SYSTEM ANALYSIS & DESIGN

OPEN SOURCE STUDY
VIRTUAL CLINIC

Software Test Plan
(STP)

Test Plan

The Virtual Clinic is an integrated care system that manages all stakeholders in the medical domain efficiently. Each feature is made up of a number of use cases, and each use case can be tested in a number of ways.

Testing Approach

We have used the SRS and the SDD to prepare the design test cases and their procedures. These tests are designed to verify the documentation previously listed.

To test Virtual Clinic, we have accounted the following testing approaches:

● **Interface Testing**

Virtual Clinic has many modules and components, including, but not limited to, appointments, medical tests, prescriptions, and profile view. Information from these components must be passed between each other and to other components throughout the application. Interface testing will be used to

evaluate whether these components and modules pass data and control correctly to one another.

● Regression Testing
Virtual Clinic is being developed in Waterfall with the Backflow process model. After each code/build change, our development environment is set up to run all test cases against the current code base with each push to the main repository.

● Coverage Testing
As per the SRS, we will be writing our own unit tests on each new code push. Because of this requirement, in addition to other testing methods, we aim to have near 100% code coverage. This means that 100% (or extremely close to 100%) of the source code written passes through a test at some point in the testing suite.

● Automated Test & Deployment
Virtual Clinic is being developed and improvised as per the suggestions from everyone and as and when some bug is found by the developers while using it, as a result, it becomes very important for the team to have automated tests after every code push and automatically deploy it to the server where the application is hosted in order to reduce a lot of manual work and get the new application code running in few minutes itself.

● Functional Testing
Virtual Clinic is a frontward-facing web application. Due to the nature of this application, we have conducted manual testing on the web page to ensure that the application reacts and responds in the way that it is expected to.

● Unit Testing
Virtual Clinic is utilizing unit and integration testing. All of the unit and integration test cases are constructed with detailed knowledge of the codebase and have been automated to run with each codebase change.

● System Testing

Virtual Clinic is a web application and hence will be needed to set up for different hospital management systems and in a different way and according to their needs. Hence we will be testing the application in different environments and verifying its successful working.

Template used for testing

Test Scenario ID		Test Case ID	
Test Case Description		Test Priority	
Pre-Requisite		Post-Requisite	

Test Execution Steps:							
S.No	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments