# A task for candidates for full-stack developer (C#, JavaScript).

## Prerequisites

Depending on the project, our company works with Vue or React on frontend. It is not a problem if you didn’t work with them. You must want to learn them though.

## Part 1

You need to develop a mini application for submitting web forms, storing submissions, viewing, and searching them.

1. Create an arbitrary form with CSS and Vue or React as a JavaScript framework. Say, a contact or order form with at least five fields of different types: text, drop-down, date, radio, checkbox.
2. Implement validation for the form fields.
3. Implement list of form submissions with ability to search for submissions.
4. Implement REST-service using .NET core and C#:
   1. The service should provide all necessary methods for your frontend.
   2. It should allow receiving and storing submissions without hard coded models. Imagine there is another frontend application with different form fields that talks to the same backend. Backend should handle this.
5. Use [In-Memory database](https://learn.microsoft.com/en-us/ef/core/providers/in-memory/?tabs=dotnet-core-cli) to store your data. It is easier for us to review your task this way. No need to set up infrastructure on our side. Anyway, imagine, you are working with a real database when creating entities
6. Pack all JS- and CSS-files of the project into a single file and minify it with the help of build system of your choice (Webpack, Vite, CLI specific to your JS framework).

The case in the task is quite basic but consider it a real-life application. Thus, try to create good architecture, level of abstraction, and UX. We will evaluate the quality of your code, the usability of the UI and the architecture.

## Part 2

Imagine your web forms also support attachments. Attachments can be relatively large (~100 Mb). Describe in a text message how you would handle storage and ability to download those attachments from the submissions list. Consider that there may be tens of thousands of submissions with multiple attachments each. Describe architecture, data structure, REST API.

## Results

Send results to [recruitment@plumsail.com](mailto:recruitment@plumsail.com) with the link to your HH resume.

## Deadlines

There is no strict deadline. We understand that you may be working on another job. It would be great if you could complete it in a week.