

Testing Plan for Persona Switcher

The Team That Shall Not Be Named (T³SNBN)

I. Introduction

- A. Overview of test plan - Unit testing for all functions currently implemented, testing for the bug fixes, and testing for any new functionality added to Persona Switcher.
- B. Goals/objectives - Find defects/bugs which may have been created during the development cycle and to make sure the SRS is satisfied for the customer. Furthermore, ensure a proper working product for the end user. Finally, making Persona Switcher compatible with the future roll out of Firefox where add-ons will be deprecated.

II. References

List of the related documents:

- [Project Plan](#)
- [Test Use Case Brainstorm](#)

III. Test items

- A. Current software version - Persona Switcher 2.0.4 - All items listed below are for this version.
- B. Use cases for the preference window.

IV. Features to be tested/scope

- A. Preferences window where the end user can modify keyboard shortcuts, menu shortcut keys, options, and persona menu locations.
- B. More use case document will be drafted as new functionality are implemented.

V. Features not to be tested/out of scope

- A. Menu shortcut keys (Not on OS X) will not be tested on any Mac OS X system due to the original software incompatibility issues with the Mac OS X.
- B. Menu shortcut keys (Not on OS X) will not be tested on any Linux distro due to incompatibility.

VI. Approach

- A. All tests will be written so that they will fail before any code is written.
- B. Source code will be implemented until the written test passes.
- C. Once the test passes, the developer will then write more tests and repeat the process.
- D. All tests will need to cover different cases for the function being tested. The testing team will plan out the test cases before any tests are implemented.

VII. Item pass/fail criteria

- A. Each test case will be developed so that the system test script will run until the script is completed.
- B. Upon completion of the script, the test case will show a confirmation of the test case as a pass or fail.
- C. The test case will be declared as passing when the script runs the test and a confirmation window of the test passing appears.
- D. If the script runs into an error then the test will conclude as a fail at the end of the script.

VIII. Suspension criteria and resumption requirements

- A. Testing suspension will not occur while the testing script is running.
- B. All tests will run until the test suite is completed
- C. Upon completion of the test suite, the testing team will analyze the failed tests and will debug the issue and resume the test suite from the beginning.

IX. Test deliverables

- A. Test plan - This document itself
- B. Test cases - set of conditions that will be applied on certain parts of the software and the tester will determine if the features or application is behaving and working as it was originally planned. The test case template (found in section XVII) will be used for each test case.
- C. Test scripts - Fabricated test case that contains the set of test data.
- D. Defect/enhancement logs - recorded feedback created by the customers which contains the defects in the application that were generated under a test.
- E. Test reports - Data gathered after running a series of test.

X. Test environment/guidelines

- A. AutoIt - System testing for Persona Switcher.
- B. AutoIt is only compatible on Windows operating systems and the scripts only run on Windows machines. A virtual machine with Windows installed will work for Mac and Linux users.
- C. AutoIt install guidelines
 - 1. Autoit download URL:
<https://www.autoitscript.com/site/autoit/downloads/>
 - 2. Click download Autoit.
 - 3. Once installed on a Windows operating system, open up a folder to start a script.
 - 4. Right click inside the folder and scroll down to new.
 - 5. Click on AutoIt v3 script.
 - 6. Rename the script to desired name.
 - 7. Right click on the script and scroll down to edit.
 - 8. This will open up the editor.
 - 9. After coding the script is complete, save and exit the editor.
 - 10. Run the script by right clicking on the script and click on Run Script.
 - 11. The script could also run inside the editor by hitting F5.
 - 12. The Autoit Help menu will give further references to tutorials and the API.

XI. Schedule

- A. Test scenario prep
- B. Test doc-test cases/test data/setting up environment
- C. Test execution
- D. Test cycle- how many cycles
- E. Start and end date for cycles

XII. Staffing and training needs

- A. The developers will need to get familiar with AutoIt in order to perform system testing on Persona Switcher.

XIII. Defect management

- A. Any defects found while testing will need to be peer reviewed by every member on the team.
- B. If the defect can be resolved then all the tests will need to be reanalyzed to determine that the defect has been resolved.
- C. After determination that the defect cannot be resolved, the team will document the defect and report the findings to the customer.

XIV. Risks

- A. System testing of Persona Switcher may not be viable.
 - 1. Selenium testing only provides testing for the web page and not the entire browser. Therefore, testing the add-on cannot be done with Selenium as it exists now.
- B. Scope of test cases
 - 1. Although the team of testers will execute all test cases for functions, some unknown anomaly may still exist in the code base and may not be discovered under the testing suites. These anomalies could happen due to code complexity and dependencies.

XV. Assumptions and dependencies

- A. All functionality listed in the overlay.js file will exist and port over to the newly refactored version of Persona Switcher.
- B. Any new functionality added to Persona Switcher will be tested accordingly and a developer on the team will test that function to find any new defects if they exist.

