Features That Will Be Tested

1. Login/Logout/Register:

Test Cases:

- Users should be able to utilize a mix of uppercase and lowercase characters in their username and password. (Case sensitivity)
- When the user leaves a required field blank, they should receive a notification that the field they left blank is required. (Blank test/Mandatory Fields case)
- Account registration fails when the user tries to create an account where the password entered does not contain a capital letter, at least 8 characters, at least 2 numbers, and at least 2 special characters.
- Account registration fails when the user tries to create an account with a username that is already used. (Unique username)
- Users should be redirected to the login page after registration. (Login -> Registration)
- Users should receive a warning when attempting to login with an incorrect username or password. (Incorrect credentials)
- When a user presses the login/registration hyperlinks, it should bring them to the corresponding page. (Hyperlinks)
- When a user presses the logout hyperlink, they should be redirected to the login page with a message informing them that they logged out. (Logout)

Test Data:

 Blank data for all fields. Alphanumeric Test data and only characters for the password field

Test #1

{'Username': ' '

'Password': ' '} //Blank

• Test #2

{'Username': 'hahaha'

'Password': 'abcdef'} //Too short, no numbers, no special

characters

• Test #3

{'Username': 'Clown'

'Password': 'notClown11\$\$'} //Incorrect Password for Login

Test #4

{'Username': 'Clown'

'Password': 'IsClown##12'} //Correct username and Password

Test Environment:

- Login and Register pages. Logout link on the Navbar.
- Mocha for testing NodeJS.

Test Results:

- When a user follows the restrictions for registering an account, they should be redirected to the login page, and their credentials stored in the database.
 - Output: "Account Registration Successful"
- When a user fails to complete the specification for account registration, they should receive a popup warning, and their credentials should not be added to the database.
 - Output: "One or more specifications are not met."
- When a user attempts to log in and their credentials are in the database, they will be redirected to the joke generator page.
 - Output: "Login successfully- redirect to jokes page"
- When a user attempts to log in and their credentials are not in the database, they should not be redirected, and a warning should appear.
 - Output: "One or more specifications are not met."

User Acceptance Testers:

 Wide range of students, family, friends, and volunteers with differing backgrounds in technology. This not only makes sure each feature works as intended, but is also user-friendly.

2. Joke Generating:

Test Cases:

- The user must specify at least one "type" of joke (at least one API to pull from).
- The user should fill the filter fields with opinions to give the best joke based on the filters (API testing)
- The program must be able to handle both multiple or no keywords.
- Turning off a filter/removing a keyword should refresh jokes displayed so that specified jokes no longer appear.
- The jokes will be displayed after filling the filter fields form.

Test Data:

- Data where no filters are specified.
 - o { french == false, yo mamma == false, etc. }
- Data where no keywords are specified.
 - o {""}
- Data where multiple keywords are specified.
 - o { "green", "pizza", "help", etc. }
- Data that combines these edge cases (no filters or keywords; filters and no keywords; vice versa; etc.)
 - { french == false, yo mama == true, "pasta", "cat" }
- Data where filters and keywords are toggled on and off repeatedly.

Test Environment:

- Loading up the page and messing with it.
- Mocha for testing NodeJS.

Test Results:

- When no filters are specified, an error should be thrown.
 - Output: "choose a filter at least show no jokes-"
- When no keywords are specified, there should NOT be an error.
 - Output: "Show a joke"
- When there are no jokes that match keywords or filters, a "No Jokes Found" message should be shown.
 - Output: "no jokes are found show filter form"
- Selecting multiple filters and/or keywords should display jokes that fill *all* of the specifications, not just one.
 - Output: "show jokes"
- Deselecting filters or keywords should actively make jokes leave the view in real time.
 - Output: "show jokes based on filters"

User Acceptance Testers:

 Wide range of students, family, friends, and volunteers with differing backgrounds in technology. This not only makes sure each feature works as intended, but is also user-friendly.

3. Joke Saving/Recall:

Test Cases:

- A saved joke can be recalled after a logout, additional jokes saved, changes to profile, etc.
- A saved joke that is removed cannot be recalled until saved again.
- A saved joke cannot be saved again (not case-sensitive).
- A user can only save a maximum of 25 jokes.
- Every user has their own data for the jokes the user prefers.

Test Data:

- Large amounts of jokes with which to test saving and recall.
 - { "This is a really funny joke.", "Man, this is such a funny joke wow.", "This
 is a less funny joke" }
- Groups of identical jokes (including jokes with different capitalizations to test case sensitivity).
 - { "This is a really funny joke.", "THIS IS A REALLY FUNNY JOKE." }
- Groups of jokes that have exactly or more than 25 jokes to test upper limit.
 - { "a", "b", "c", "d", "e", "f", "g", "h", "i", "j", "k", "l", "m", "n", "o", "p", "q", "r", "s", "t", "u", "v", "w", "x", "y", "z" }

Test Environment:

- We will also be forcing our parents to test this too.
- Mocha for testing NodeJS.

Test Results:

- Saved jokes should be able to be recalled when requested
 - Output: A table of all relevant jokes.
- Deleting a joke that isn't saved should cause an error.
 - Output: "This joke is not saved on your profile, therefore cannot be deleted."
- Trying to recall a joke that has been deleted should cause an error.
 - Output: "That joke is no longer saved."
- Trying to submit a joke that has already been saved should cause an error (not case-sensitive).
 - Output: "You already have this joke saved!"
- Trying to save a 26th joke without first deleting a previous joke should cause an error.
 - Output: "You can only save a maximum of 25 jokes, delete a joke to save another."

User Acceptance Testers:

 Wide range of students, family, friends, and volunteers with differing backgrounds in technology. This not only makes sure each feature works as intended, but is also user-friendly.