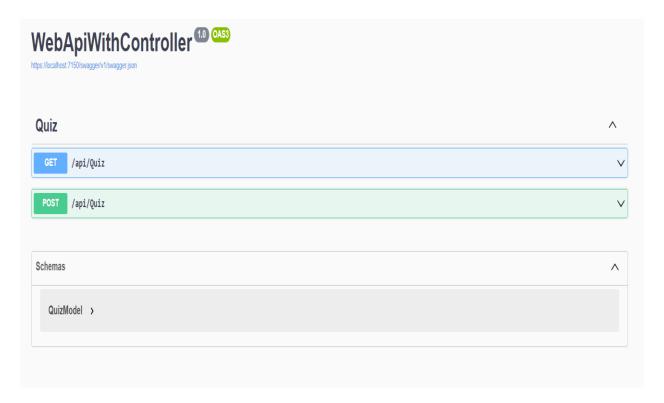
# Jenkins assessment

1. Create a dotnet core application for quiz program



Fields are:

# N-unit testing

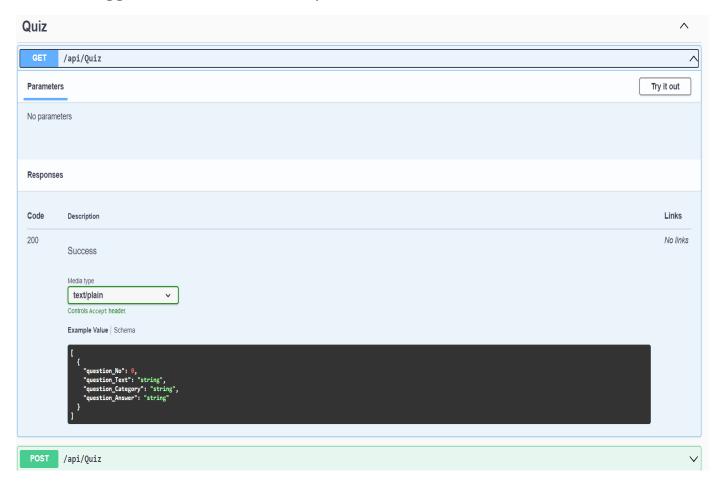


```
using WebApiWithControllers.Controllers;
using WebApiWithController.Models;
namespace WebApiQuizProject.test
{
  public class Tests
  {
    private QuizController controller;
    [SetUp]
    public void Setup()
    {
      controller = new QuizController();
    }
    [Test]
    public void TestMethodForGetQuestions()
      IEnumerable<QuizModel> result = controller.GetQuestions();
      Assert.That(result, Is.Not.Null);
      Assert.That(result.Count(), Is.EqualTo(0));
    }
    [Test]
    public void TestMethodForPostQuestions()
    {
      var newItem = new QuizModel
```

```
{
    Question_No = 1,
    Question_Text = "test",
    Question_Category = "test",
    Question Answer = "test"
  };
  var actionResult = controller.PostQuestions(newItem);
  Assert.That(actionResult, Is.Not.Null);
}
[Test]
public void TestMethodForPostQuestionNull()
{
  var newItem = new QuizModel
  {
    Question No = 1,
    Question_Text = null,
    Question_Category = null,
    Question Answer = null
  };
  var actionResult = controller.PostQuestions(newItem);
  Assert.IsNotInstanceOf<BadRequest>(actionResult);
}
```

}

3. the swagger and test the Web Api



- 4. Application to the Git repository
  - 1. create a new repository
  - 2. push all the files to the git hub repository

Creating new repository

### Create a new repository

Add .gitignore

.gitignore template: None 🔻

A repository contains all project files, including the revision history. Already have a project repository elsewhere? <u>Import a repository.</u>

Required fields are marked with an asterisk (\*).

Owner \* Repository name \*

JenkinsAssessment

JenkinsAssessment

JenkinsAssessment

JenkinsAssessment

JenkinsAssessment

JenkinsAssessment

JenkinsAssessment

JenkinsAssessment

Public

Anyone on the internet can see this repository. You choose who can commit.

Private

You choose who can see and commit to this repository.

