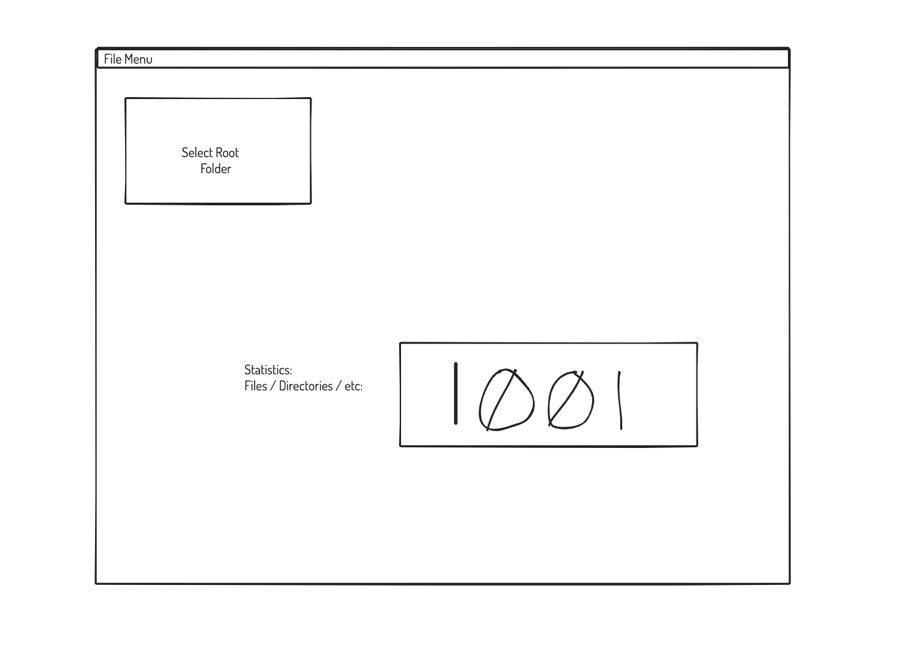
# Analysis:

* 1. The task is to implement a GUI that allows a user to select a directory and list the number of files in the directory. This all must be done recursively.   
       
     The state at program start would be the local users directory. A GUI will open for a user to select which directory they would like to look inside of. They will then see a count of all files in the directory recursively displayed to the screen.
  2. The major steps of processing this problem are opening a gui, getting the local root directory, displaying the window. Taking a click action that allows the user to select a directory, and listing all files in the directory continuing to walk down the folder structure calling the same “count files” command that will return an aggregate of all files.   
       
     Recursion is having a method that will call itself until a sentinel condition is triggered causing a return that will walk back up the call stack.
  3. The base case will be any folder that has no additional directories (excluding ‘.’ and ‘..’)

# Design:

Graphical user interface, text

Description automatically generated