

IT313: Software Engineering

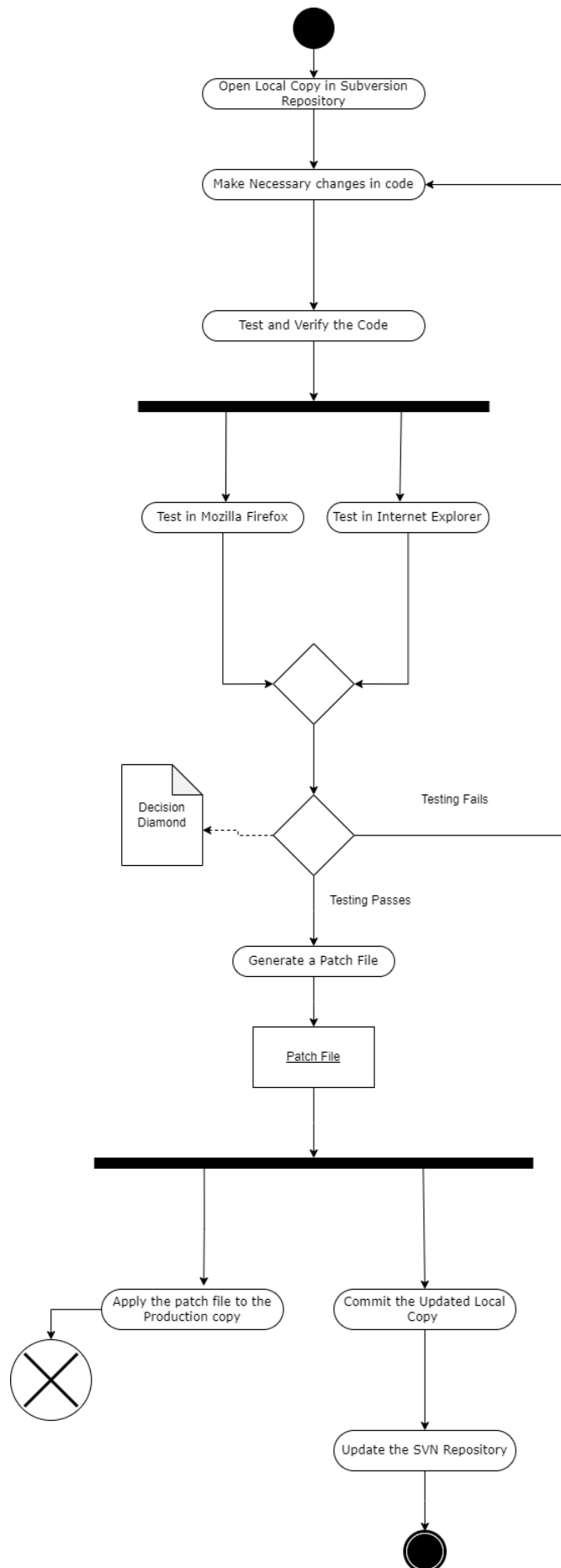
Lab 6: Activity and Class Diagram

1. Activity Modelling:

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.



2. Class Diagram:

Draw class diagram for any one of the sprints by identifying objects, classes and their relationships.

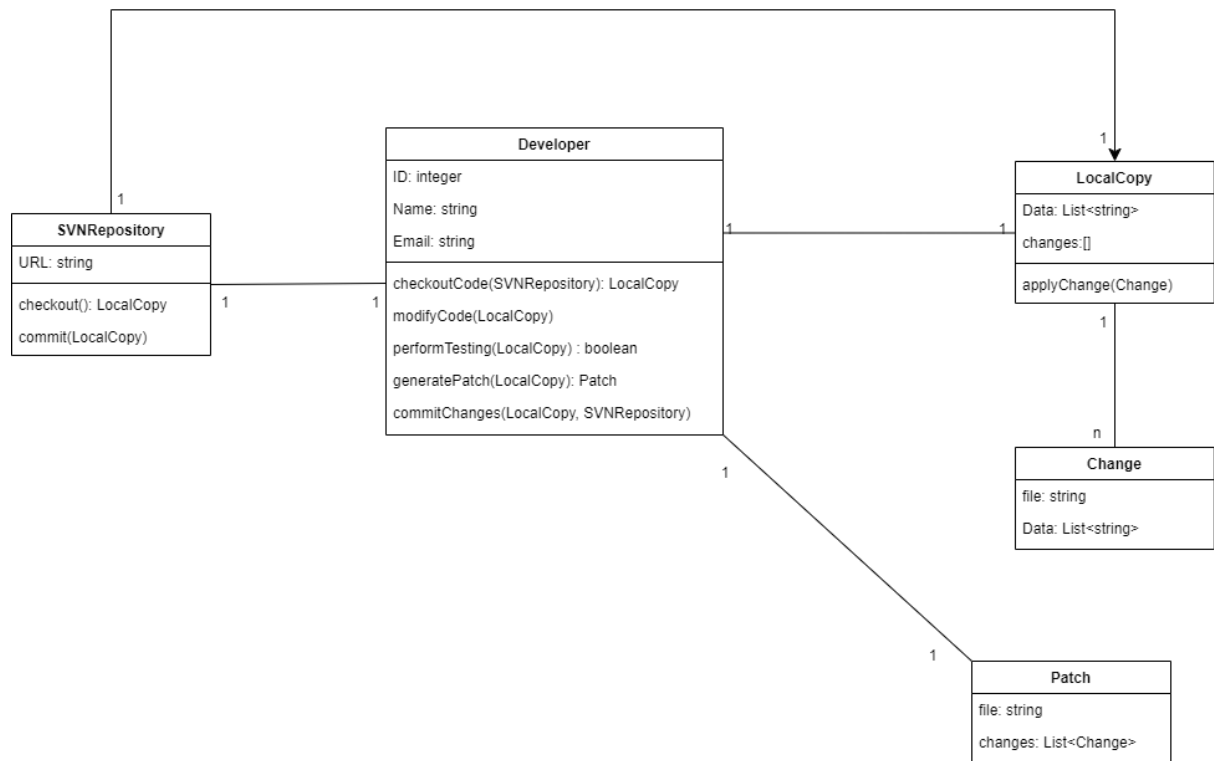
➔ Here the sprint I am working is: Code Modification and Testing

➔ Objects:

1. Developer
2. SVN Repository
3. Local Copy
4. Change
5. Patch

➔ Relations:

1. Developer and Repository: Developer checks the code from SVN Repository and commit files in the Repository.
checkoutCode()
commitchanges()
2. Developer and Local Copy: Here, developer directly makes the local copy from the Repository in his system.
modifyCode()
performTesting()
generatePatch()
commitchanges()
3. Local Copy and Change: The changes made by developer is stored in the Local Copy.
applyChange()
4. Developer and Patch: Developer makes a Patch file containing the list of changes.
generatePatch()
5. SVN Repository and Local Copy: Local Copy is committed and checked out using the SVN Repository.
checkout() **commit()**



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