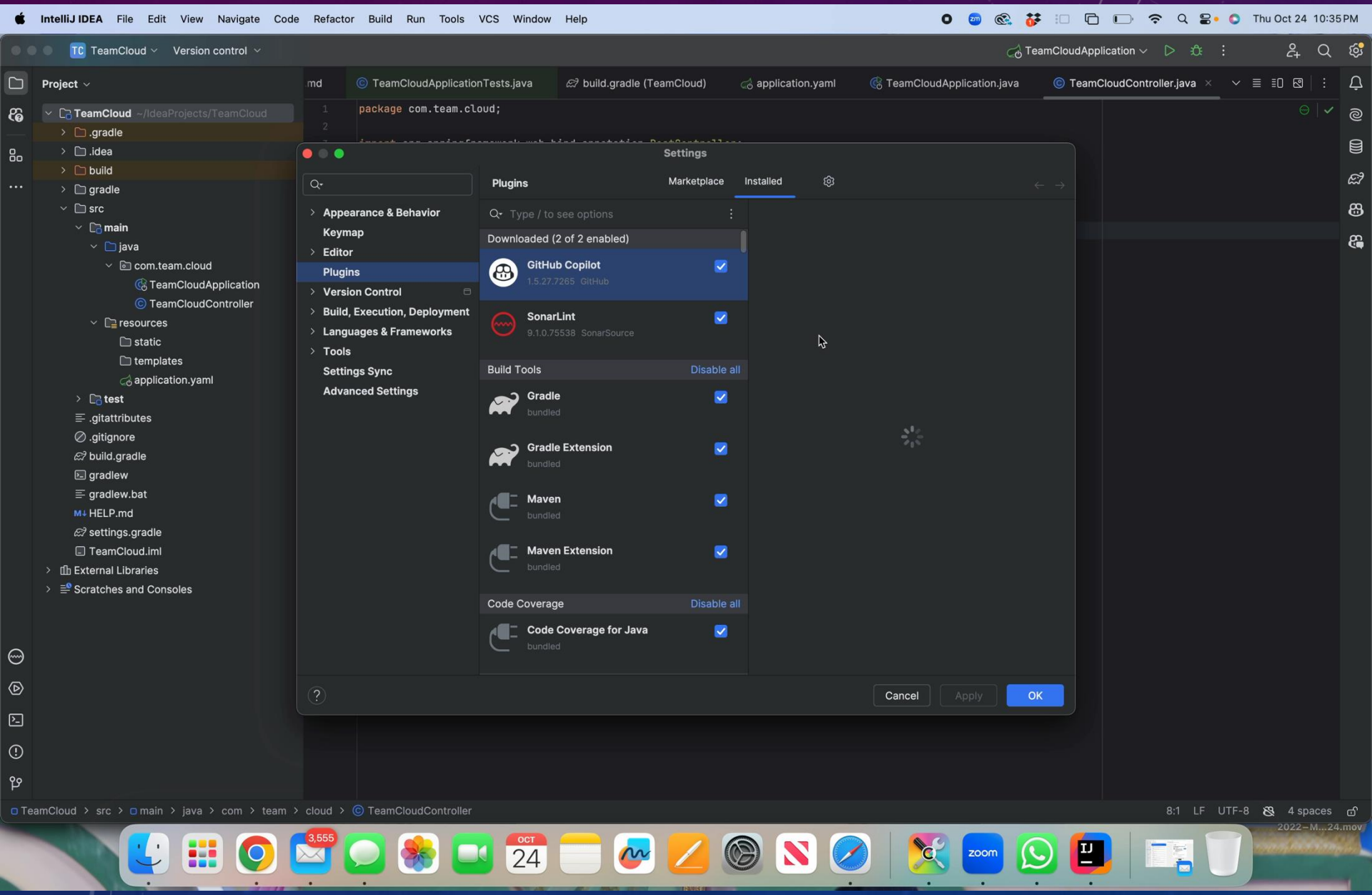
- Increased Productivity
- Enhances Learning
- Improved Code Quality
- Accelerated Onboarding
- Collaborative Coding Experience