XVI. Approvals

- A. Dr. Beaty - Originally developer of Persona Switcher and the customer
- B. All team members responsible for and approval of the tests in the Persona Switcher software.

XVII. Test case template

Test Suite ID	The ID of the test suite to which the test case belongs to.
Test Case ID	The ID of the test case.
Test Case Summary	The summary/objective of the test case.
Related Requirement	The ID of the requirement the test case relates and/or traces to.
Prerequisites	Any prerequisites or preconditions that must be fulfilled prior to executing the test.
Test Procedure	Step by step instructions to execute the test.
Test Data	The test data to be used while conducting the test.
Expected Result	The expected result of the test.
Actual Result	The actual result of the test. Filled out after test execution.
Status	Pass, fail, not executed, or blocked.
Remarks	Any comment on the test, during the test, or after the test.
Created By	Author of the test case.
Date of Creation	Initial creation date of the test.
Executed by	Name of the person executing the test.
Date of Execution	The date the test was executed.
Test Environment	The environment which the test was executed.

XVIII. Exit criteria (when to stop testing)

- A. Once all use cases and functions have been tested and are passing.
- B. All bugs with high priority have been resolved and all tests are passing for these bugs.
- C. All bugs with medium priority have been resolved and all tests are passing for these bugs.

XIX. Test case diagrams

This section focuses on defining and demonstrating the test cases that will be used as an aid in creating the automation tests. The automated tests may end up containing more cases that were thought of during the implementation and not defined in the diagrams. The following are the default settings for preferences:

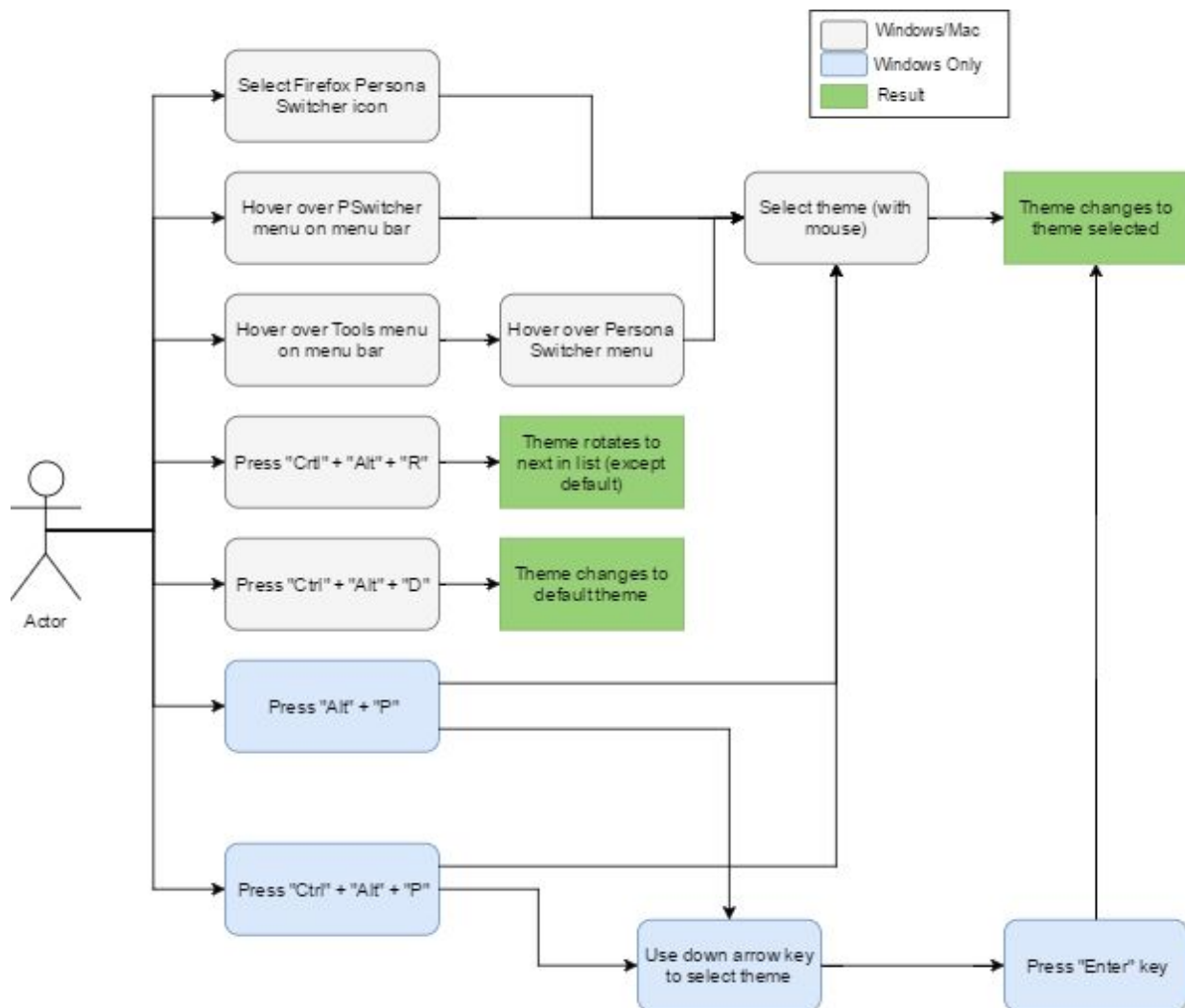
Preference Name	Enabled/Disabled	Value
Default persona key combination	--	Ctrl + Alt + D
Rotate persona key combination	--	Ctrl + Alt + R
Toggle auto-switch key combination	--	Ctrl + Alt + A
Main menu shortcut key	--	P
PSwitcher menu shortcut key	--	Ctrl + Alt + P
Switch every __ minutes	Disabled	30 mins
Switch to a random persona instead of the least recent	Disabled	--
Rotate on startup	Disabled	--
Preview personas on menu selection with __ (ms) delay	Disabled	--
Add icon preview to menu items	Enabled	--
Remove Personas Plus notifications	Enabled	--
Minimum height of toolbox:	--	0
Tools Menu	Enabled	--
Main menu bar	Disabled	--

