Course : IT-314 (Software Engineering)
Lab : 5
ID : 202101415
Name : Maulik Thakkar

1) Activity Diagram

Create local copy
from SVN Repo.

Modification
in
local copy

Fail   Fail

Fail

Test with   Test with   Test with
Browser 1   Browser 2   Browser 3

Pass   Pass   Pass

Patch file
generation

Patch applied   Commit
to production code   changes

Commit
changes

SVN Reposetory Updated
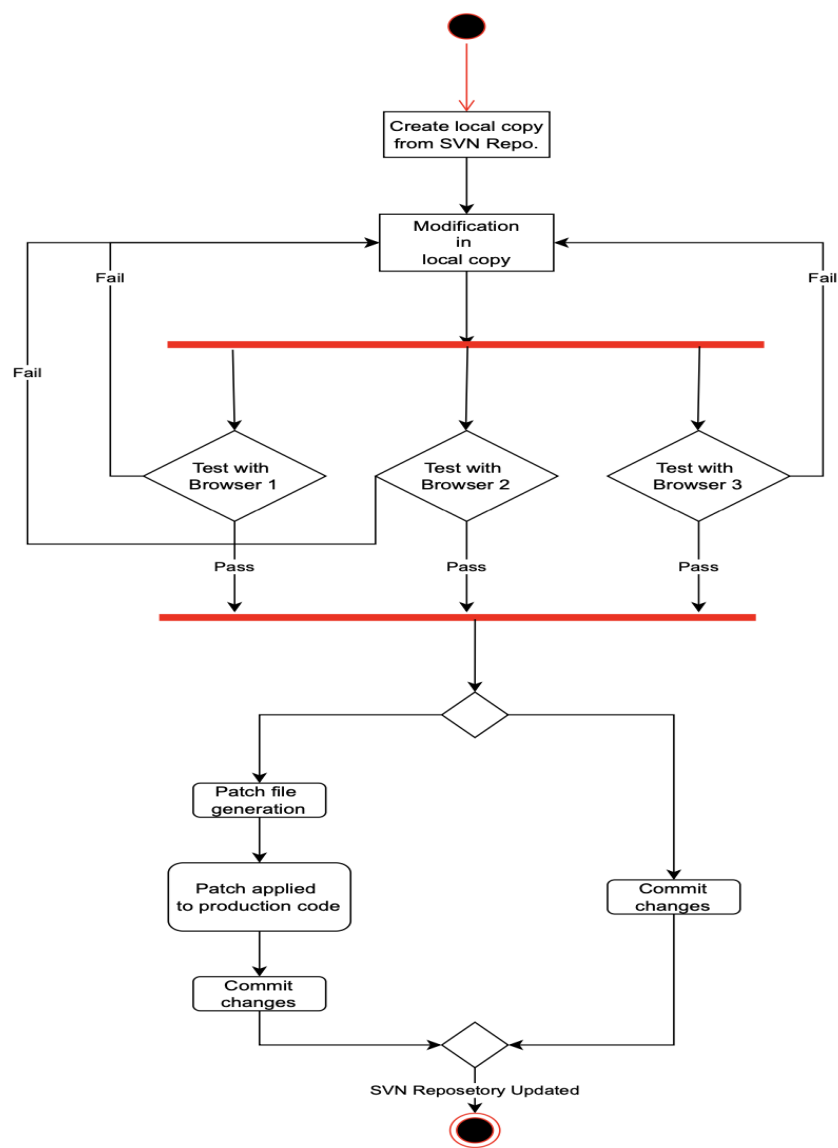
Think Over Questions :

1) To represent testing , we should use fork join and fork which ensures the process moves further only if testing in all the browsers succeed.
2) First patch will be generated , then it'll be applied to production code and then changes will be committed in the SVN repository.
3) No , first patching should be done and then SVN repository should be updated.

Learning Objectives :

1) Workflow :
   → first local copy will be created from the SVN repository.
   → Then new features will be implemented in local copy.
   → Then new features will be tested with multiple browsers.
   → If testing is successful for all the browsers then it will move to the next stage else code will be modified.
   → Then there can be two scenarios ,
      1. If changes are directly committed , Then SVN repository will be updated.
      2. Patch file will be generated. It will be added to production code. Changes will be committed in the SVN repository.

2) Testing of code in multiple browsers can be done parallely.

3) If the local copy is committed before generating a patch , the patch can't be created.

Class Diagram

Person

+ Name : string
+ Addr : string

+ BrowseBooks()

Librarian

+ Id: string (PK)
+ Name : string

+ Verification()
+ AddnewBook()
+ RemoveBook()

Member

+ MemberId : string (PK)
+ Name : string

+ BrowseBooks()
+ IssueBook ()
+ReturnBook()
+extendDate()

Non-Member

+ Name : string

+ BrowseBooks()

Transaction

+ TransId: string (PK)
+ bookId : string
+ memberId : string
+ dateOfIssue : string
+ dateOfReturn : string

+ AddTrans()
+ RemoveTrans()
+ SearchTrans()

Book

+ IBN Num: string (PK)
+ tite : string
+ Author : string

+ displayDetails()

1 — 0...*

1 — 0...*

1 — 0...*