

IT314

Software Engineering

Jay Malaviya
202101048

Lab 6
Activity & Class Diagram

Exercise 1

Draw an activity diagram to graphically represent the following workflow

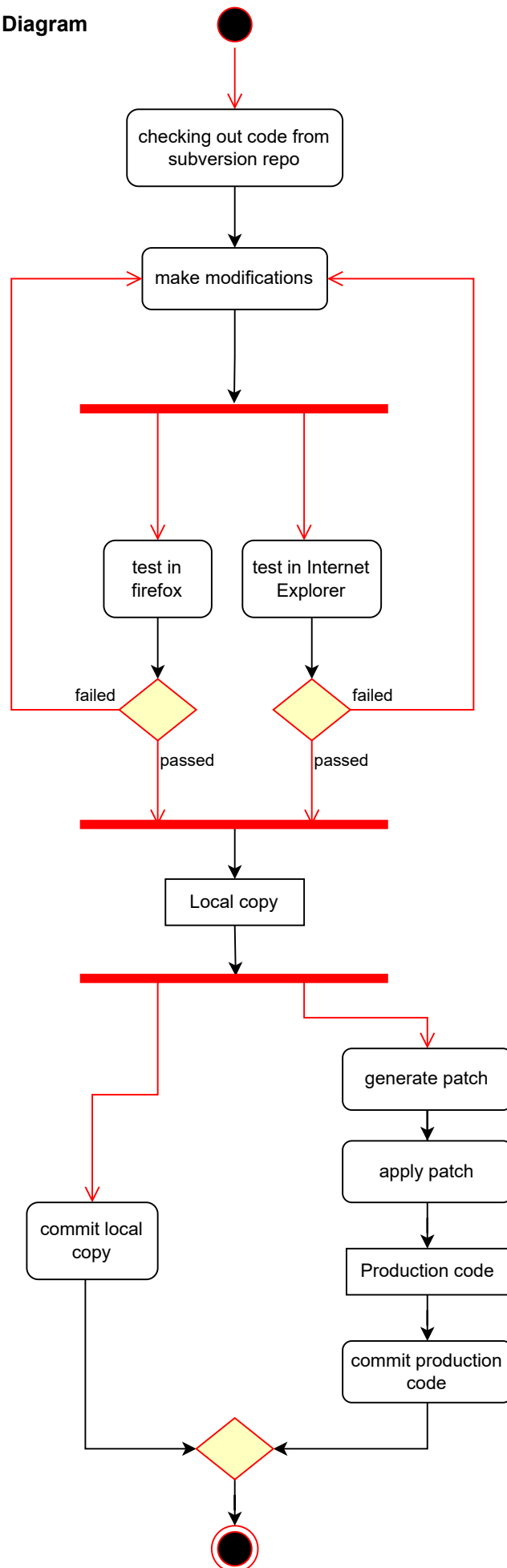
Let us consider the development activities of SE Virtual Labs. The process begins by checking out the code from Subversion repository. Necessary modifications are then made to the checked out code (local copy). Once the developer is done with his changes, the application has to be tested to verify whether 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.

Think over the following questions:

- How would you represent testing of the application with multiple browsers?
 - To represent it, I am using 'test in Firefox' and 'test in Internet Explorer' activities and I'll use fork and merge operations.
- Can generation of the patch file and update the Subversion repository be done concurrently?
 - No. Its not good to do them concurrently as the patch file must be generated before updating the repository.
- Can patching the production code and updating the Subversion repository be done in parallel?
 - Yes, they can be done parallel as there is not any dependency between these two activities.

Activity Diagram



Class Diagram

Library Management System