A. Selecting a Theme

Purpose: This is testing all the possible ways a user can change/select a theme.

Preconditions:

- Preferences are set to default settings
- Main menu bar preference is enabled



B. Keyboard Shortcuts in Preferences

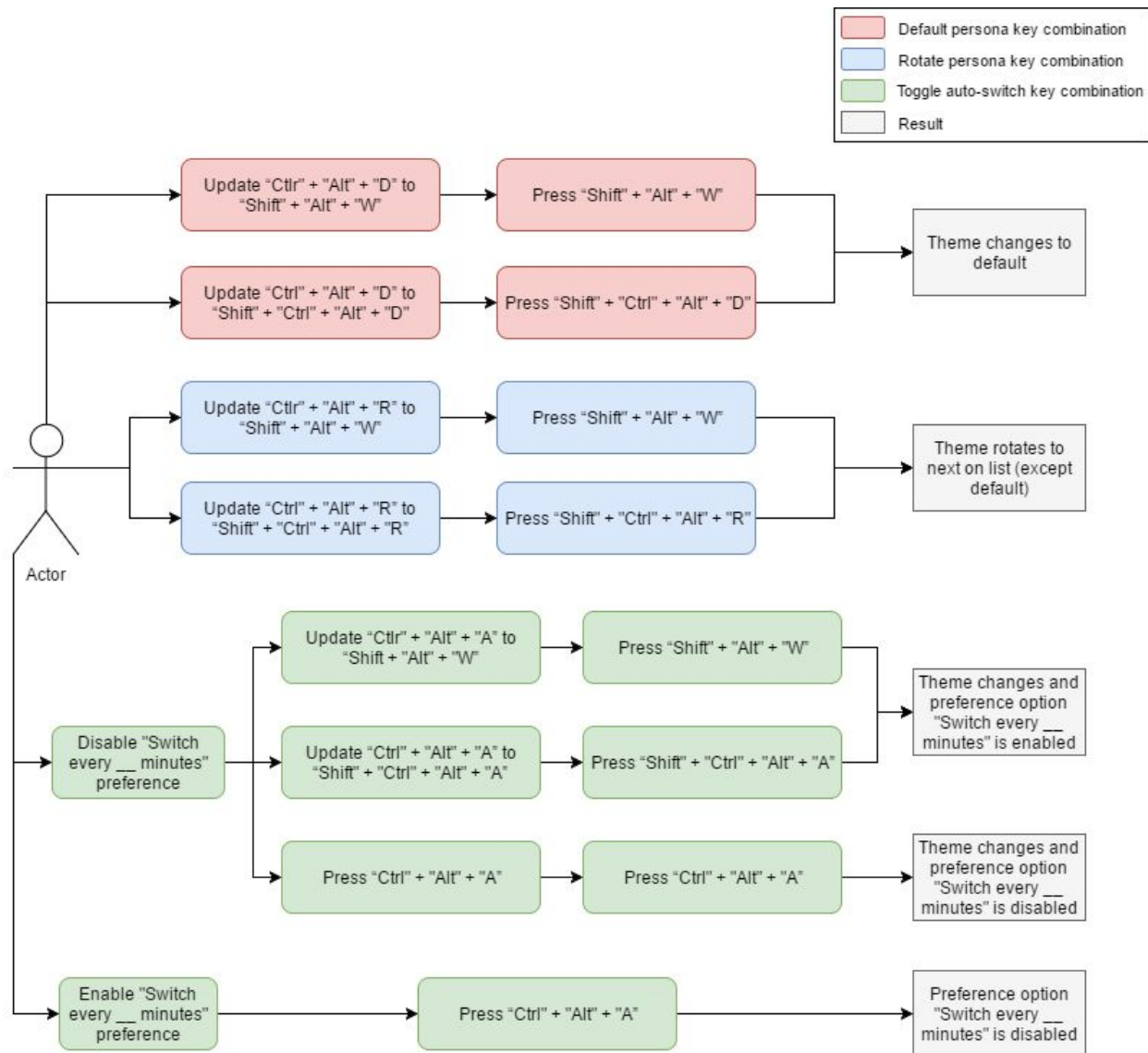
Purpose: This is testing the keyboard shortcuts options listed in the preferences

