

# Change request log

## 1. Team

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## 2. Change Request

Change Request #4: add a Clear Recent Directories button to the recent directories menu in order to clear the directory list.

## 3. Concept Location

Step #	Description	Rationale
1	Opened the Java file RecentDirectoriesProvider	Since the java file serves a similar concept to Change Request #2, we started looking in the folder that contained RecentFilesProvider. Luckily, we found RecentDirectoriesProvider.
2	Compared the file RecentDirectoriesProvider to RecentFilesProvider	To get familiar with the similarities and differences of the code, we scanned through both files since they were relatively short.
3	Copied the code skeleton for deleting recent files into the code for recent directories	The structure of the classes were similar, so we identified RecentDirectoriesProvider as the class that had to be modified.
4	RecentDirectoriesProvider identified	RecentDirectoriesProvider, more specifically the update() method had to be updated.
5		
6		
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Time spent (in minutes): 20

## 4. Impact Analysis

Step #	Description	Rationale
1	RecentDirectoriesProvider.java, and the update() method had internal variables that did not affect other classes.	Since the variables like "pattern" are local to the update() function, and update handles UI output, changes to update() do not impact other parts of the system greatly.
2	update() is the only function that we need to change.	We needed to port over the delete function skeleton that RecentFilesProvider.java had.
3	All changed variables are local to RecentDirectoriesProvider	
4		

**Time spent (in minutes): 10**

## 5. Actualization

Step #	Description	Rationale
1	We copied the code skeleton from RecentFilesProvider to RecentDirectoriesProvider	RecentFilesProvider and RecentDirectoriesProvider function similarly as menu classes, so we reasoned that a clear function in one would work for the other.
2	We edited the action listener's result and changed the label of the button.	We found a variable called "model" that stored the directory names within itself, so we replaced the action listener's function to clear that list when clicked. We changed the label of the button for user clarity
3	We created unit tests for the new class and also performed functional testing. We also ran the existing test cases.	To make sure everything works.
4	...	

**Time spent (in minutes): 20**

## 6. Validation

Step #	Description	Rationale
1	Test case defined: Clearing a list of directories Inputs: Recently visited directories shown, Clear Recent Directories Clicked Expected output: No directories shown upon reopening of the menu	This is the regular expected behavior. The test passed.
2	Test case defined: Attempt to clear an empty directory Inputs: no directories recently visited, try to clear them Expected output: The Clear Recent directories button should not show	The test passed, the button did not show
3		
4		

**Time spent (in minutes): 20**

## 7. Timing

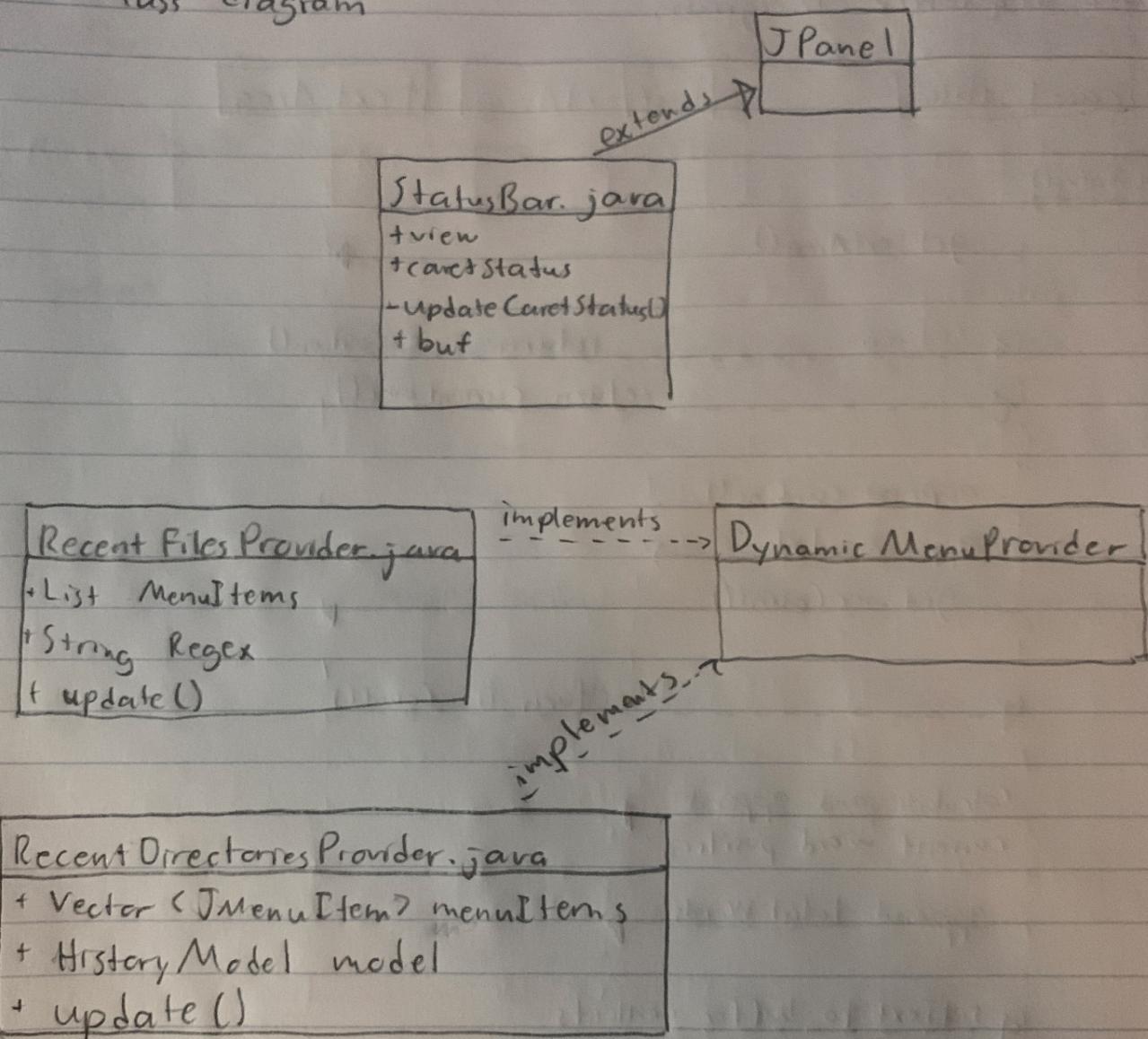
Summarize the time spent on each phase.

