**Note:**

In Agile world - Details on test goals, timelines, environments , tools, stake holders involved are usually captured only for specific test phases like End to End testing or UAT etc.

As this document is a system test approach, above mentioned details are not captured here.

* **Database Testing Approach:**
  + Validate registered users data is INSERTed correctly.
  + Validate all events (button clicks, hyperlink clicks, navigations) are stored correctly as per requirements.
  + Validate “view more” click in all subpages, that the model specifications and comments **HISTORY** along with date, author are displayed correctly from database.
  + In “Overall Rating” page – Validate that comments, author and timestamp are being INSERTed in database correctly on vote button click.
  + Validate whether “comments” field is **NULLABLE** or NOT NULLABLE as per requirement.
  + Validate the maximum **length** of data allowed in “comments” textbox in “Overall Rating” page as per requirement.
  + Validate that **vote count** is updated correctly in database and UI on each vote.
  + In “Register” page - Validate the maximum length of data allowed in ”Login”, “FirstName”, “LastName” as per requirement.
  + In “Register” page - Validate the minimum length of data allowed in ”Password” & “Confirm Password” fields as per requirement.
  + Validate that characters/numeric/special characters are allowed in all textboxes “Comments”, ”Login”, “FirstName”, “LastName” ,”Password” as per requirements.
  + **Sort** functionality on headers “Make”, “Model”, ”Rank”, “Votes”, ”Engine” are working as expected in all subpages.

**Other Test Types:**

* Functionality Testing
  + Validating all user requirements with respect to application behaviour.
* UI Testing
  + Verifying front-end components (labels, buttons, hyperlinks, scrollbars, etc).
  + Verifying alignments, fonts, colours etc.
* API Testing
* Security Testing
  + Verifying defensive measures against breach techniques.
* Performance Testing (testing performed matching the real time requirements like maximum number of users/requests etc..)
  + Load Testing
  + Stress Testing
  + Scalability Testing
* Compatibility Testing
  + Validating application functionality on different browsers
* Exploratory Testing
  + Exploring the application without any test plan for identifying any unexpected behaviour. This is usually time-bounded.
* Usability Testing
  + Validating if the web application is easy to use and has meaningful content.

**High level test scenarios in Functionality Testing:**

**Positive Test cases:**

* Validating register functionality
* Profile page navigation, save, cancel buttons functionality in register page.
* Password and confirm password fields functionality in register page.
* Password criteria functionality in register page.
* Validating login functionality
* Hyperlink functionality on 3 images/sections in home page
* Adding comment functionality in subpages.
* Validating each model specification retrieval functionality on model hyperclick in subpages
* Page navigations functionality verification.
* Validating logout functionality
* At the bottom of home page, facebook and twitter image button clicks navigation verification.

**Negative Test cases:**

* Incorrect or empty username/Password for login functionality
* Duplicate username in register functionality
* Weak password tests in register functionality.

**Edge Test cases:**

* Validate the maximum number of incorrect login attempts for a user.