Preconditions:

- Preferences are set to default settings

Note:

- ANY change made to the preferences has to be saved first.



C. Menu Shortcuts in Preferences

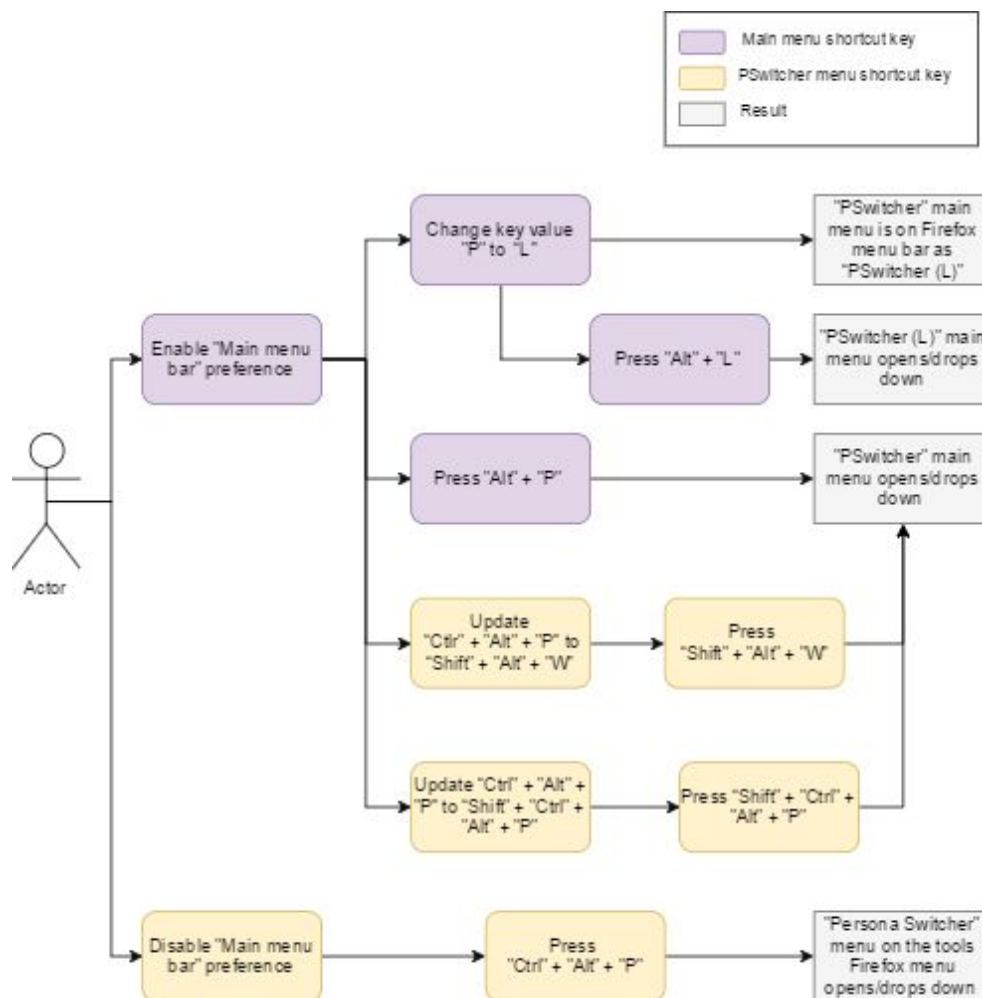
Purpose: This is testing the menu shortcut options listed in preferences.

Preconditions:

- Preferences are set to default settings

Note:

- ANY change made to the preferences has to be saved first.



