CS 1632 – DELIVERABLE 3:

Web Testing with BDD

Brandon S. Hang

https://github.com/brandonhang/Pitt-Projects/tree/master/cs1632/Deliverable%203

The site I chose to test with Selenium was the forum for the North American Subaru Impreza Owners Club, or NASIOC for short. I chose this site as I knew it was fairly old and wouldn't have much in regards to dynamic content generation. I also chose this site as it attracts a large, diverse group of people. Thus, it made generating user stories somewhat easier.

Because the site itself is a basic forum, I focused on testing interactions that are fundamental to any user's experience on the site. This included testing of the login system, correct navigation, availability of specific links, and general usability in different subforums. When testing the login system, I made sure to test for various username and password inputs, the password recovery functions, and the "remember me" checkbox. Correct navigation was fairly straightforward; most involved clicking the link and checking either the title or some major body of text to ensure that the correct page was reached. The availability of specific links was more important for "interior" pages (I.e., subforums) as that is where I'd imagine most users spend their time on the site. Lastly, general usability is touched upon by all of the aforementioned tests but some areas had more specific functions such as sorting menus.

The biggest issue for me was that this site was written a long time ago, possibly in the early 2000's, and has received few updates since then. As such, there are practically no unique identifiers for many of the elements and it was rather difficult for me to target specific elements easily (everything was a table!). I am fortunate that I am currently taking CS 1520 so I was able to utilize the cssSelector() method Selenium provides.

Please note that I used a built-in Java library object, Date and DateFormat, in order to test the date that was currently displayed on the site. I did not want to use a doubled object for those classes as I needed to dynamically generate the current date to test it against the site's. Also, I reasoned that, since it is a library provided by Java, it would be acceptable to use in the same regard that Strings, LinkedLists, etc. are acceptable to use.

Other issues that might occur with in depth testing of this site include features that are limited to members that are currently logged-in. For this assignment, it was not logistically practical to set up a dummy account in order to test those features as that account would need to be shared during code evaluation. I must also reiterate how difficult it is to select specific elements when testing this site due to the scarcity of unique identifiers and the ubiquity of common HTML tags.

Repo: https://github.com/brandonhang/Pitt-Projects/tree/master/cs1632/Deliverable%203

Runs: 5/5   ☒ Errors: 0   ☒ Failures: 0   Runs: 6/6   ☒ Errors: 0   ☒ Failures: 0

▲ NASIOCMemberUserStoryTest [Runner: JUnit 4] (26.303 s)
    testErrorPageResetPassword (7.277 s)
    testForgotPasswordForm (4.915 s)
    testInvalidPasswordPage (5.713 s)
    testRememberMe (3.820 s)
    testNoLoginCredentials (4.577 s)

▲ NASIOCVisitorUserStoryTest [Runner: JUnit 4] (31.442 s)
    testHomeTitle (5.840 s)
    testPrivacyPolicyLink (7.290 s)
    testRegistrationLink (6.242 s)
    testTodaysDate (3.769 s)
    testSidebarLinks (4.210 s)
    testNotAMemberPhrase (4.089 s)

Runs: 5/5   ☒ Errors: 0   ☒ Failures: 0   Runs: 5/5   ☒ Errors: 0   ☒ Failures: 0

▲ NASIOCRegularUserStoryTest [Runner: JUnit 4] (30.065 s)
    testSearchPage (8.922 s)
    testNewPostIcons (6.763 s)
    testViewingAsGuest (3.973 s)
    testNASIOCGeneralFollowLink (6.550 s)
    testSubForumLinks (3.857 s)

▲ NASIOCOwnerClassifiedsUserStoryTest [Runner: JUnit 4] (12.677 s)
    testDisplayOptionsMenu (2.708 s)
    testClassifiedsTitle (2.243 s)
    testForumTableHeaders (2.906 s)
    testNewThreadButton (2.755 s)
    testGuidelinesSticky (2.065 s)

Runs: 6/6   ☒ Errors: 0   ☒ Failures: 0

▲ NASIOCOwnerPartsDBUserStoryTest [Runner: JUnit 4] (5.826 s)
    testSearchBar (2.935 s)
    testProductCategories (0.444 s)
    testReturnToMainDBasePage (0.810 s)
    testDBTitle (0.423 s)
    testSearchRadioButtons (0.466 s)
    testTiresLink (0.748 s)

Repo: https://github.com/brandonhang/Pitt-Projects/tree/master/cs1632/Deliverable%203