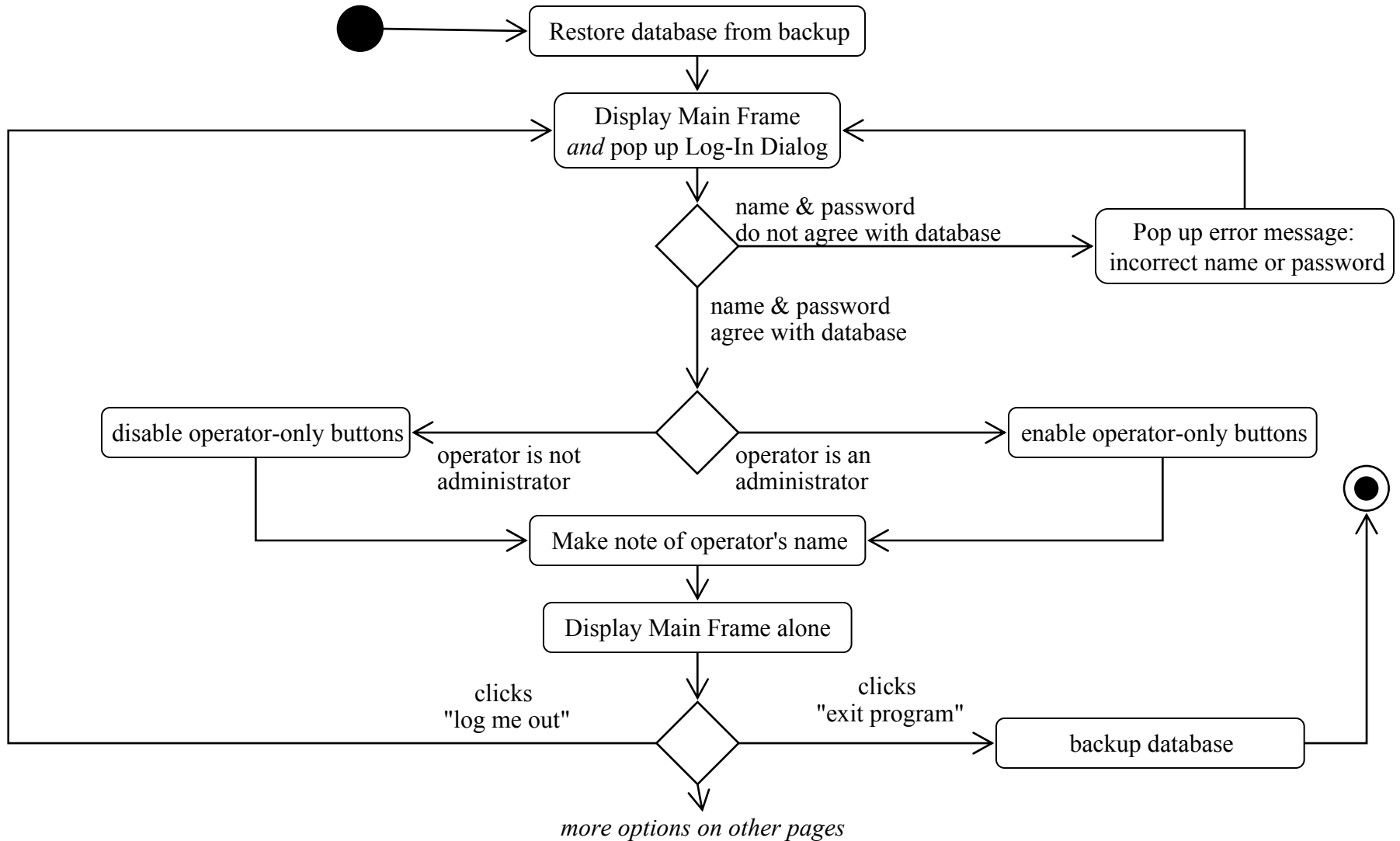


General Notes About My Activity Diagrams

In my design, there are many buttons to click on the main frame, each with associated activities that will follow. There is a diamond following "display main frame alone" that has many, many choices. I couldn't fit all of these choices onto one page, so I've split them into several pages in a way that should be fairly easy to read.