D. Switch Theme Option in Preferences

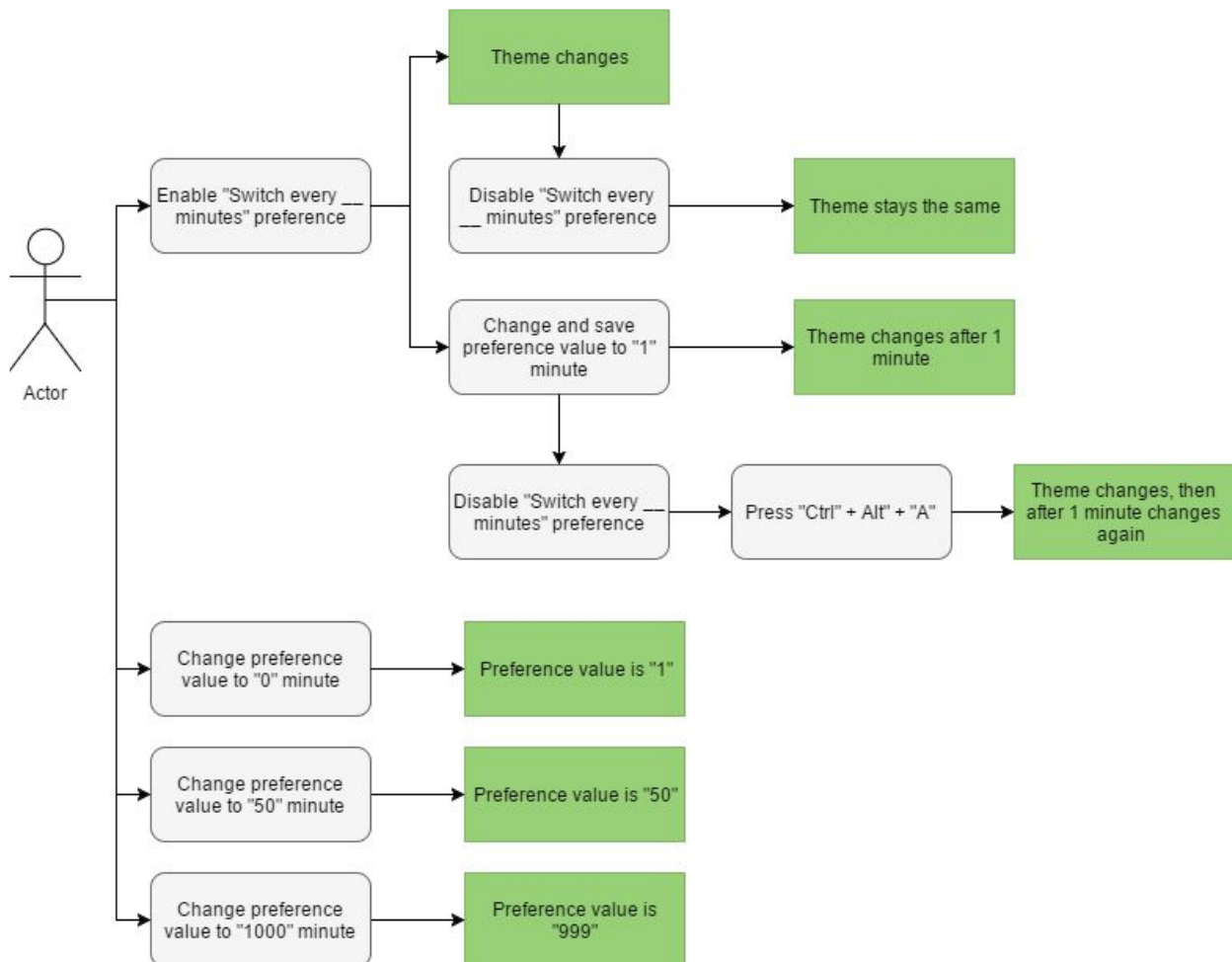
Purpose: This is testing the “Switch every __ minutes” option in preference. This preference enables the user to indicate how often they want their theme to change.

Preconditions:

- Preferences are set to default settings

Note:

- ANY change made to the preference has to be saved first.



