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IT313

Lab:06

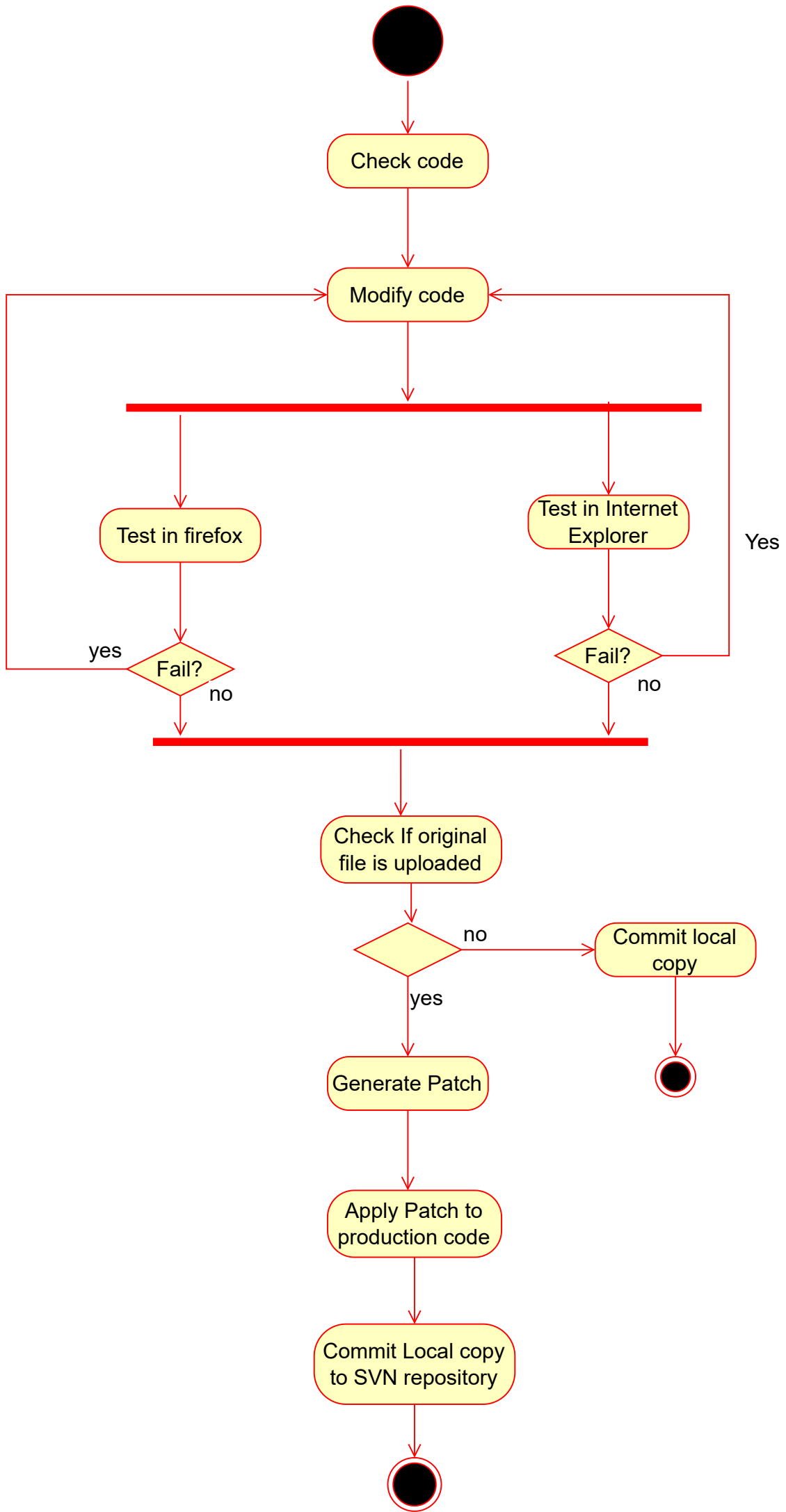
Exercise:

Draw an activity diagram to graphically represent the following workflow

Let us consider the development activities of SE Virtual Labs. The process begins by checking out the code from Subversion repository. Necessary modifications are then made to the checked out code (local copy). Once the developer is done with his changes, the application has to be tested to verify whether the new functionality are working fine. This test has to be performed with two of the more popular web browsers: Firefox and Internet Explorer, to support cross-browser accessibility. If testing fails in at least one of the two browser, developer goes back to his code, and fixes it. Only when all the browsers pass the test, a patch is generated from the local copy, and applied to the production code. The local copy is then committed resulting in update of the SVN repository. Note that, if the local copy is committed before generating a patch file, then local changes would get registered, and one won't be further able to generate the patch file.

Note: For further clarification, at any point of time there exists three versions of the source code: Production copy, local copy, and copy in SVN repository.

Activity Diagram



Think over the following questions:

- How would you represent testing of the application with multiple browsers?

Ans: In order to assess the program's functionality across various browsers comprehensively, it's necessary to utilize forking to ensure concurrent execution of both tasks and the generation of output.

- Can generation Of the patch file and update the Subversion repository be done concurrently?

Ans: No, Initially, a patch file will be generated, followed by applying the patch to the production code, and ultimately updating the Subversion repository.

- Can patching the production code and updating the Subversion repository be done in parallel?

Ans: Applying the Patch to Production Code: This action is undertaken once the patch has been accurately created. Implementing the modification in the production code marks the conclusion of this step. Following the patching of the production code, this phase can be finalized. Committing Changes to SVN Repository: After successfully committing the alterations, the SVN repository is then updated.

Learning Objectives:

- Identify the basic units of work, and visualize the work flow

The process entails duplicating the repository, modifying the local code, and subsequently launching Firefox and Internet Explorer in parallel. Execution of this process relies on committing the local code copy and ensuring successful tests on all browsers. If any browser fails the test or the local code copy isn't committed, the process will generate a patch file, commit the local code copy, and proceed to an update.

- Identify stages from where progress could be made only after a list of criteria is Satisfied

1. Code adjustments are necessary if either Internet Explorer or Firefox fails the testing during the verification step.

2. If the local copy is committed prior to patch file creation, rendering patch file creation impossible in this scenario.

Class Diagram(BOOK ISSUE Sprint)

