Software Maintenance Autumn 2023

Frederik Busch

November 8, 2023

Student Mail: frbus21@student.sdu.dk
Date: mm/dd/yyyy

Contents

1 Change Request

For this Software Maintenance report document, i have chosen to work with the feature called "Tool Palette". The refactoring of the code will be done in a group consisting of 5 students total, including myself. We have each choosen af feacture to reactore doing the course of this project.

The infomation we have gotten on the different features are only a short descriptive text, with the name of the feature. For my chosen feature the text is the following: "Tool Palette - Display, Drag and Drop". With this feature name i can with some analysis and implementation of the given code I can figure out what i have to reactore within my feature. As I am working with the feacture called "Tool Palette", I will assume the whole of the tool palette is within my feacture. The tool palette after inspection looks to contain tool sections, where it has different tools that one can select within these sections.

As part of the project we have made individual User Stories for our chosen feature. My User Story are the following:

Drag and Drop

The "Drag/Drop" user story outlines a feature, that is designed to enable users of the program to customize their workspace within the program itself. It allows the user to drag and drop different sections of the toolbar, to a location of their choosing. By allowing the user to customize their workspace, it can impove their work efficiency, but have their most used tools and options within easy reach.

Busch31 on Sep 13

As a user I want to be able to drag and or drop the different parts of the toolbar, so that I can setup a custom workspace.

☐ I should be able to drag a part of the toolbar to a different location on the bar
☐ I should be able to rearrange the parts of the toolbar to have a custom layout

Figure 1: User Story for Drag and Drop.

Display

The "Display" user story outlines a feature, that is designed to enable the users to show or hide different sections of the toolbar to their liking. Thereby allowing the users to hide or show only the tool section, that are relevant to their current task. It will also give the user less clutter on their screen doing their work.

Busch31 on Sep 13 (edited)

As a user I want to be able to hide and show the tool palette, so that I can have the maximum workspace that is also clear of tools

☐ When I click on the option to show / hide the tool palette it should do so.
☐ Since the toolbar has multiple different parts I should be able to hide one or more at any giving time.

Figure 2: User Story for Display.

To successfully complete the refactoring, the following steps should be undertaken by us as a group:

- Learn the feature scope of our different features within the codebase by doing a concept location to identify the relevant classes and tools.

- Evaluate the estimated impact of the refactoring on each developers features to anticipate any potential overlaps or conflicts our different features might have or could have.

- Understand the sections of code that require refactoring by identifying it with code smells.

- Carry out the refactoring while trying to minimize any unintended cascading changes that could happen with refactoring.

- Verify the changes after refactoring to ensure they achieve the desired outcome and that the primary function of the code is still maintained.

Besides having to do this refactoring, we as a group also have to setup continuous integration, thereby ensuring that any code is tested and verified before it is merged into the main branch.

2 Concept Location

hej

3 Impact Analysis

hej

4 Refactoring Patterns and Code smells

hej

5 Refactoring Implementation

hej

6 Verification

hej

7 Continuous Integration

hej

8   Conclusion

hej

9 Source Code

hej