

Technical Assignment

Please complete the following technical assignment. You can complete the project in any technology or language you choose, however the solution must be suitable for a demo and be able to be reviewed at a source code level using standard text editing tools.

CLASSIFIED EMAIL FILTER

You have been hired by the White House to write software to detect potential classified mail being exchanged in non-secure email accounts. Your software will act as a filter to test the incoming email text, detect if the email might be classified, and additionally replace any sensitive text with censored ***** characters.

Please write the core code as a function that accepts as parameters:

- a list of classified words/phrases
- the email text

The function should return

- true/false flag - If any of the classified words or phrases were located in the email
- censored text – a new email text where the classified words or phrases have been replaced with asterisks, or the original email text if there was no classified material in the email

Around the core function you can write a wrapper of your choice that lets a user input test data, run the function, and see the result. Since our interest is in your use of programming logic, avoid the use of third-party packages to solve the algorithm of your core function.

If the requirements are unclear, just capture what the point of confusion was, what assumptions you made, and why. Keep the list to talk through later.

Thank you.