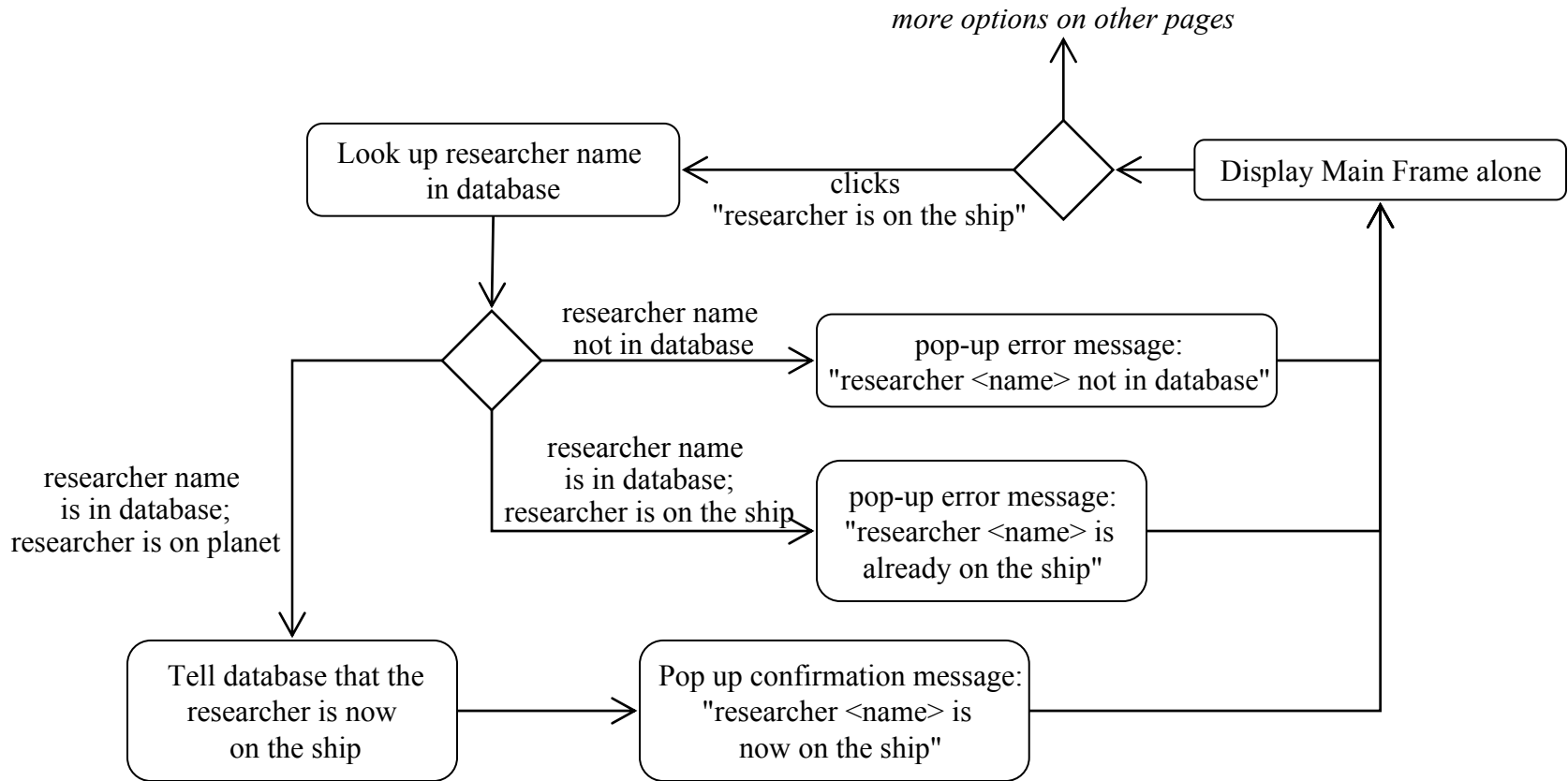
In Part 6 (submitting exposure data), I spelled out the arithmetic fairly precisely. It's OK if student activity diagrams were a bit more vague than I was. I just wanted to make it very clear for implementation purposes.

