Chatterbug Ltd. Coding Excersise for Junior Full Stack Developer

Objective:

- Develop a Rest API using Fast API that allows users to request new password based on specified criteria
- **Optional**: Create an additional Fast API route that intigrates a third-party API's (example: Weather, Bitcoin price etc.).

Requirements:

1. **API End Points:** Create an endpoint '/generate-password' which accepts post requests.
2. **Request Payload:** The endpoint should accept a JSON payload that contains a 'length' field that indicates the length of the password to be returned.
   a. **Optional:** Add any additional fields to improve the password generator.
3. **Password generator logic:** using the fields given in the request payload, generate a Password. (Password should be secure as per 'password security best practices')
4. **Response:** Return a JSON response with generated password and length of password
5. **Error Handling:** Implement error handling for invalid inputs.
6. **Documentation:** Write a README.md briefly explaining how to setup and use the API to test.
7. **Github:** Host the code on the GITHUB repository to be accessible by Chatterbug Ltd for evaluation.

Optional:

1. **API End Point:** Create a custom API endpoint which accepts either GET/POST requests.
2. **Third-party API Integration:** Integrate an open-source third-party API (of your choosing) to retrieve and post data.
3. **Response:** Return a JSON response containing data from the third-party API.
4. **Note:** Prefer showcasing creative APIs or presentation methods for API integrations.
5. **UI/UX:** Allow requests to be made via Swagger, Postman, or similar tools, or present a simple frontend UI for input and output (e.g., Jinja2-HTML, Vue.js, React). Include documentation.