Software Engineer Interview - Practical exercice

Context

The objective of this exercise is for the candidate to develop a small self-contained web application.

The candidate shall develop it as he wishes, in accordance to some constraints identified below.

The purpose is to have a small example of a "real" app using the best available techniques and guidelines available or aware to the candidate. It will not, of course, be a production-ready application, nor does it need to. It will serve as a basis for a small discussion on approaches, consequences of a given choice over another, and identified potential improvements (short, medium and long term).

A deployable artefact is ideal, but not essential.

Constraits

- Main programming language: JAVA
- Tech stack:
  - Spring
  - JPA (relational DB)

Requirements

Imagine a typical feedback submission form, present in any company website. "Please send us some feedback using the form below".

The requirements are purposely left vague, as the purpose is not to dictate a specific mechanism, but rather the general idea.

- <u>Story</u>: As any user, I want to be able to send feedback via an online form, so that my opinion is taken into account.
  - Acceptance criteria:
    - When accessing the page, a form with 4 fields appears:
      - Name (optional) : text - max 100 characters
      - Email address (optional), : text - max 100 characters
      - Contact type (mandatory): select box - possible values
        - general
        - marketing
        - support
      - Message (mandatory) : text - max 1000 characters
    - When successfully submitting the form using the **<u>submit</u>** button, the system shall display a message informing of success.

- <u>Story</u>: As a company administrator, I want to be able to list available feedback, so that I can decide what to do about it.
  - Acceptance criteria:
    - When accessing the page, a list appears with all feedback presently persisted. Attributes to show per submission:
      - ID,
      - Date of submission,
      - Name,
      - Email address,
      - Contact type,
      - Message.
  - Notes:
    - Possibility to **<u>sort</u>** on Date of submission
    - Possibility to **<u>filter</u>** on Contact type *(and list only feedbacks of type "support" for example)*
    - No need for authentication mechanism

Process

Once a suitable implementation of the above is done, please make the source code available and provide us with the location.