Activity Diagram, Part 1: Program Start & End, Log In and Log Out



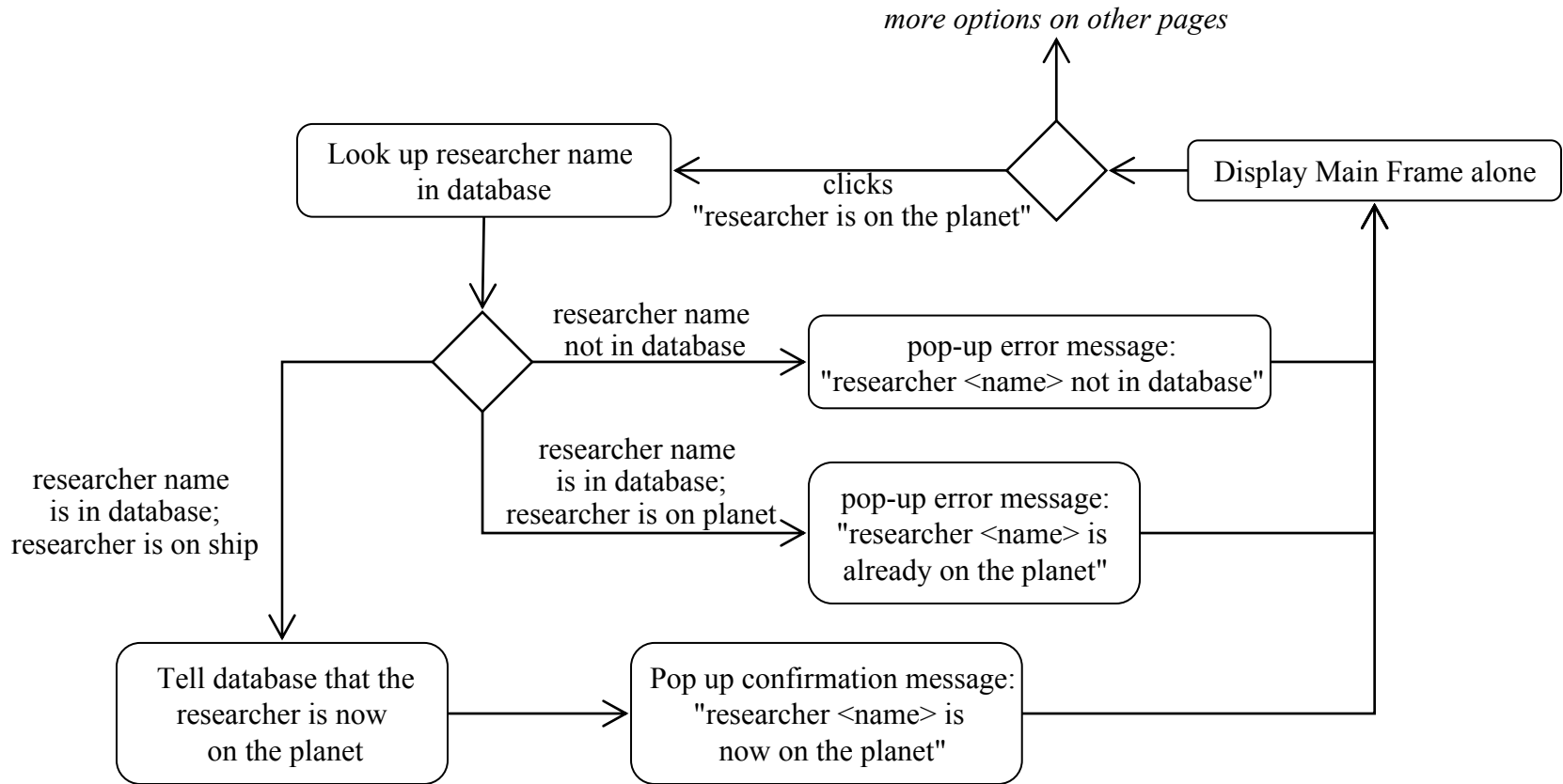
The operator-only buttons are: "add new operator", "delete new operator", and "change recall number". If you want to make them invisible instead of disabling them when they don't apply, that's OK too. By "make note of operator's name, I mean store it in a variable that you can use later on if the operator decides to change its password.

