# Test Strategy – Loan Prediction III Contest Page

URL: https://www.analyticsvidhya.com/datahack/contest/practice-problem-loan-prediction-iii/

## 1. Introduction

This document explains how I plan to test the Loan Prediction III contest page on Analytics Vidhya. The goal is simple — make sure the page works smoothly for users, whether they are just browsing the problem statement or trying to participate in the contest.  
  
Since this is a black-box test (no backend access), the focus is on what we can see and interact with on the page.

## 2. Objective

The main objectives of this testing are:  
- To ensure the page loads correctly and quickly.  
- Check all the links, buttons, and sections work as expected.  
- Confirm the page looks and behaves well on desktop, tablet, and mobile.  
- Run basic performance, accessibility, and security checks.

## 3. Scope of Testing

### In Scope

- Page loading and navigation.  
- Validating main sections: Problem Statement, Rules, and Evaluation.  
- Testing primary buttons like Participate Now and Leaderboard.  
- Negative testing for invalid inputs in the login popup.  
- Responsive layout checks on desktop, tablet, and mobile.  
- Basic performance and accessibility audits using Lighthouse.  
- Checking if the site uses HTTPS for secure connection.

### Out of Scope

- Backend API and database testing.  
- Automating OTP login (can be validated manually).

## 4. Assumptions

- CAPTCHA or OTP validations cannot be automated but will be verified manually.  
- Focus will remain on public-facing areas visible without login.

## 5. Testing Approach

| **Type of Testing** | **Purpose** |
| --- | --- |
| Functional Testing | Check if links, buttons, and sections work correctly. |
| UI/UX Testing | Ensure the page looks clean and is easy to navigate. |
| Responsive Design Testing | Test the layout on desktop, tablet, and mobile. |
| Negative Testing | Validate proper error handling for invalid inputs. |
| Accessibility Testing | Ensure the page is usable and readable for all users. |
| Basic Performance Testing | Check load time and Lighthouse performance score. |
| Basic Security Testing | Confirm HTTPS and secure lock icon are present. |

## 6. Test Environments

| Device | Browsers | Operating Systems |
| --- | --- | --- |
| Desktop/Laptop | Chrome, Firefox | Windows 10/11, macOS |
| Mobile Phones | Chrome, Safari | Android, iOS |
| Tablets | Chrome, Safari | Android, iOS |

## 7. Tools Used

| Purpose | Tool | Why |
| --- | --- | --- |
| Manual checks & inspection | Chrome DevTools | Easy to debug and verify links, elements, and network calls. |
| Responsive layout checks | Chrome DevTools Responsive Mode | Quick way to simulate mobile and tablet views. |
| Functional automation | Selenium + TestNG | Reliable and standard automation for UI testing. |
| Performance and accessibility audits | Lighthouse, Axe plugin | Simple tools for scoring and basic checks. |