SOFTWARE ENGINEERING
IT314

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LAB-6

THINK OVER QUESTIONS:
1. We need to utilize a fork to ensure that both activities are carried out simultaneously and output is produced in order to represent testing the application across several browsers.

2.No,A patch file will first be created, after which the production code will be patched, and the Subversion repository will then be updated.

3. Applying Patch to Production Code: This step will be reached when the patch has been generated successfully. The workflow is finished when the patch is applied to the production code. Progress can only be made to this step once the patch has been applied to the production code. Committing Changes to SVN Repository.The SVN repository is updated upon commit.

Learning Objectives:

1.Determine the basic units of work and depict the workflow.
Changes are made to the local code first, then simultaneously in Firefox and Internet Explorer after a copy of the repository has been produced. If every browser passes the test, the method will execute if the local copy is committed; if not, it will generate a patch file, commit the local copy of the code, and then update the SVN repository.

2.The checking of code in both browsers (Firefox and Internet Explorer) will be done parallelly.

3. Identify activities that can be done in parallel.
 The code must be changed if at least one of the browsers (Internet Explorer and Firefox) fail the test in the review stage. After the local copy is done before generating the patch, in which case the patch cannot be generated.

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      ┌─────────┐         ┌─────────┐
      │ Create  │────────▶│ Modify  │◀──────────┐
      │ local   │         │ local   │           │
      │ copy    │         │ copy    │           │
      └─────────┘         └────┬────┘           │
                               │                │
 Fail ─────────────┐           │                │
                   │           ▼                │
                   │    ████████████████        │
                   │      │           │         │
                   │      ▼           ▼         │
                 ┌──────────┐   ┌──────────┐    │
                 │ Firebox  │   │ Internet │    │
                 │          │   │ Explorer │    │
                 └────┬─────┘   └────┬─────┘    │
                      │              │          │
                      ▼              ▼          │
                   ◇─────────◇    ◇─────────◇   │
                   │If code  │    │If code  │   │
                   │doesnt   │    │doesnt   │───┘
                   │work     │    │work     │
                   │propely  │    │propely  │
                   ◇────┬────◇    ◇────┬────◇
                        │              │
                        │         Pass │
                        │              ▼
                        │    ████████████████
                        │      │
              Pass ─────┼──────▶
                        │            │
                        │            ▼
                        │      ◇─────────────◇
                        │      │ CheckingLocal│
                        │      │   change     │
                        │      ◇──┬───────┬───◇
                        │         │       │
                        ▼         ▼       │
                  ┌──────────────┐        │
                  │ Generation of│        │
                  │ patch file   │        │
                  └──────┬───────┘        │
                         ▼                │
                  ┌──────────────┐        │
                  │ Patch applied│        │
                  │ to production│        │
                  │ code         │        │
                  └──────┬───────┘        │
                         ▼                ▼
                  ┌──────────┐      ┌──────────┐
                  │ Commit   │      │ Commit   │
                  │ Changes  │      │ Changes  │
                  └────┬─────┘      └────┬─────┘
                       │       ◇         │
                       └──────▶◇◀────────┘
                               ◇

                  SVN Repository is Updated

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Student

Member ID:string

Name:string

+ Register()

Member

Member ID:string

Name:string

Address:string

+ IssueBook()

+ ReissueBook()

Employee

MemberID:string

Name:string

+ Register()

Librarian

MemberID:string

Name:string

+ IssueBook()

+ ReturnBook()

+ Verification()

+ AddBook()

+ RemoveBook()

Transaction

TransactionID:int

BookID:int

MemberID:int

DteofIssue:string

DueDate:sring

+ CreateTransaction()

+ DeleteTransaction()

+ RetreiveTransaction()

Book

MemberID:string

Title:string

Publisher:string

Edition:int

Author:string

+ updateStatus()

+ DisplayBookDetails()

0...*

1

0...*

1

0...*