Activity Diagram, Part 2: Researcher Returns To Ship

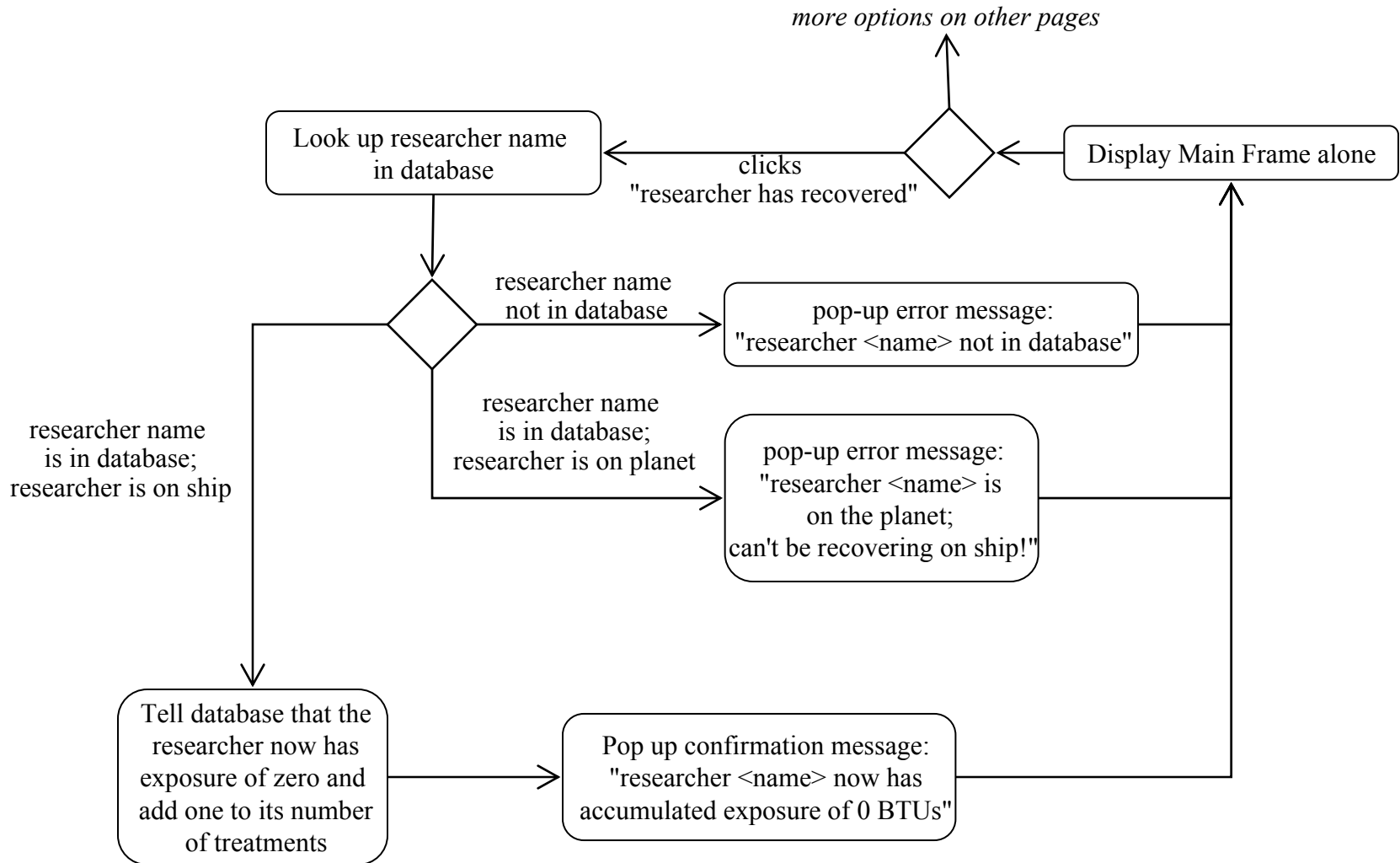


If the researcher name field is empty, this should be an error for all actions relating to researchers. However, this wasn't a requirement and I'm trying to keep this design from getting too complicated. So we'll say that there might be a researcher named "".

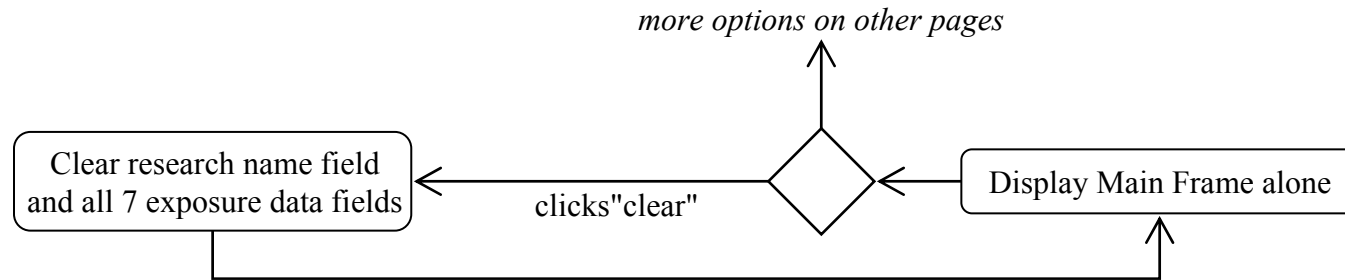
Activity Diagram, Part 3: Researcher Leaves Ship



