

Exam Preparation

Exercises for the "[DevOps for Developers](#)" module @ SoftUni

1. Resource Files

You are provided with a simple .NET application with tests – follow this [link](#) to access the repository with the resource files.

2. Working with Git and GitHub

Fork the Repository

Fork the repository into your own GitHub account.

Clone and Set Up Local Environment

Clone the forked repository, open the solution and ensure that it is building locally without errors.

3. Configure GitHub Actions

Set up a GitHub Actions pipeline to automatically build the application, run the tests and trigger the pipeline on **push** events to the **develop** and **staging** branches.

Ensure that changes **pushed** to **develop** branch trigger **unit** tests and code pushed to **staging** branch triggers **integration** tests.

4. Create and Manage Branches

Create a branch from the **develop** branch and name it **feature-ci-pipeline**.

5. Configure Jenkins

Configure a Jenkins pipeline to build the application and execute all of the tests when changes are pushed to **the new feature-ci-pipeline** branch.

Push the branch to the forked repository by creating a pull request from the new **feature-ci-pipeline** branch to the **develop** branch.

6. Test and Merge

After completing the CI pipeline setup, create a pull request from **develop** to **staging** branch.

7. Create a Pull Request to Original Repository

Once you are done with everything, create a **final** pull request from your **staging** branch in the **forked** repository to the **staging** branch in the **original** repository.

8. Submission

You can submit your solution by filling the provided document resource with name "**Solution-Resources-Template-Software-Engineering-and-DevOps**".

You should fill in the following information:

- The link for your GitHub repository.

After you have filled in the document, zip it and upload it to the SULLS system.

NOTE: Don't forget that you must NOT delete the branches, nor the GitHub repo, until you receive your exam grade!