# Infosys \_ DEVOPS

Test Projects:

# Use Cases:

1. Testing Lab Setup [Reference : [Lab Guide - Viewer Page | Infosys Springboard](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared) [(onwingspan.com)](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)]
2. Git Operations [Reference : [Lab Guide - Viewer Page | Infosys Springboard](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared) [(onwingspan.com)](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)]
3. Creating project in SonarQube [Reference : [Lab Guide - Viewer Page | Infosys](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared) [Springboard (onwingspan.com)](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)]
4. Using SonarQube with Sonar-runner [Reference : [Lab Guide - Viewer Page |](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)

[Infosys Springboard (onwingspan.com)](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)]

1. Adding custom rules to SonarQube[Reference : [Lab Guide - Viewer Page |](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared) [Infosys Springboard (onwingspan.com)](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)]
2. Creating a local repository in Artifactory [Reference : [Lab Guide - Viewer Page |](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared) [Infosys Springboard (onwingspan.com)](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)]
3. Build automation using Maven [Reference : [Lab Guide - Viewer Page | Infosys](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared) [Springboard (onwingspan.com)](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)]
4. Final Project: Create and configure a Continuous Integration (CI) pipeline using Jenkins and other open source tools. The steps to be followed include installing Jenkins, configuring system settings, downloading necessary plugins, creating a central CI pipeline, copying and moving jobs, setting up a pipeline view in Jenkins, and configuring gating conditions. [Reference: [Lab Guide - Viewer Page](https://infyspringboard.onwingspan.com/web/en/viewer/pdf/lex_auth_013557221639806976595_shared?collectionId=lex_auth_013538989171924992269_shared&collectionType=Course&pathId=lex_auth_013557216540409856593_shared)

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# SOFTWARE REQUIREMENTS:

* + JDK
  + Eclipse – Integrated development environment
  + Git- Source code management
  + SonarQube – Static code quality checks
  + JUnit – Unit testing of code
  + Maven – Build automation
  + JaCoCo – Code coverage
  + Jenkins – CI orchestration

# HARDWARE REQUIREMENTS:

* i5 or i7 processor or R5 from AMD
* 16 GB of RAM. 500 GB storage system