EXAMPLE WORKFLOW WITH GITHUB COPILOT

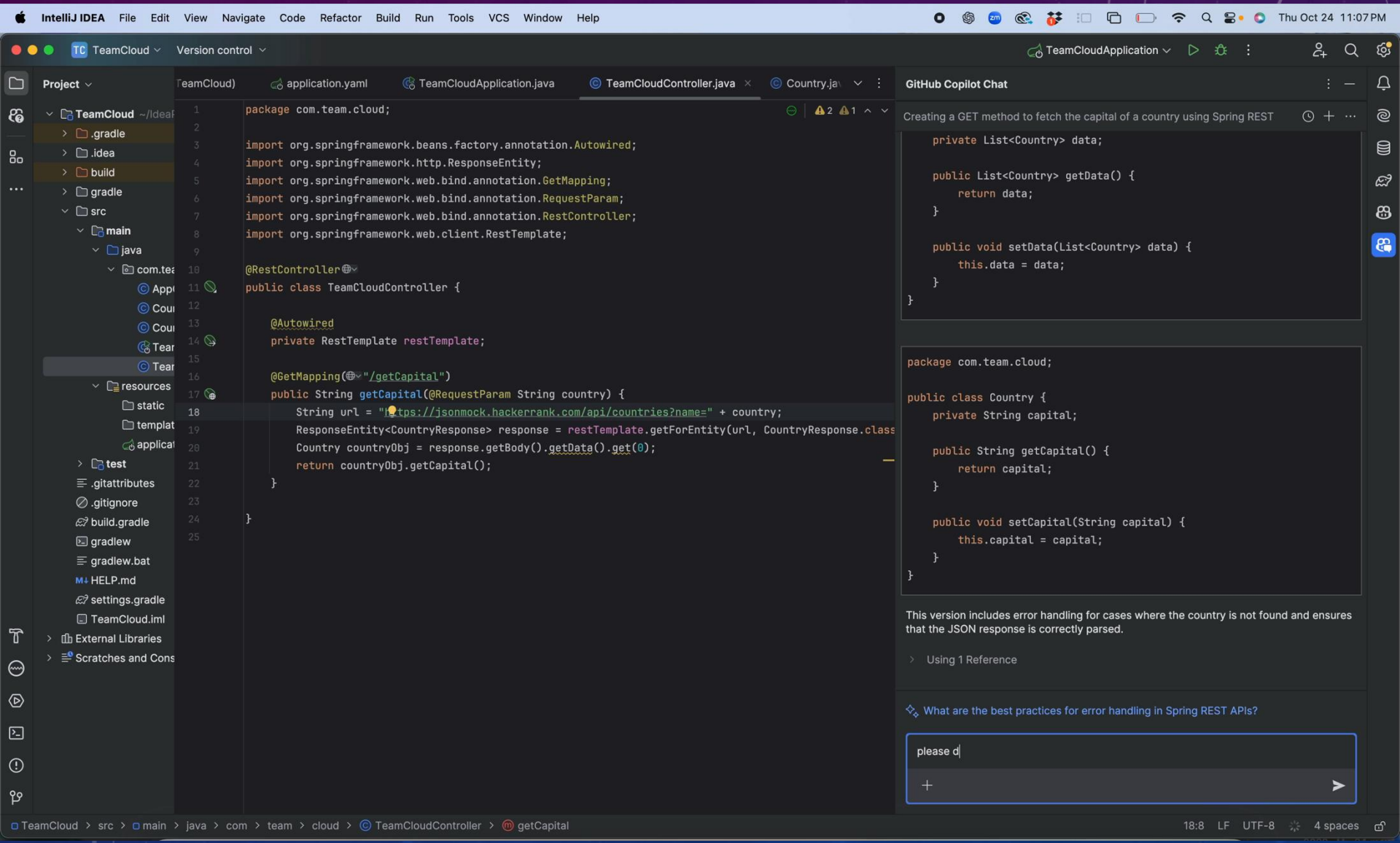
1. Writing Comments: Describe desired functionality.
2. Copilot Suggests Code: Auto-suggest implementation based on the comment.
3. Accept/Modify Suggestion: Adjust or accept the suggestions.
4. Additional Suggestions: Continue coding with more relevant suggestions.

