Loan API

- I developed the API with JAVA 21 and Spring 3.4.2. I also implemented the bonus feature and for the role management one username was required to recognize the customers. I decided to store tckn for the basic authentication username.

- The application is initialized with 3 customer info. One of them is admin user which has 11111111111 as tckn info.

- For the encryption of passwords, I used BcryptPasswordEncoder with 12 strength.

- I put junit dependency on pom.xml but I had not enough time to implement some unit test. I already have hands on experience in this area but I think you can ask me about testing when we meet at interview.

- In this API, I throw the exceptions as RuntimeException but I put a ControllerAdvice to catch them properly.

- I made swagger configuration in the project and got the ui interface as document.

- All services are working properly and if we made an interview, I can show all the flow on my local computer.

To see the happy path scenory, you can run these curl commands;

```
1) curl 'http://localhost:8080/create-loan' \
--header 'Content-Type: application/json' \
--header 'Authorization: Basic MTExMTExMTExMTI6eXNmMTIz' \
--data '{
    "customerTckn": "11111111112",
    "loanAmount": 1000,
    "interestRate": 0.5,
    "numberOfInstallment": 6
}'

2) curl 'http://localhost:8080/list-loans/11111111112' \
--header 'Authorization: Basic MTExMTExMTExMTI6eXNmMTIz'

3) curl 'http://localhost:8080/list-installments/1' \
--header 'Authorization: Basic MTExMTExMTExMTI6eXNmMTIz'

4) curl 'http://localhost:8080/pay-loan' \
--header 'Content-Type: application/json' \
--header 'Authorization: Basic MTExMTExMTExMTI6eXNmMTIz' \
--data '{
    "loanId": 1,
    "amount": 1000
}'
```