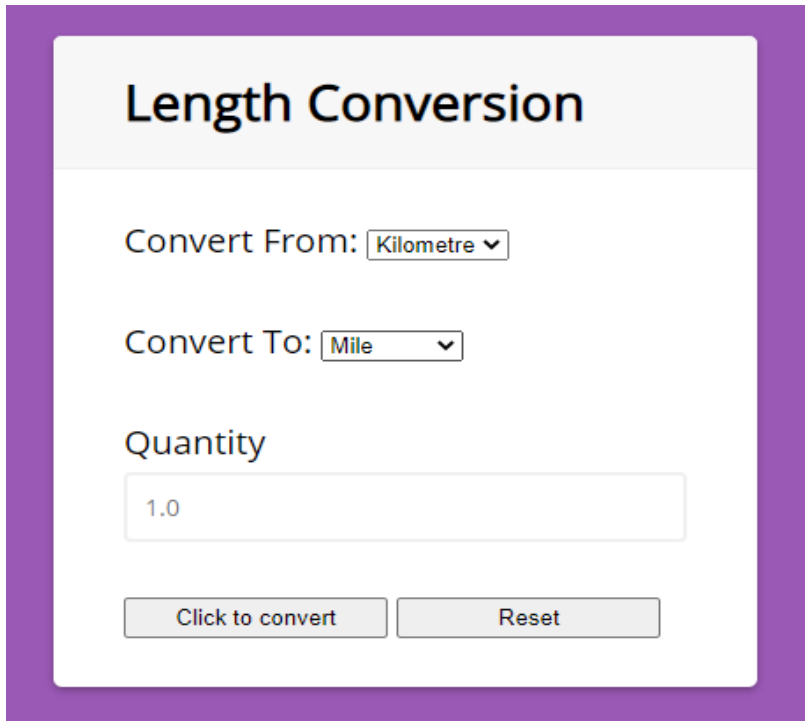# Length Conversion MiniProject

- The Project consists of UI which allows users to select values for 'From' and 'To' for Length conversion along with the quantity.
- The Users select the value and clicks on 'Click to convert' button and the result is displayed in the new window.
- The UI is developed using HTML5, CSS and Javascript
- The Back-end logic consists of 4 Micro services
    1. Length-multiple-service: Contains logic to connect to MySQL database using Spring Data JPA and retrieve values from the same.
    2. Length-conversion-service: Calls Length-multiple-service to retrieve the value of Conversion_Multiple and calculates the actual_value and returns to the User
    3. Netflix-eureka-naming-server: Both Length-multiple-service and Length-conversion-service registers with the Naming Server and is used for monitoring the same.
    4. Ribbon Client is used for Load Balancing between multiple instances of Length-multiple-service
    5. Zuul API Gateway is used for Logging.
- MySQL database contains the required Table.
- Server used is Tomcat and iDE is Spring Tool Suite

Languages/Technologies Used:

- UI : HTML5, CSS, JavaScript
- Backend : Java, REST Web services, SpringBoot, Spring Data JPA, Microservices
- Database: MySQL
- Server : Tomcat
- IDE : Spring Tool Suite
- Microservices:
    o Feign Client
    o Netflix Eureka Naming Server
    o Ribbon Client
    o Zuul API Gateway

Screenshots:

1. **Initial screen**

2. **Select the required values and click on 'Click to convert'**

3. **The required result is displayed in the browser**

localhost:8100/length-convert/from/Mile/to/Metre/quantity/22

Apps | New Tab | Welcome to Engine... | PDF to JPG - Conve... | Resize Images
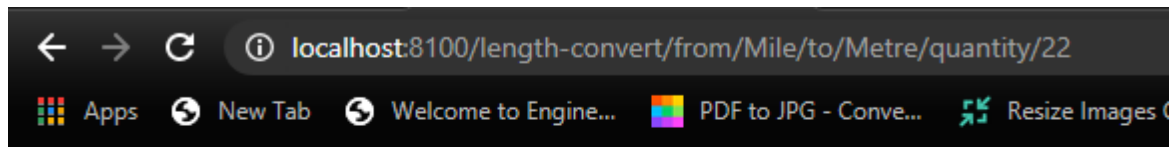
The value in Metre is 35405.4800

4. **Click back and click on 'Reset' button to select new values.**
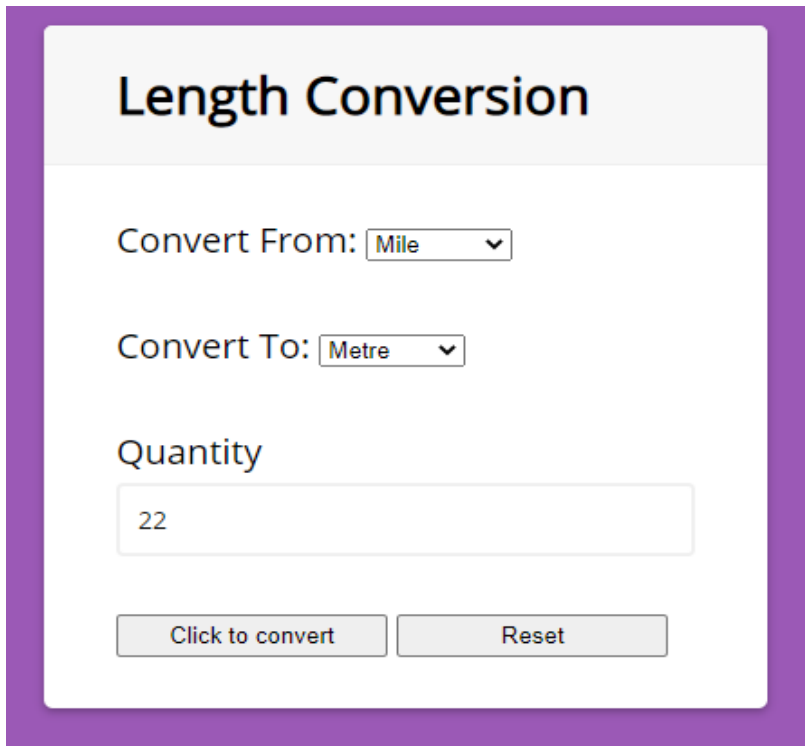
Length Conversion

Convert From: Kilometre ▾

Convert To: Kilometre ▾

Quantity

1.0

Click to convert | Reset

5. Eureka naming server running on port 8761

6. Database Table