TEAM CLOUD - DEMO

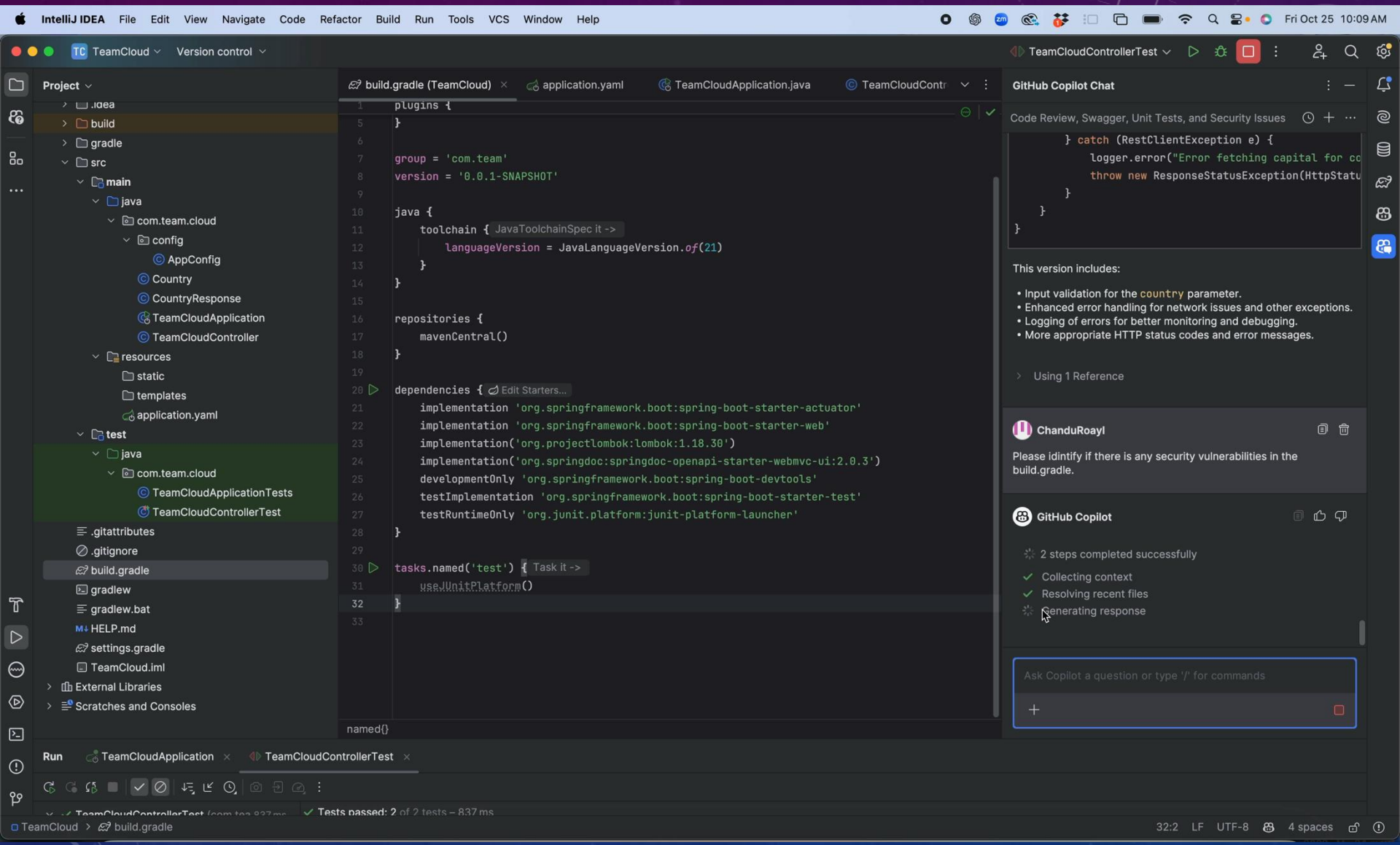
GITHUB COPILOT PLUGIN



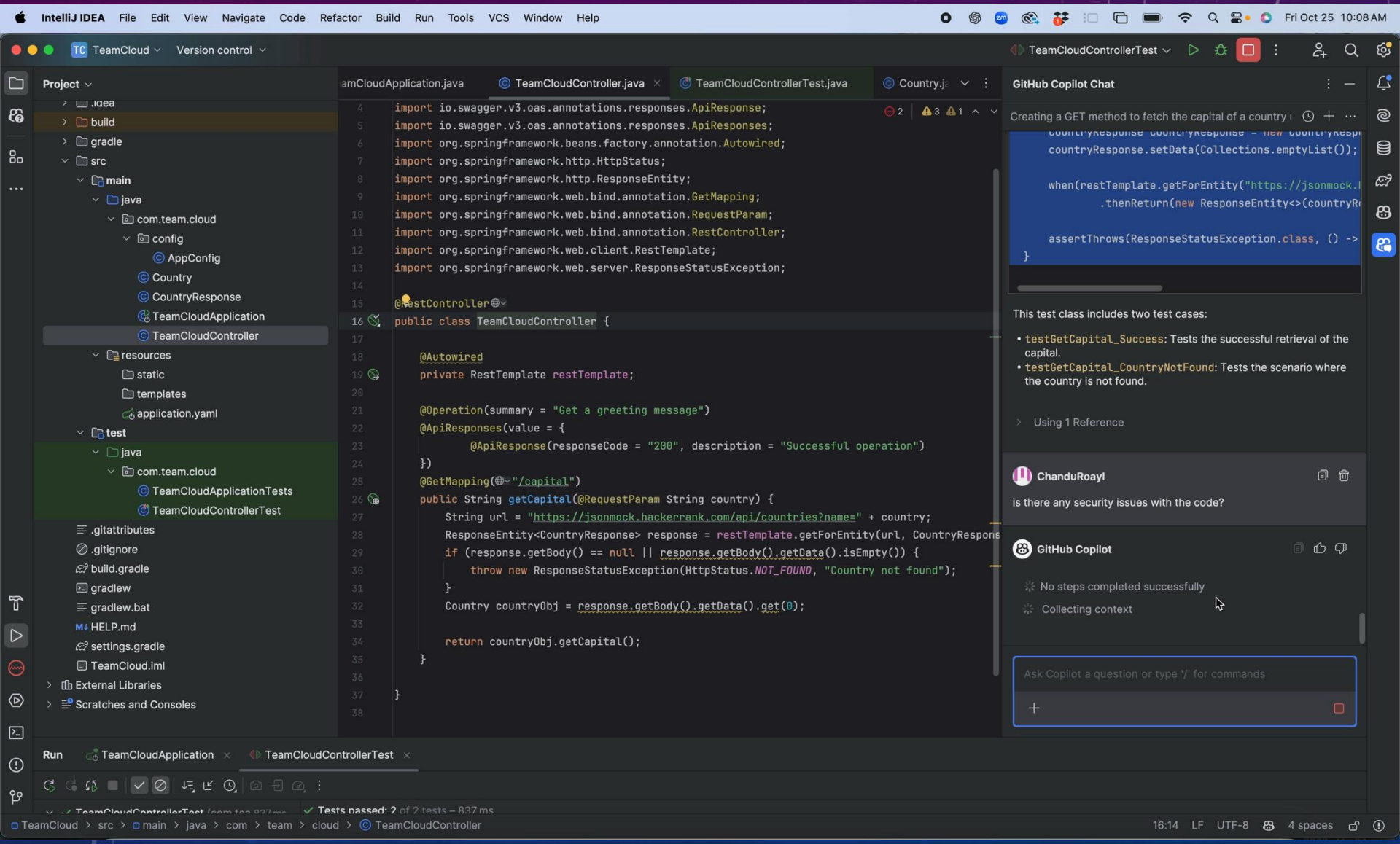
CODE REVIEW


IntelliJ IDEA File Edit View Navigate Code Refactor Build Run Tools VCS Window Help
Thu Oct 24 11:07 PM
TeamCloud
Version control
TeamCloudApplication
Project
application.yaml
TeamCloudApplication.java
TeamCloudController.java
Country.ja
GitHub Copilot Chat
Creating a GET method to fetch the capital of a country using Spring REST
package com.team.cloud;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.RestController;
import org.springframework.web.client.RestTemplate;
@RestController
public class TeamCloudController {
@Autowired
private RestTemplate restTemplate;
@GetMapping("/getCapital")
public String getCapital(@RequestParam String country) {
String url = "https://jsonmock.hackerrank.com/api/countries?name=" + country;
ResponseEntity<CountryResponse> response = restTemplate.getForEntity(url, CountryResponse.class
Country countryObj = response.getBody().getData().get(0);
return countryObj.getCapital();
}
}
private List<Country> data;
public List<Country> getData() {
return data;
}
public void setData(List<Country> data) {
this.data = data;
}
}
package com.team.cloud;
public class Country {
private String capital;
public String getCapital() {
return capital;
}
public void setCapital(String capital) {
this.capital = capital;
}
}
This version includes error handling for cases where the country is not found and ensures that the JSON response is correctly parsed.
Using 1 Reference
What are the best practices for error handling in Spring REST APIs?
please d
TeamCloud > src > main > java > com > team > cloud > TeamCloudController > getCapital
18:8 LF UTF-8 4 spaces