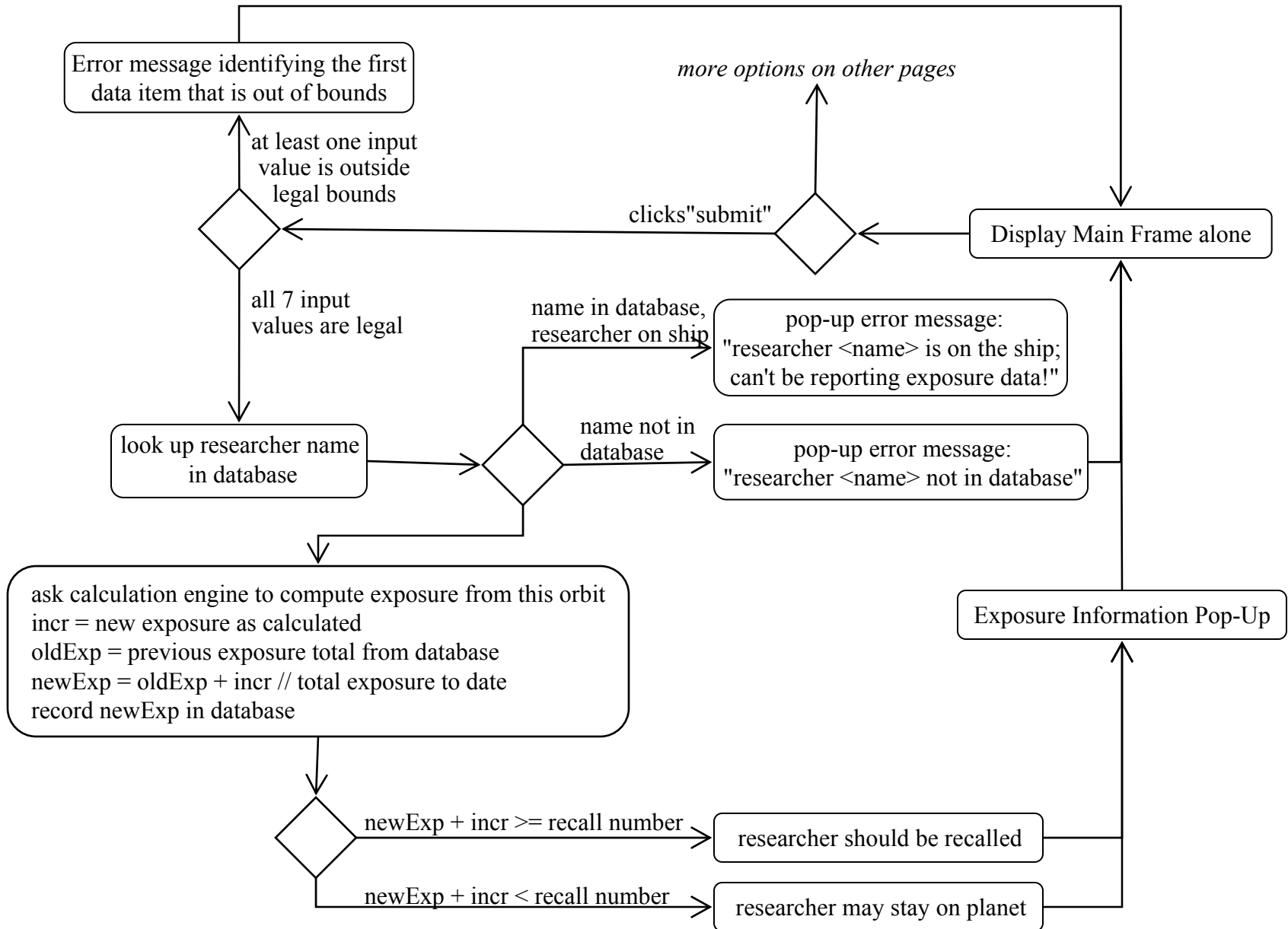
Activity Diagram, Part 4: Researcher Is Treated



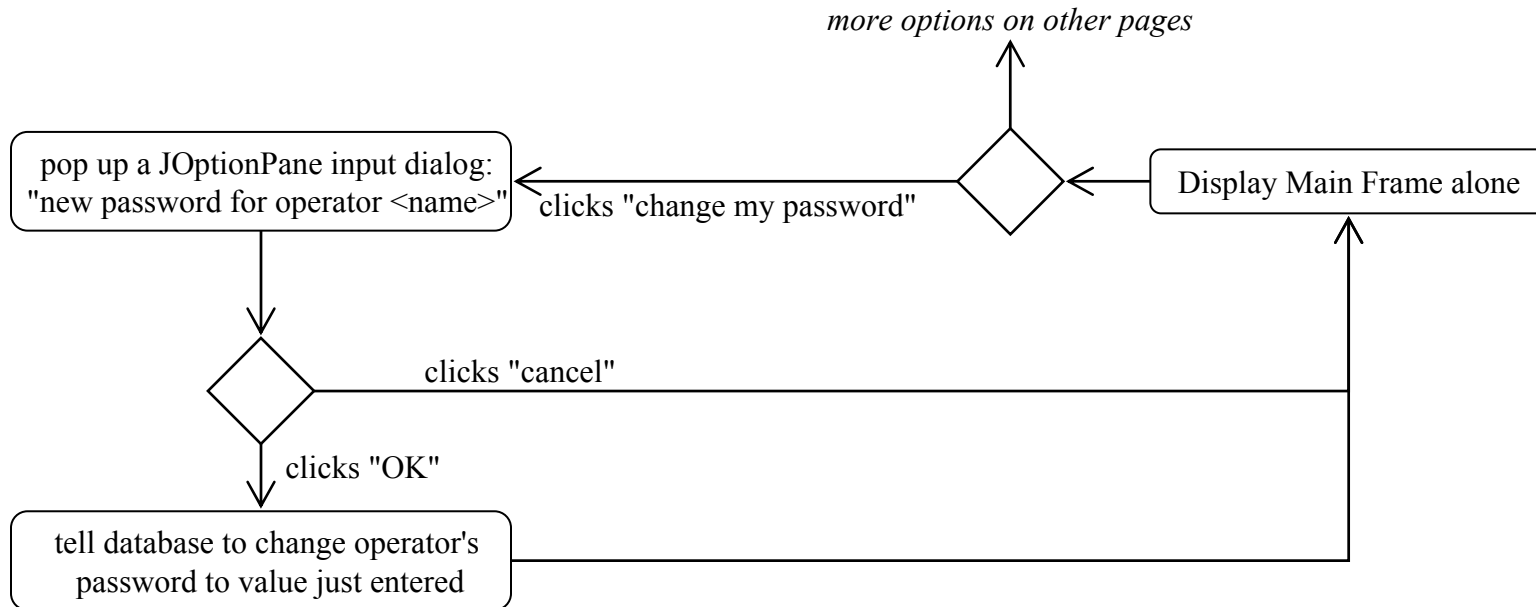
Activity Diagram, Part 5: Clear Exposure Data



