# SOFTWARE ENGINEERING

## LAB 6

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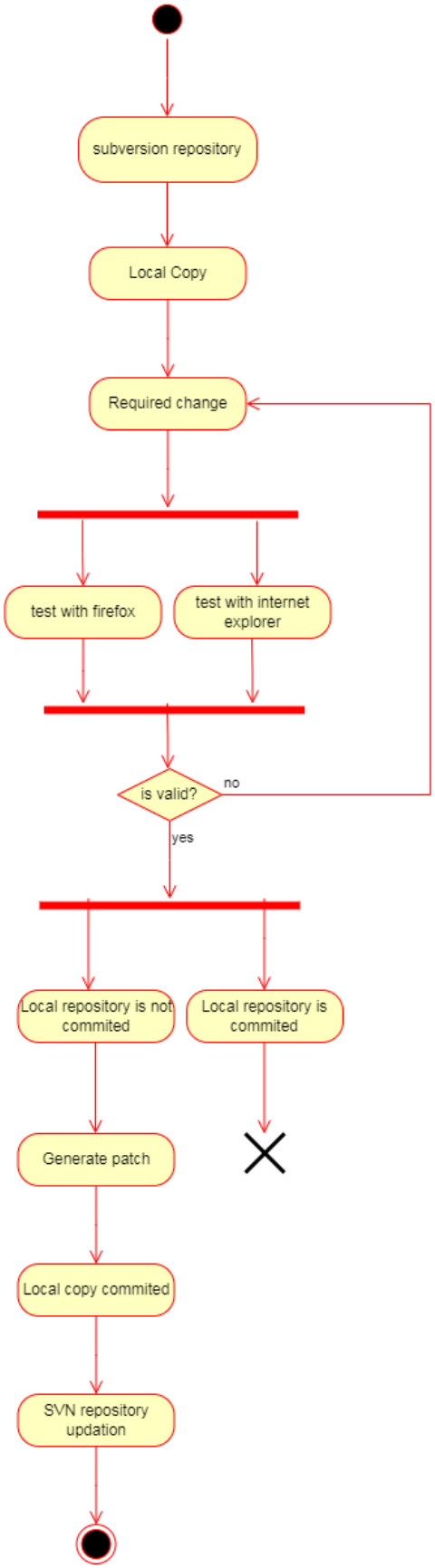
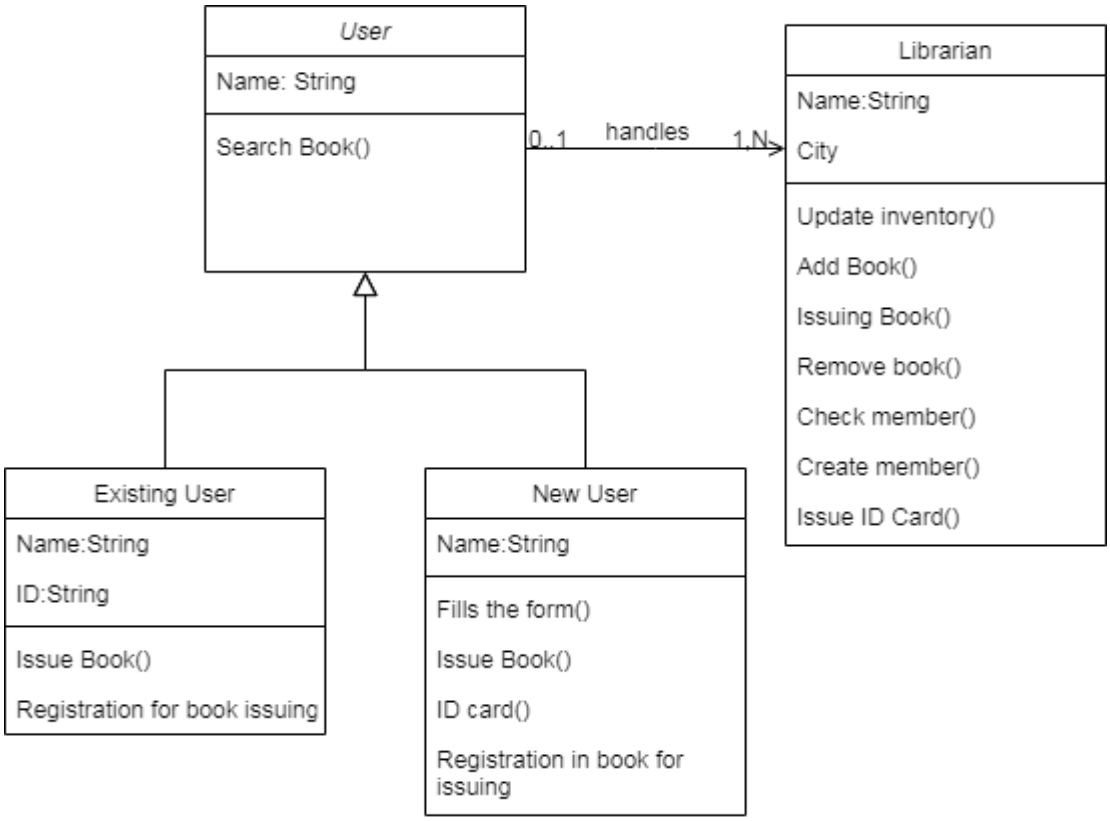
1. Activity Diagram


subversion repository
Local Copy
Required change
test with firefox
test with internet explorer
is valid?
no
yes
Local repository is not commited
Local repository is commited
Generate patch
Local copy commited
SVN repository updation

# 2. Class Diagram



Questions:

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

Answer: To represent the testing of application with multiple browsers, we need to use the fork so that both actions get executed and output will be generated at the same time.

2. Can generation of the patch file and update the subversion repository be done concurrently?

Answer: No first patch will be generated first, then that patch will be applied to product code and then subversion repository will be updated.

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

Answer: Applying Patch to Production Code: progress to this stage is possible after successfully generating the patch. Applying the patch to the production code completes the workflow.

Committing Changes to SVN Repository: progress to this stage can only be made after the patch is applied to the production code. Committing the changes updates the SVN repository.

Learning Objectives:

• Identify the basic units of work, and visualize the work flow First the copy of repository has been created, then changes in the local code will be made, then it will be executed in Firefox and internet explorer parallelly. If all the browsers pass the test, then if local copy is committed then the process will be executed, else it will generate a patch file then commit the local copy of code then SVN repository will be updated.

• Identify activities that could be done in parallel The checking of code in both browser (Firefox and Internet Explorer) will be done parallelly.

• Identify stages from where progress could be made only after a list of criteria is satisfied

1. If at checking stage at least one of the two browsers (Firefox and Internet Explorer) fails in testing, the code must need some changes.

2. if the local copy is committed before generating a patch file, and one won't be able to generate the patch file.

**My Assumptions During the class Diagram:** I had assumed that there will be multiple librarians in the library. So, cardinality will be 1 to N.