Back-End (.NET)

Test Assignment

DESIGN A RESTFUL API FOR THE "SNEAKER COLLECTION" APPLICATION, INCLUDING ENDPOINTS, REQUESTS, AND RESPONSES.

- This task assesses the candidate's understanding of REST principles, API design standards, and ability to plan and design effective API endpoints. It also evaluates their attention to detail through structuring requests and responses and their foresight in considering various scenarios or use cases that might interact with the system.

- Make the proper use of HTTP methods (GET, POST, UPDATE, DELETE, PATCH) Consider including any strategy to handle large datasets.

FOLLOW DDD PRINCIPLES TO MODEL THE DOMAIN, IDENTIFYING DOMAIN OBJECTS WITHIN THE "SNEAKER COLLECTION" APPLICATION.

- This task tests the candidate's knowledge in Domain-Driven Design, checking if they can correctly identify entities, value objects, aggregates, and possibly bounded contexts. It examines their ability to structure complex business logic into a maintainable codebase.

- Consider patterns like the CQRS Pattern.
  Decouple your code from the database implementation.

IMPLEMENT ERROR-HANDLING MECHANISMS IN YOUR API. ENSURE THAT APPROPRIATE HTTP STATUS CODES ARE RETURNED FOR DIFFERENT SCENARIOS.

- This task examines the knowledge of proper error handling. Make sure that the API is testable and returns correct error states.

IMPLEMENT JWT-BASED AUTHENTICATION UTILIZING EMAIL/PASSWORD TO VERIFY USER IDENTITY.

- This task examines the knowledge of web security, specifically through the use of JSON Web Tokens. The candidate should demonstrate how to handle user credentials securely, manage token generation and validation, and protect endpoints.

WRITE TESTS TO VERIFY THE DOMAIN LOGIC AND APPLICATION ENDPOINTS.

- The candidate demonstrates their commitment to the code quality by writing unit and/or integration tests. This task assesses their proficiency in testing, understanding of when and what to test, and potentially their familiarity with TDD practices.

Resources

DESIGN

https://www.figma.com/file/BkIlzDuqHTV8GaXIt58fdI/Sneaker-collector

Final Result

DELIVERABLES

Share a link to the Git repository.
Share a link to Swagger with implemented endpoints.

SUBMITTING

Send it over to test@native.tech
The email's subject should be **Back-End Test Assignment — Your Name.**

DEADLINE

One week