E. Switch Random Persona & Rotate on Startup in Preferences

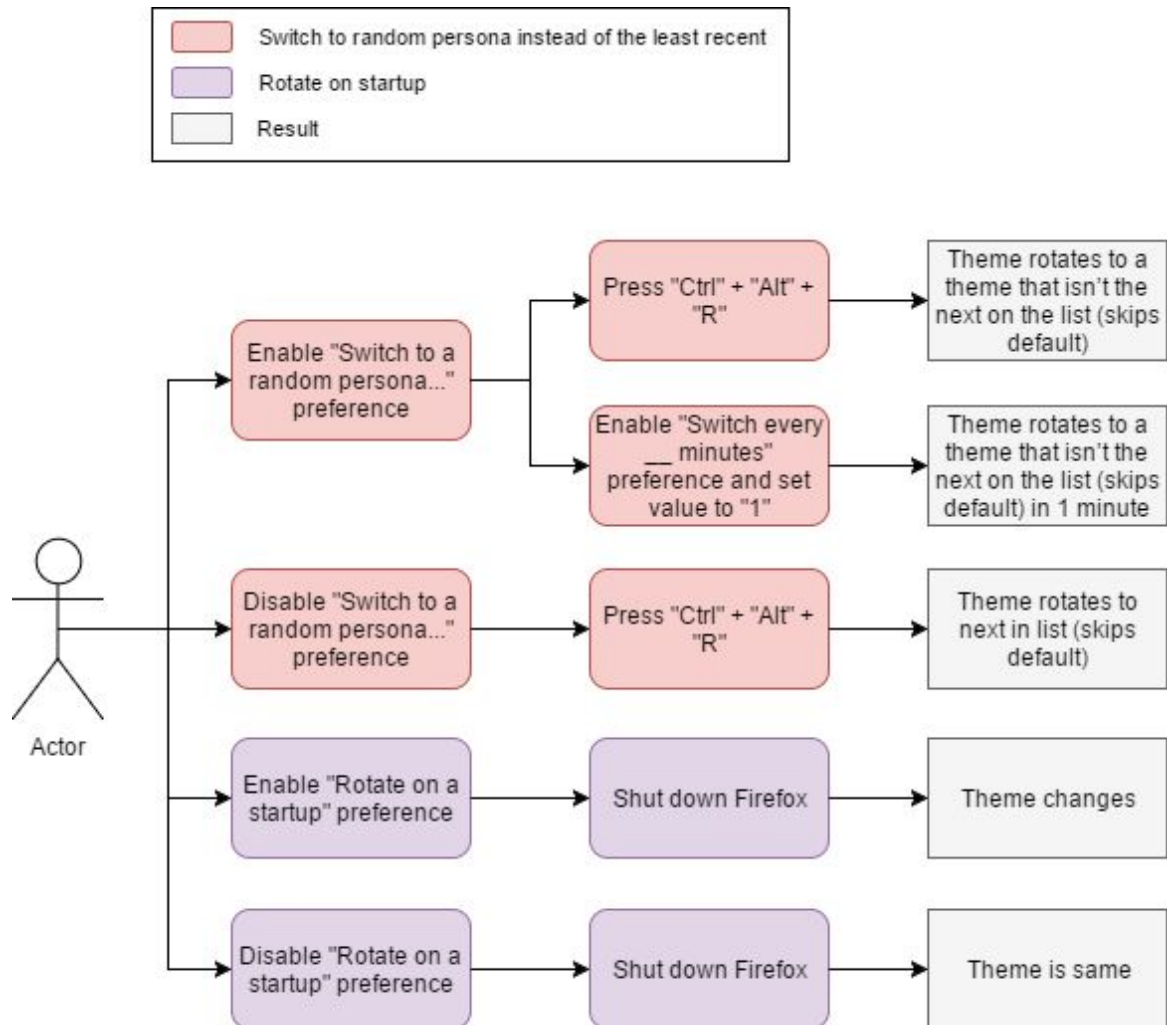
Purpose: This is testing two preference options, “Switch to a random persona instead of the least recent” and “Rotate on startup”. The first preference allows the user to enable if they want their theme to change to a random theme in the list rather than the next one in the list. The second preference indicates whether to change themes when Firefox is started up or not.

Preconditions:

- Preferences are set to default settings

Note:

- ANY change made to the preference has to be saved first.



