LAB - 7: Activity Diagram

Group 5

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QUESTION:

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.
Think over the following questions:

- How would you represent testing of the application with multiple browsers?
- Can generation of the patch file and update the Subversion repository be done concurrently?
- Can patching the production code and updating the Subversion repository be done in
- parallel?
- Learning Objectives:
- Identify the basic units of work, and visualize the work flow
- Identify activities that could be done in parallel
- Identify stages from where progress could be made only after a list of criteria is satisfied

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                              ●

                    ┌─────────────────┐
                    │    Checking     │
                    │ out the code from│
                    │   Subversion    │
                    │   repository.   │
                    └─────────────────┘
                              │
          ┌───No──────────────▼──────────────No───┐
          │           ┌─────────────────┐          │
          │           │    Necessary    │          │
          │           │ modifications done│        │
          │           │ to the local copy│         │
          │           └─────────────────┘          │
          │                    │                    │
          │        ████████████████████████         │
          │             │              │            │
          │      ┌───────────┐   ┌───────────┐      │
          │      │ Testing with│   │ Testing with│    │
          │      │  Internet  │   │  Mozilla  │      │
          │      │            │   │  Firefox  │      │
          │      └───────────┘   └───────────┘      │
          │            │               │            │
          │         ◇ Passed? ◇     ◇ Passed? ◇      │
          └────────────┘               └────────────┘
                      │      Yes   Yes    │
                      └────────┐   ┌───────┘
                        █████████████████████

                         ┌─────────────────┐
                         │ Patch generated from the│
                         │    local copy   │
                         └─────────────────┘
                                 │
                  ████████████████████████████
                     │                      │
          ┌────────────────────┐   ┌────────────────────┐
          │ Commit the changes in local│  │ Application of patch file to the│
          │ code resulting in update of the│ │ production code │
          │  SVN repository.   │   │                    │
          └────────────────────┘   └────────────────────┘
                     │                      │
                     └──────────◉───────────┘
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