



Software Engineer Coding Challenge

Background

Have you ever written an email when you were angry, only to regret sending it an hour later? What if your email application can alert and even prevent you from sending an email if it detects that you're in an angry state?! Well, this is what this challenge is all about.

Description

Your task is to create a simple Windows application (WinForms or WPF) with the following requirements:

- The application will contain just one form to "Send Email" with "To", "Subject", "Body" text fields, and a "Send" button. (See below for a UI example)

A screenshot of a Windows application window titled "Send Email". The window contains three text input fields: "To:", "Subject:", and "Body:". The "Body:" field is a large text area. To the right of the "To:" and "Subject:" fields is a "Send" button. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

- When the user clicks "Send", the application will determine if the user is in an angry state or not.
- If anger is detected, a message is displayed to the user telling them that they cannot send the email at this time, and instructs them to try again later.
- If no anger is detected, a "Sent!" message is displayed.
- The application should be written in C# using .NET 6.0 (or later).

Anger Detection

Our data science team determined that typing speed is a good predictor of the user's emotional state. Their research found out that if the user is typing at a speed **above 400 keystrokes per minute**, then they are more likely to be angry.



Testing

The project should include a test suite to ensure that the application is producing the expected behavior, and to ensure stability and maintainability in a production environment.

Deliverables

A .zip file containing:

- All code used to build the application
- .git folder
- Build instructions
- Instructions for running the tests
- Any other relevant documentation
- If any, known limitations and/or future enhancements

Note

Please do NOT share any of the code/data from this challenge, or post it on a *public* Github repository.

Good luck!