F. Preview Personas on Menu Selection in Preferences

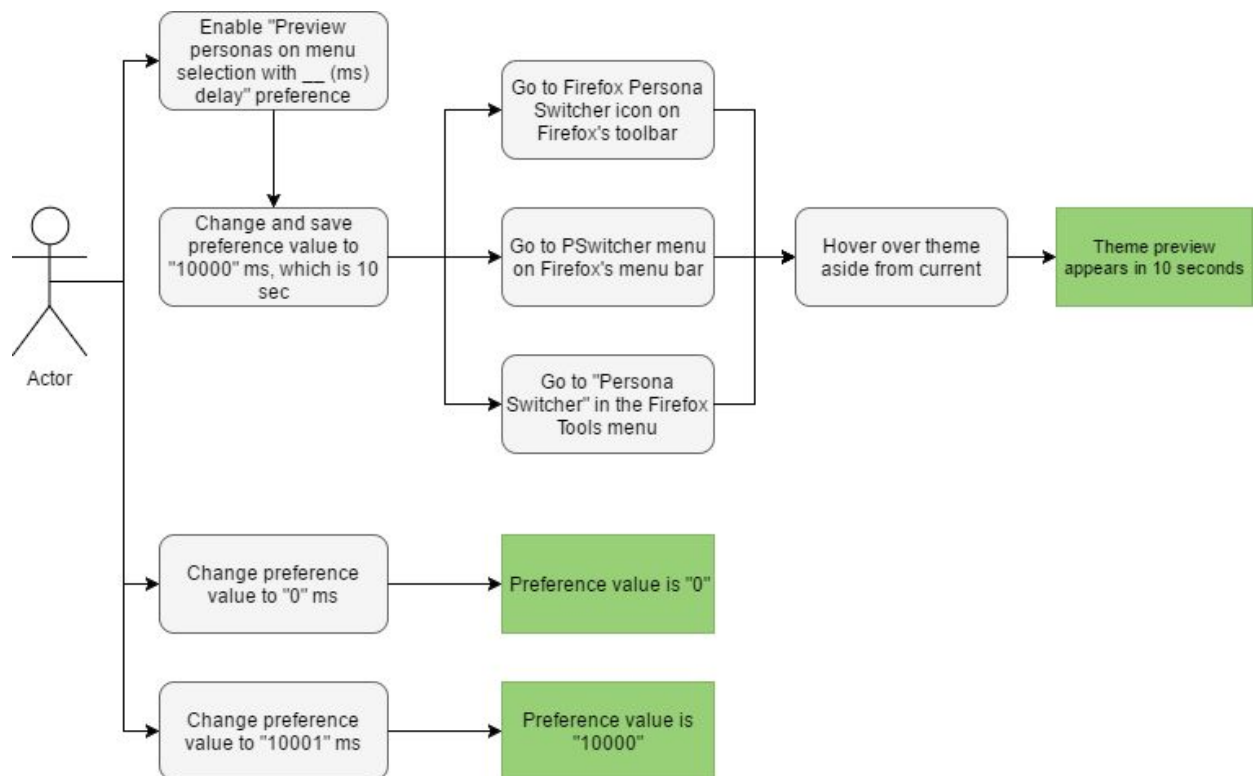
Purpose: This is testing the “Preview personas on menu selection with ___ (ms) delay” preference. This allows the user indicate the time they want for a preview of a them to show up when hovering over a theme in the menus.

Preconditions:

- Preferences are set to default settings
- Main menu bar preference is enabled

Note:

- ANY change made to the preference has to be saved first.



G. Add Icon Preview in Preferences

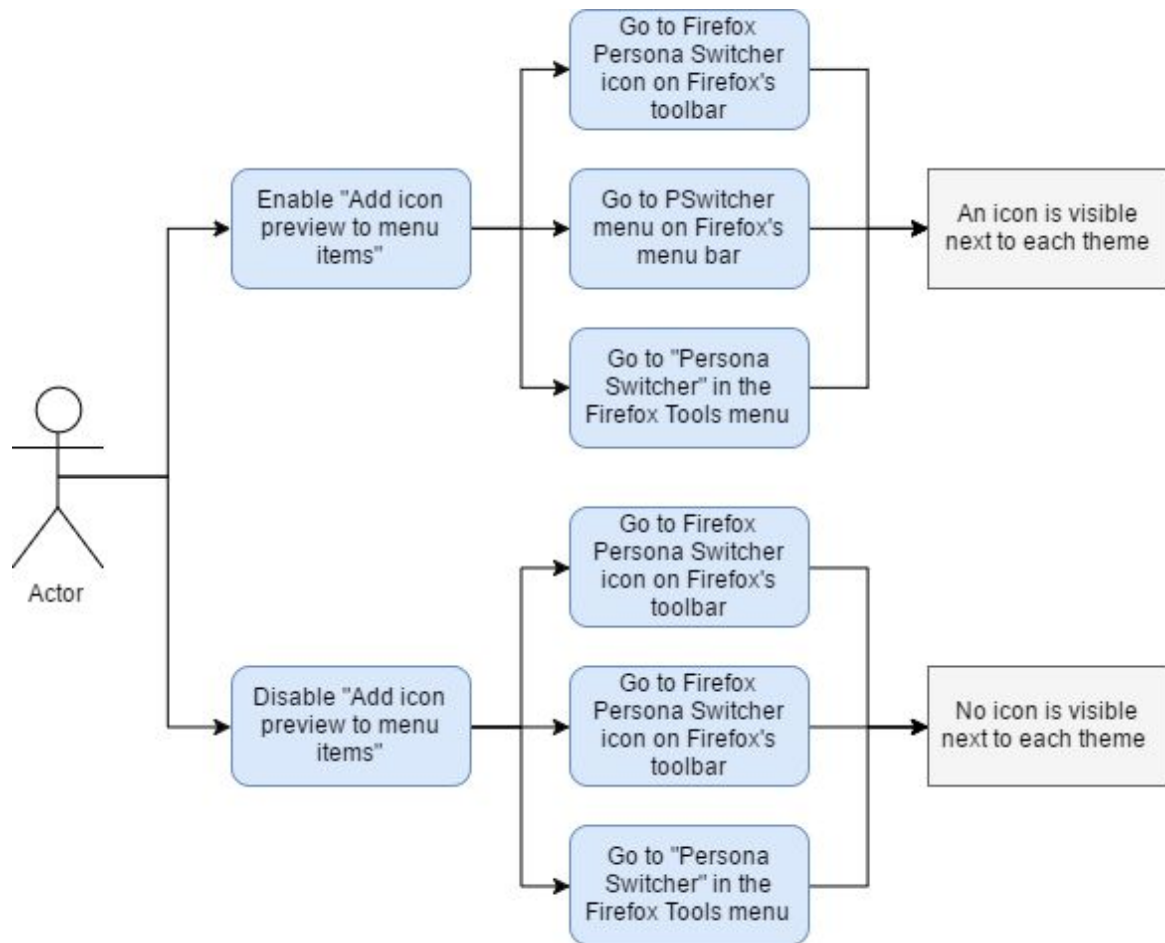
Purpose: This is testing the “Add icon preview to menu items” preference where the user indicates whether they want a small icon next to each theme in the menu lists.