Initialize this repository with:

Add a README file

This is where you can write a long description for your project. Learn more about READMEs.

```
Counting objects: 100% (231/231), done.

Delta compression using up to 12 threads

Compressing objects: 100% (208/208), done.

Writing objects: 100% (231/231), 3.10 MiB | 2.61 MiB/s, done.

Total 231 (delta 97), reused 0 (delta 0), pack-reused 0

remote: Resolving deltas: 100% (97/97), done.

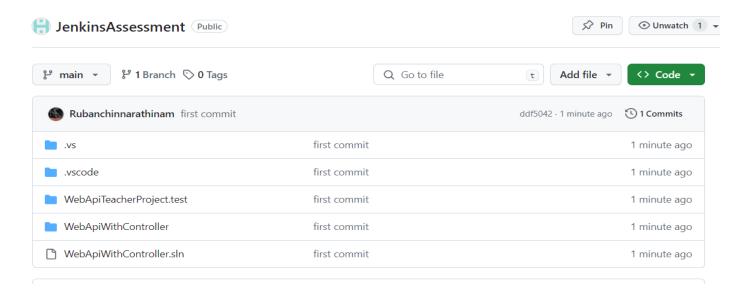
To https://github.com/rubanch/JenkinsAssessment.git

* [new branch] main -> main

branch 'main' set up to track 'origin/main'.

rubanchinnarathin.m@RLP1649 MINGW64 /d/snakengen-R/WebApiForTestsAndJenkins (main)

$ |
```



All the files are updated in the files.

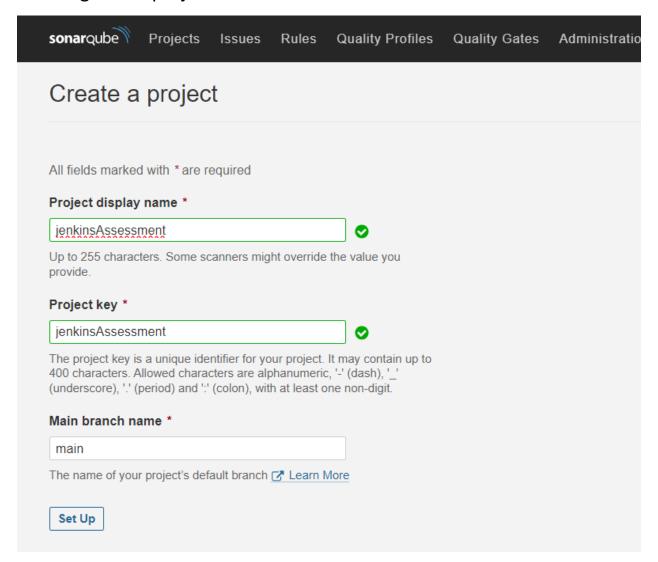
# 4. Configuring the Jenkins

### **Stage View**



Starting the sonar server

# Creating a new project file in sonar



#### **Stage View**

	1. GIT Checkout	2. Build the Project	3. Test the Project	4. Code Quality Test	5. Code Quality Build	6. Publish Report
Average stage times: (Average <u>full</u> run time: ~48s)	6s	17s	8s	5s	8s	19s
Mar 02 No 15:11 No	5s	12s	6s	5s	8s	19s
Mar 02 No 15:00 Changes	7s	21s	9s			



### Code:

```
node
{
  stage(' 1. GIT Checkout')
  {
    git 'https://github.com/rubanch/Assignment-gen1.git'
  stage(' 2. Build the Project')
  {
    bat 'dotnet build'
  }
  stage(' 3. Test the Project')
    bat 'dotnet test'
  }
  stage(' 4. Code Quality Test')
  {
```

```
bat 'dotnet sonarscanner begin /k:"jenkinsAssessment"
/d:sonar.host.url="http://localhost:9000"
/d:sonar.login="sqp_e41cb85a10e08fcf940480c4bccaaa9206f83c29"
  }
  stage(' 5. Code Quality Build')
  {
   bat 'dotnet build'
  }
   stage(' 6. Publish Report')
   bat 'dotnet sonarscanner end
/d:sonar.login="sqp_e41cb85a10e08fcf940480c4bccaaa9206f83c29"
  }
}
```

#### **QuizQuesionspipeline** $\operatorname{\mathscr{O}}$ Add description Disable Project **Stage View** 1. GIT 2. Build the 3. Test the 4. Code 5. Code 6. Publish 7. Dockerize Project **Quality Test Quality Build** Checkout Project Report the project 6s 16s 7s 7s 15s 3s Average stage times: 3s (Average <u>full</u> run time: ~48s) Mar 02 7s 21s 8s 3s 19s 15:47

# QuizQuetionspipeline

Add description
Disable Project

### **Stage View**

