# Analytics Vidhya DataHack Platform - Test Strategy & Scope

## Platform Overview

DataHack is Analytics Vidhya's comprehensive competitive data science platform that serves as a hub for learning, competing, and growing in data science and AI.

## Key Features & Offerings

* Competitive Challenges: Hackathons and data science competitions, practice problems, real-time submission, leaderboards.
* Skill Development: Quick tests, daily challenges, practical AI challenges, learning from winners’ approaches.
* Career Opportunities: Jobathons, talent showcase, recognition, networking opportunities, career advancement.
* Blogging Platform (Blogathons): Monthly blogathons, stipend, editorial support, community engagement, prizes.
* Success Stories & Community Impact: Career advancements at Amazon, Meesho, Mail.Ru; strong community culture.

## In-Scope Testing

Testing includes verifying navigation across sections (Explore, Upskill, Engage, Contribute), link redirection to correct pages, visibility of content, login button functionality, expandable menus, responsive design, and visual consistency (fonts, spacing, alignment, image rendering).

## Out-of-Scope Testing

Out-of-scope areas include backend functionalities such as authentication, course progress tracking, server-side logic, advanced performance testing (stress/load), deep content validation, and authenticated user features.

## Assumptions

* Static Content Behavior
* Authentication Flow Simplification
* Placeholder Behavior for Dynamic Metrics
* Responsive Navigation Structure
* UI-Driven Content Load
* No Real-Time Functionality in Static View

## Types of Testing Covered

* Functional Testing - Login, registration, navigation flows
* UI/UX Testing - Visual consistency, readability
* Navigation Testing - Link/button directions and states
* Form & Submission Testing - Inputs, validations, file uploads
* Negative Testing - Invalid logins, error message validation
* State & Data Flow Testing - Leaderboard updates, event states
* Accessibility Testing - Keyboard navigation, labels
* Performance Testing - Load times and responsiveness
* Compatibility Testing - Browser and device consistency
* Basic Security Checks - HTTPS, session handling

## Test Environments

Browsers: Google Chrome (latest), Microsoft Edge (latest)

Operating Systems: Windows 10 & 11

## Testing Tools & Justification

* Browser DevTools - Inspect, debug layout, network activity
* Postman - Validate front-end behavior during login flows
* Responsive Mode / BrowserStack - Ensure UI adapts across devices
* Snipping Tool / Lightshot - Capture visual issues for reporting
* DevTools Network Throttling - Validate behavior under slow internet
* Bug Tracking (JIRA) - Report and track issues