Technical Design Document Template

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Program Description:

Program uses a list of strings to analyze a test you input, then rates your prompt on how likely it could be a spam or scam.

Functions used in the Program (list in order as they are called):

1. **Function Name:** get_spam_words

Description: Return a list of 31 common spam-related words and phrases

Logical Steps: defines and returns a list

Returns: a list of strings...

2. Function Name: check_spam

Description: analyzes the user's message for words on the list

Parameters: the user's input

Variables: spam_words(stores spam words returned by get_spam_words()),

<u>message</u>(converts to lowercase for consistent comparison), <u>score</u>(counts how many words were found), <u>found_words</u>(stores the spam words that are found)

Logical Steps: get the list of spam words, convert the users message to lowercase, for each spam word check if its in the text, if found in the text increment score and add the word to a new list of found words.

Returns: a new list that shows a number of spam found and a text describing how likely it is to be spam and the words found.

3. Function Name: spam_rating

Description: rates how likely it is to be spam, or scam... see what I did there, it rhymes! **Logical Steps:** use an elif, if, else statement to assign a rating based on the score:

0 = not spam

1-3 = low

4-7 medium

8 or more = high

Returns: a string rating(not spam, low, medium, high)

4. Function Name: Main

Desription: Holds all the code and other functions

Logical step: Calls all the code over

Logical Steps:

- 1 the program starts by prompting the user to enter a message.
- 2 the user input is passed to check_spam(message).
- 3 check_spam() calls get_spam_words() to get the list of spam words.
- 4 it calculates the score and which words were found, then returns them.
- 5 the score is passed to spam_rating(score) to get the spam likelihood.
- 6 finally, the program prints a result

Link to your repository: https://github.com/DanielGutierrezzz/spam_detection

Output Screenshot:

```
Enter your email message: free prize if you click this link

--- Results ---
Spam Score: 3
Spam Likelihood: Low
Spam Words Found: free, prize, click this link

Process finished with exit code 0
```