

Programming Interview Exercise

To facilitate a walkthrough of code as part of the technical portion of the interview process, we would like you to create an application with user interface according to the following specifications:

Develop a demonstration application to collect data for a technical support request system and list valid technical support requests that have been submitted. When valid, the support request data should be stored in a file or database and displayed in a list of support requests.

- 1) Create a form (Technical Request Form) to collect the following:
 - a. Requestor Email Address
 - b. Request Description (limit 1000 characters)
 - c. Request Due Date
- 2) Create a submit button on the form to submit the collected data for validation.
 - a. It is your choice if you want to do some validation as the data is entered.
- 3) Validate the data entered
 - a. Email address should be in a valid email address format.
 - i. Email address validation can be complicated; simple demonstration validation is fine for this exercise. (e.g. you can check for the existence of an @ sign and check minimum and maximum length of the string).
 - ii. When not valid display a message like "Invalid email address"
 - b. Request Description should be at least 100 characters in length and no more than 1000 characters.
 - i. When not valid display a message that indicates if the content is too short or too long.
 - c. Request Due Date should be a valid date in the future no more than 1 year from the current date.
 - i. When not valid display a message that indicates the issue with the date. (e.g. "Date is not a valid date" or "Date is too far in the future. The request due date cannot be more than a year from today.")
- 4) When the data entered is valid, write it to a file or database. This implementation will be up to you.
- 5) Create another form (Technical Request List) to display the list of valid requests.
 - a. Read the requests from the file or database.
 - b. Order these requests by earliest due date.

Expectations:

The expectation is that this will take a few hours. We ask that you make the project source code accessible to us via an internet-based code repository or by internet file share (Google Drive, Sharepoint, Microsoft Teams, etc.) Be prepared to demonstrate your application through a screen share or prepared screen shots and code walkthrough. Please include any setup instructions to build/run your application locally. Please avoid using any custom controls or components that are not free/open source or require special licensing. We hope that you have fun with this exercise and look forward to reviewing your work.