Git Workflow and Release Process Documentation

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# 1. Overview

This document outlines the Git branching strategy and release workflow for the SBI\_Customer application. It includes the process for handling sprints, merging changes through SIT and UAT environments, and tagging releases.

# 2. Release/Sprint Flow Diagram

The development starts with release SBI\_R\_1.0a. The code is moved through SIT and UAT environments. Sprints are created for specific tasks and merged incrementally to form a final tagged release.

Sprint Details:

* • Sprint 01: Includes Task 01, Task 04, Task 09 (Changes: a + b)
* • Sprint 02: Includes Task 01, Task 04, Task 09 (Changes: a + c)

Final Tag: SBI\_R\_2.0 (Changes: a + b + c)

# 3. Git Command Reference

## 3.1 Basic Git Operations

* • Create Branch: git checkout -b <branch\_name>
* • Switch Branch: git checkout <branch\_name>
* • Merge Branch: git merge <branch\_name>

## 3.2 Clone & Setup

git clone <repo\_url> apache2\_test\_project

## 3.3 View Commit History

git log

## 3.4 .git Folder Structure

* .git contains:
* • hooks/, info/, logs/, objects/, refs/
* • config, HEAD, description, index

# 4. Git Workflow Examples

## 4.1 Create and Push UAT Branch

git checkout -b UAT  
git touch fileuat  
git add .  
git commit -m "committed by UAT"  
git push -u origin UAT

## 4.2 Create and Push SIT Branch

git checkout -b SIT  
touch filesit  
git add .  
git commit -m "Added sitfile"  
git push -u origin SIT

## 4.3 Create Sprint Branch from SIT

git checkout SIT  
git checkout -b sprint01  
touch sprintfile01  
git add .  
git commit -m "Created branch and added file"  
git push -u origin sprint01

## 4.4 Merge Sprint Branches into SIT

git checkout SIT  
git merge sprint01  
git push -u origin SIT  
  
git merge sprint02  
git push -u origin SIT

## 4.5 Merge SIT into UAT

git checkout UAT  
git merge SIT  
git push -u origin UAT

## 4.6 Merge UAT into Main

git checkout main  
git merge UAT  
git push