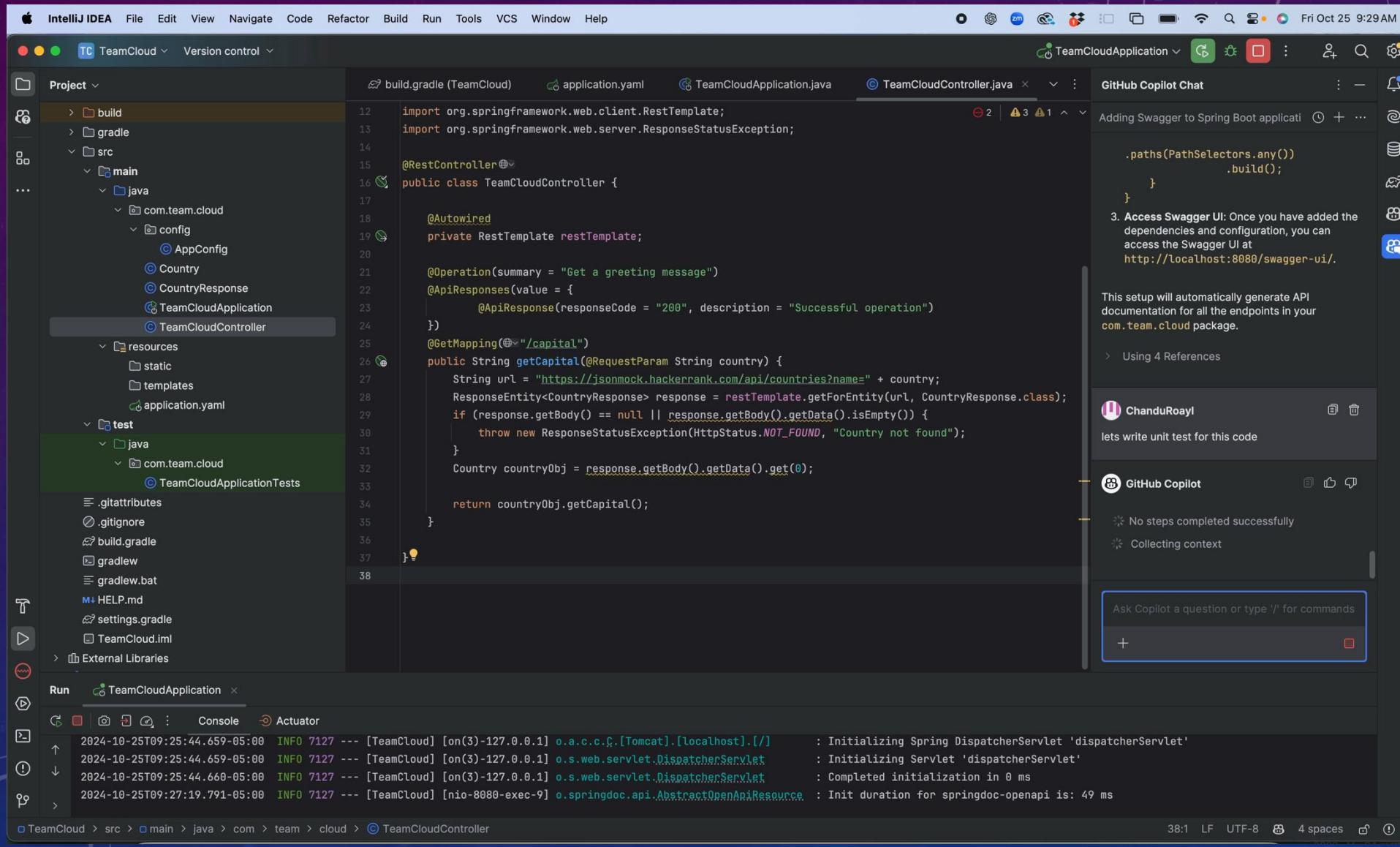
SECURITY VULNERABILITIES



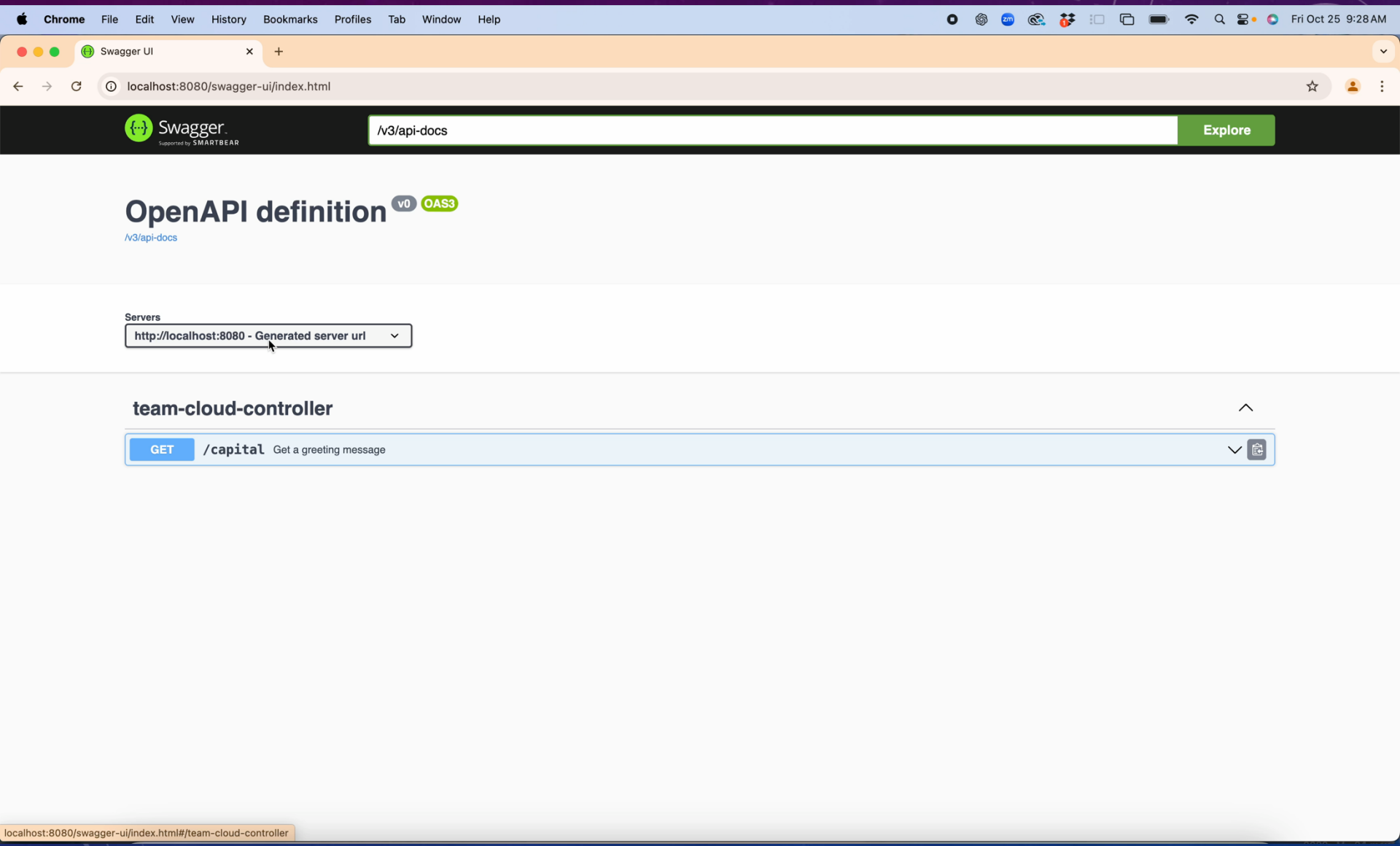
SECURITY ISSUES



UNIT TEST CASE



TESTING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Swagger UI
localhost:8080/swagger-ui/index.html
Swagger
Supported by SMARTBEAR
/v3/api-docs
Explore
OpenAPI definition
v0
OAS3
/v3/api-docs
Servers
http://localhost:8080 - Generated server url
team-cloud-controller
GET
/capital
Get a greeting message
localhost:8080/swagger-ui/index.html#/team-cloud-controller

CONCLUSION

GitHub Copilot enhances coding efficiency, reduces errors, and fosters a collaborative coding environment by acting as an AI pair programmer.