Activity Diagram, Part 6: Submit Exposure Data

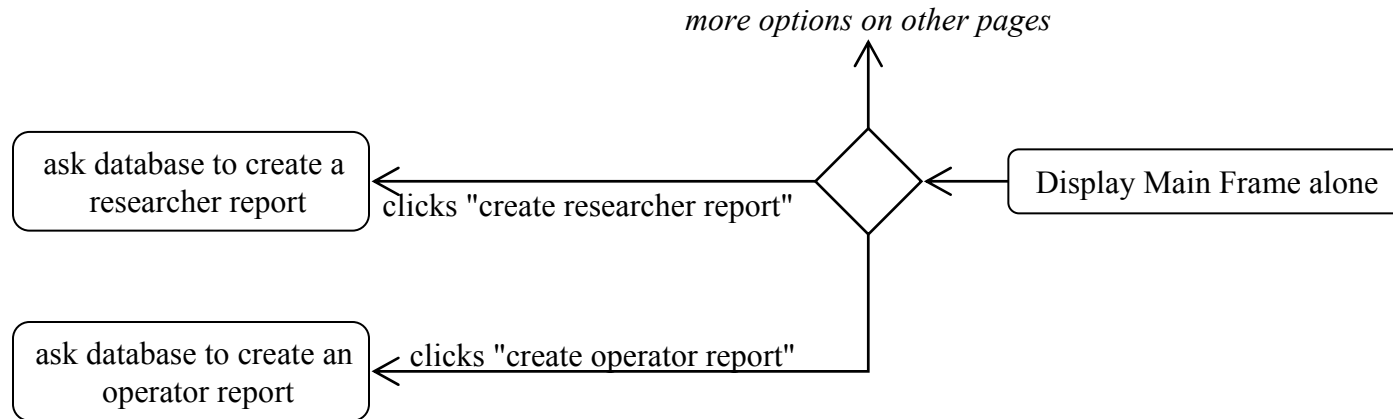


Activity Diagram, Part 7: Change Operator's Password



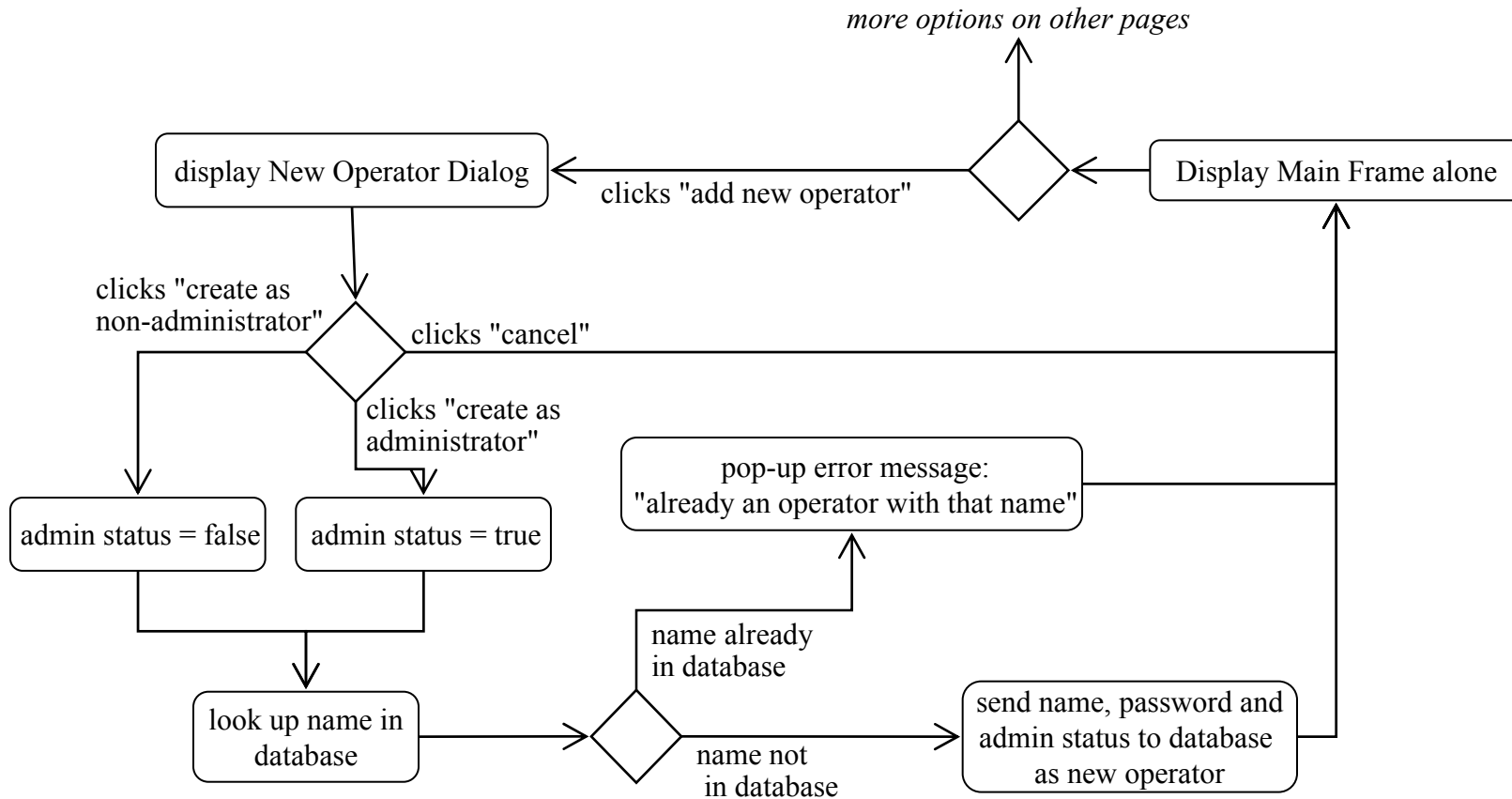
In this section, we're using the operator name that we recorded in Part 1, when the operator logged in. As noted with the log-in dialog picture, ideally we wouldn't echo the password when it is entered. But to keep things simple, it's OK to use a JInputDialog and let it echo the password.

