REI Buy and Hold Python Application.

# Problem Statement or the Solution Requirements or Specifications

## Initial Requirements:

1. Create and input file (text format) for the GUI. I would like to be able to automate the creation of these input files to make rapid calculations easier. Ideally we end the file type with something like '.bah'
2. Add a save and save as function to the GUI which will then save all the inputs into a input file that was defined in item 1.
3. Add a load function to the GUI to allow the user to load an input file into the GUI and have all parameters defined.
4. I would like to define an 'about' section from the file menu. This way we can put in the current program number and basic information about the GUI.
5. From the file menu if the 'New' item is clicked I would like this to clear out all inputs from the GUI.
6. From the file menu I would like the 'Execute' item to do the same function as the generate report button.
7. Help with creating a report template that is easy to follow, visually pleasing, and professional. I will need help in this area as visual display is not my area of expertise. I would like to have both an HTML version of the report and then to convert the HTML version to a PDF file as well.
8. When the generate report button is clicked (or 'Execute'), I would like a file explorer window to open so the user can save the location of the report and name of the report manually. I would also like this to be an input for the input file (again so I can write an algorithm to mass-produce input files).

## Additional development:

1. On the 'Reports' tab I would like to have checkboxes that the user can click to add items to the report. My idea to make it easier is that each checkbox would be a separate page so that it is easy to create reports of different sizes. The additional items that I would like to see in the report should be easy to add as the mathematics has already been done or is just a few more simple functions that I can easily write myself.
2. Ability to batch reports by giving a directory location with all input files or with the ability to cmd prompt/terminal.
3. The 'Reports' tab has a progress bar that is currently not being used. I would like to add functionality to this bar.

## Notes:

1. For item 11, we can discuss at a later date the exact items that we would like to have for report generation.

## Additional Resources

* [Google Sheets Spreadsheet of the Calculations](https://docs.google.com/spreadsheets/d/1unZwMxAvYxwAO5Z0QKXPxj7i7oAVPzeNkO9DpWFbHWE/edit" \l "gid=1840834887)
* My email address: [john.steiner@steinerforesti.com](mailto:john.steiner@steinerforesti.com)
* [Idea for Report Look](https://www.rentgrace.com/how-much-will-my-denver-property-rent-for)
* [Additional Report ideas](https://finomad.com/post/2018/4_21-ultimate-spreadsheet/)