Preconditions:

- Preferences are set to default settings
- Main menu bar preference is enabled

Note:

- ANY change made to the preference has to be saved first.

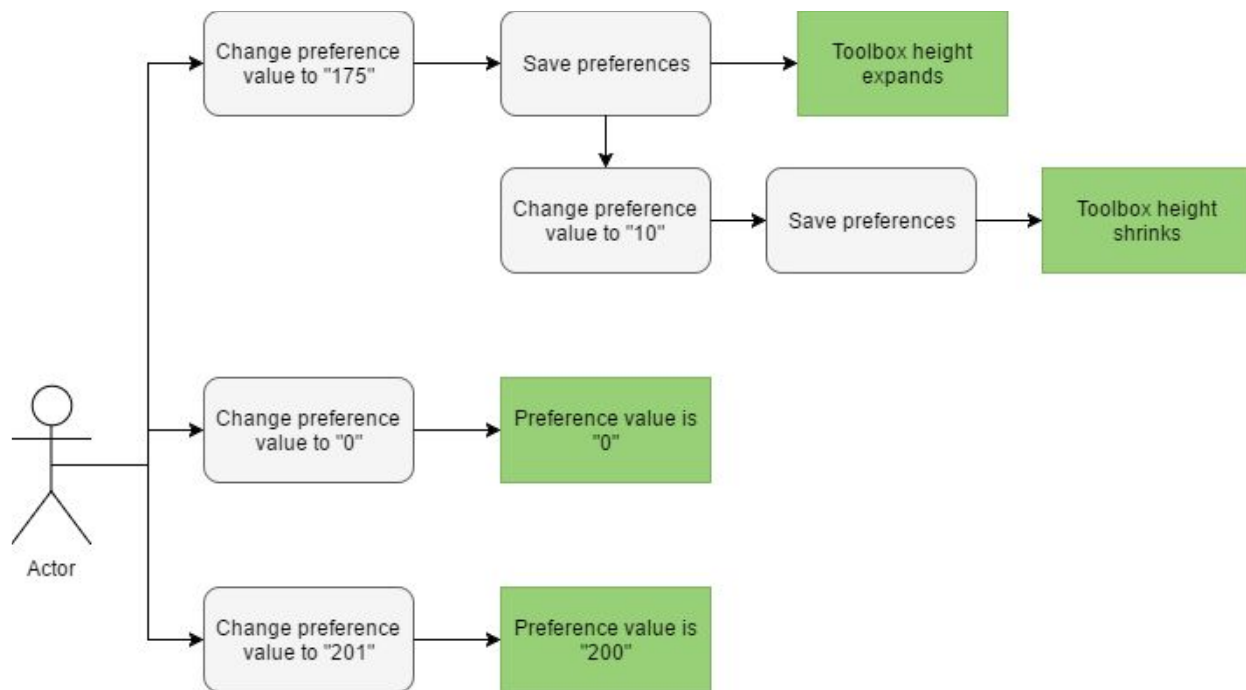


H. Height of Toolbox in Preferences

Purpose: This is testing the “Minimum height of top toolbox” preference where the user can define the height of their toolbox.

Note:

- ANY change made to the preference has to be saved first.



I. Persona Menu Locations in Preferences

Purpose: This is testing two preferences, “Tools Menu” and “Main menu bar”.

Both allow the user to enable/disable the menus for selecting themes.

Note:

- ANY change made to the preference has to be saved first.