Activity Diagram, Part 8: Create Reports



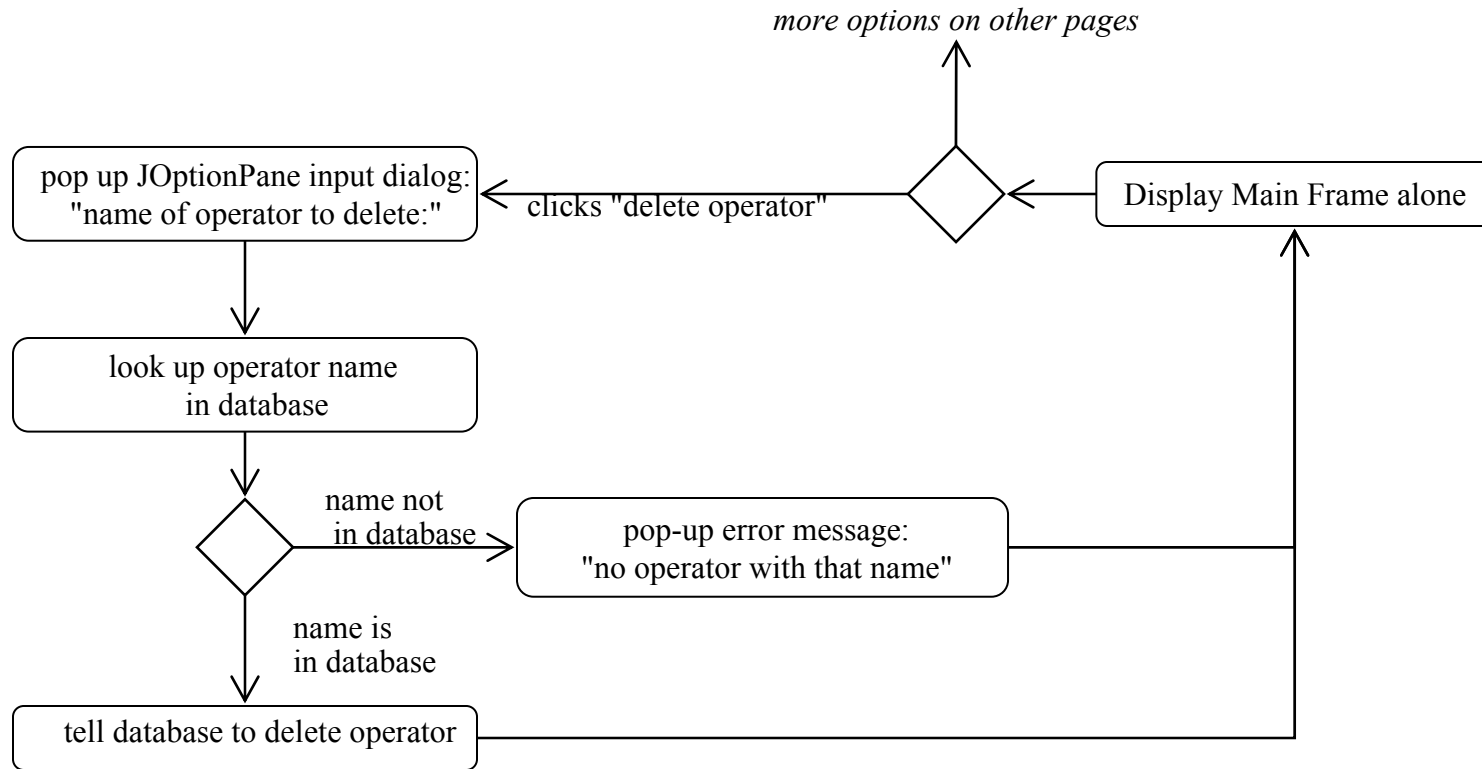
The database will prompt for a file name and pop up an error message if there are any I/O errors.

