

**IT314 – Software Engineering
Lab - 6**

**Name: Mayur Suthar
ID: 202101172**

→ Que: 1 → Activity Diagram:



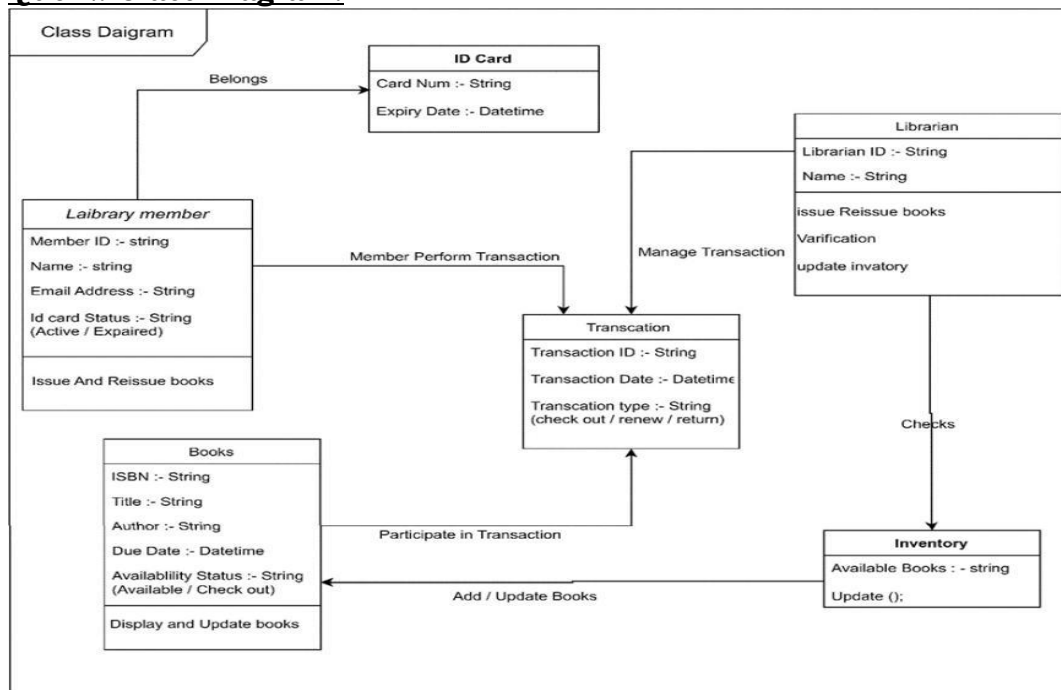
Think over questions:

- To represent the testing of the application with multiple browsers, we need to use fork so that both actions get executed and output will be generated at same time.
- No first patch file will be generated first, then that patch will be applied to production code and then the Subversion repository will be updated.
- 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 workflow. First, a copy of the repository is built, changes are made to the local code, and then it is performed concurrently in Firefox and Internet Explorer. If every browser passes the test, the procedure will run if the local copy is committed; if not, it will create a patch file, commit the local copy of the code, and then update the SVN repository.
- Identify activities that could be done in parallel. The checking of code in both browsers (Firefox and Internet Explorer) will be done parallelly.
- Identify stages from where progress could be made only after a list of criteria is satisfied.
- The code must be changed if at least one of the two browsers (Internet Explorer and Firefox) fails the testing at the checking step.
- If the local copy is committed before creating a patch file, in which case the patch file cannot be created.

• Que 2: Class Diagram:



Classie and their relation

- Library member → who performs transaction
- Books → which participate in transaction
- ID card → Belongs to library Member
- Librarian → Manages transactions, update inventory
- Transaction → track transaction history of books
- Inventory → track the books add and update books

Objects

- Library Members → Library Members who have id card at past or present
- Books → all books that belongs to library
- Id card → all card of library members
- Librarian → person who works on library
- Transection → All transaction performs by Library members like issue / return book
- Inventory → new books that can be update the library