



Test Assignment

The assignment is to build UI + API applications (2 separate ones) with the following functionalities:

- UI application displays a form and table of data polled from the API (list of encrypted values).
- The form must include a text input and “Encrypt” & “Decrypt” buttons:
 - Pressing “Encrypt” in the form, the provided text value is sent to API, encrypted and saved into the database and a new record appears in the UI table.
 - You can select a row from the table, the encrypted value is placed into the form’s text input, where you can press "Decrypt" to display the original value.
/Or press “Encrypt” where the encrypted value is simply encrypted and saved again.
- The key pair for encryption and decryption must be stored in the API application (you decide on the best solution).
- API functionality must be tested with Unit tests.
- Additional points will be given if authentication is added and the key pair is connected to the user (not using one single key pair for everyone).

Tech limits:

- The API application should use the Spring (Boot) Framework.
- Java SE 8+.
- In-memory database for storing encrypted values.
- Use the JavaScript native Fetch API instead of jQuery for polling data from API application. Otherwise, UI frameworks/libraries such as React/Angular are most welcome for developing the UI (which already should satisfy the requirement in the previous sentence).