Activity Diagram, Part 9: Add an Operator



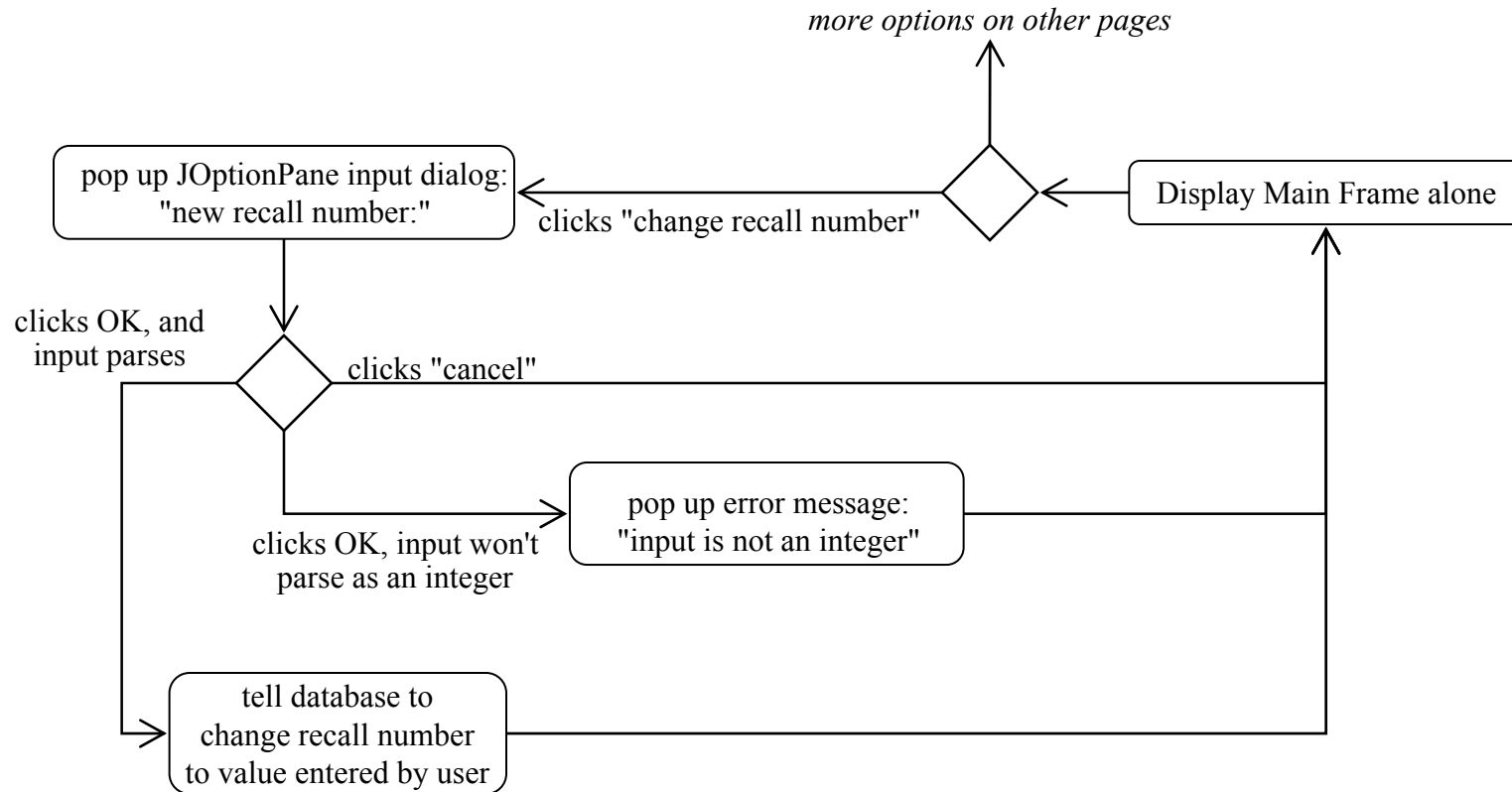
No checking is needed here to make sure the current operator is an administrator. If it is not, these buttons will be disabled or invisible. There was no explicit requirement to check to make sure a new operator was not already in the database, so it's OK if you left this check out of your design.

Activity Diagram, Part 10: Delete an Operator



As on the previous page, no checking is needed here to make sure the current operator is an administrator. There was no explicit requirement to check to make sure a deleted operator does exist, so it's OK if you left this check out of your design.

Activity Diagram, Part 11: Change Recall Number



As on the previous page, no checking is needed here to make sure the current operator is an administrator. There was no requirement about legal limits for the recall number, so any integer is OK. We will have to trust the administrators not to enter something silly.