

Creating a Quiz Service

👉 Introduction to the Quiz Service

After successfully implementing our Question Service, we now need to build our second microservice: the **Quiz Service**. This service will act as the primary interface for client interactions and will communicate with the Question Service to fulfill its operations.

In a microservices architecture, this relationship exemplifies how services work together - clients interact directly with the Quiz Service, which then communicates with the Question Service when it needs question-related functionality.

➤ The Quiz Service will handle three main operations:

1. **Creating Quizzes** - Generating new quizzes for users
2. **Retrieving Quizzes** - Fetching quiz details by ID
3. **Calculating Scores** - Determining user scores for completed quizzes

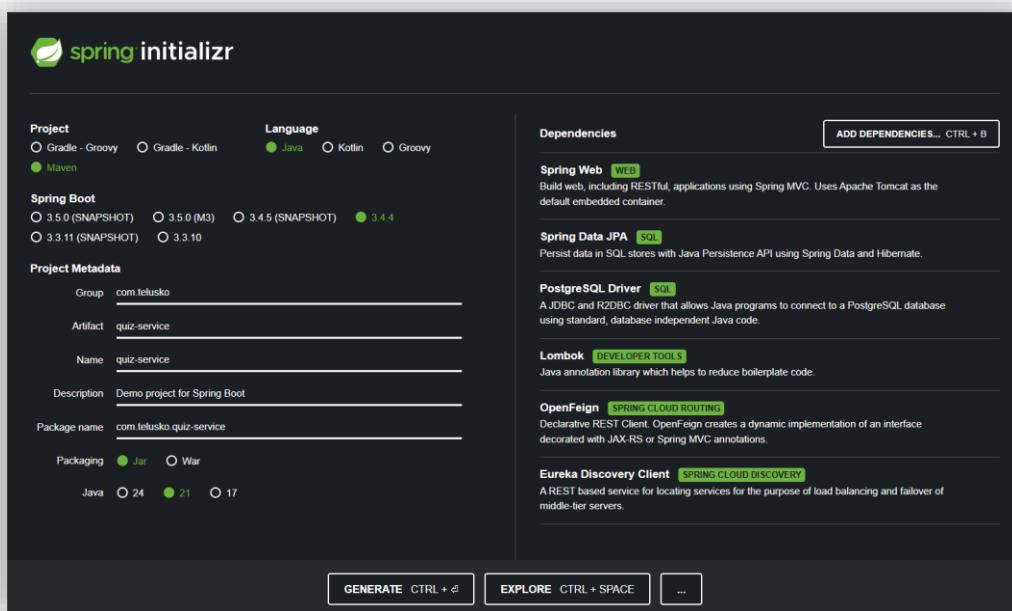
These operations represent the essential user-facing features of our quiz application.

➤ To create our Quiz Service:

Initialize a New Spring Boot Project. To initialize visit Spring Initializer (<https://start.spring.io/>) and name the project **quiz-service**.

➤ Add the following dependencies:

- Spring Web (for handling HTTP requests)
- Spring Data JPA (for database interactions)
- PostgreSQL Driver (for connecting to PostgreSQL database)
- Lombok (for reducing boilerplate code)
- OpenFeign (for service-to-service communication)
- Eureka Discovery Client (for service registration and discovery)



➤ Download the generated project and open it in your preferred IDE

👉 Reusing Code from Monolith

One advantage of transitioning from a monolithic application is that we can reuse much of our existing code:

- Copy all files from the original **QuizApp** project to our new quiz-service project
- Include the `application.properties` file
- Modify the database name in `application.properties` to **quizdb**
- Create a new database with this name in PostgreSQL
- Since we now have a dedicated Question Service, we can remove:
 - `QuestionController`
 - `QuestionDao`
 - `QuestionService`
 - `Question`