Phase Name	Time (in minutes)
Concept location	20
Impact Analysis	10
Actualization	20
Verification	20
<b>Total</b>	<b>70</b>

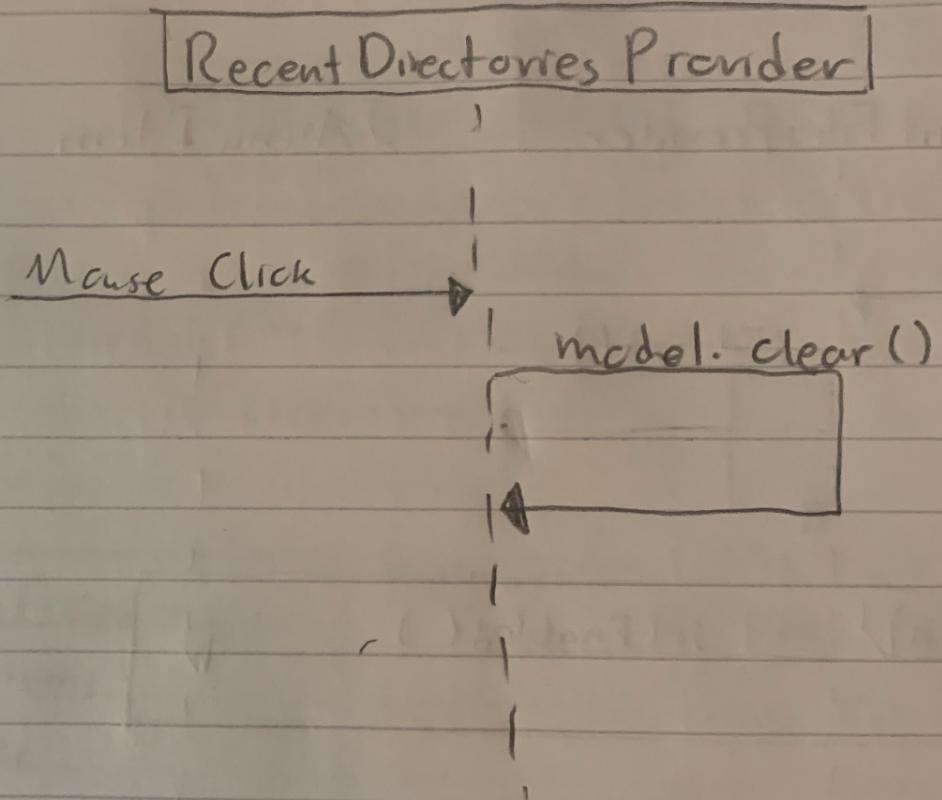
## **8. Reverse engineering**

Create a UML sequence diagram (or more if needed) corresponding to the main object interactions affected by your change.

## UML Class diagram



# UML Sequence Diagram



## **9. Conclusions**

For this change, concept location was easy because it was close to the location of a previous change. Impact analysis was also similar, and actualization was a matter of mimicking a function that was already present in the source code

Classes and methods changed:

- org/gjt/sp/jedit/menu/RecentDirectoriesProvider.java
  - void update()