

Length Conversion MiniProject

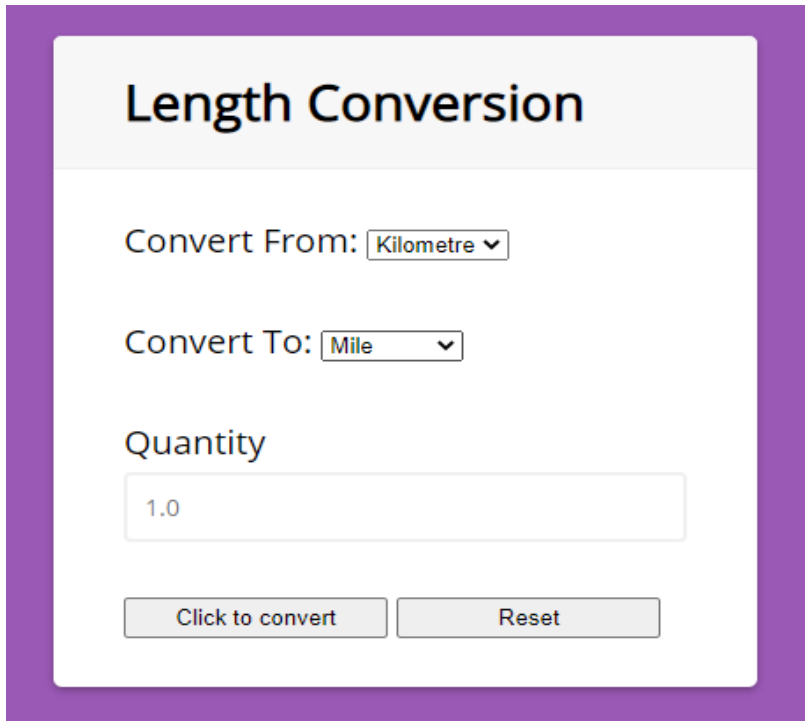
- The Project consists of UI which allows users to select values for 'From' and 'To' for Length conversion along with the quantity.
- The Users select the value and clicks on 'Click to convert' button and the result is displayed in the new window.
- The UI is developed using HTML5, CSS and Javascript
- 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:
 - Feign Client
 - Netflix Eureka Naming Server
 - Ribbon Client
 - Zuul API Gateway

Screenshots:

1. Initial screen



A screenshot of a web application titled "Length Conversion". The interface includes two dropdown menus: "Convert From:" set to "Kilometre" and "Convert To:" set to "Mile". Below these is a text input field labeled "Quantity" containing the value "1.0". At the bottom are two buttons: "Click to convert" and "Reset".

Length Conversion

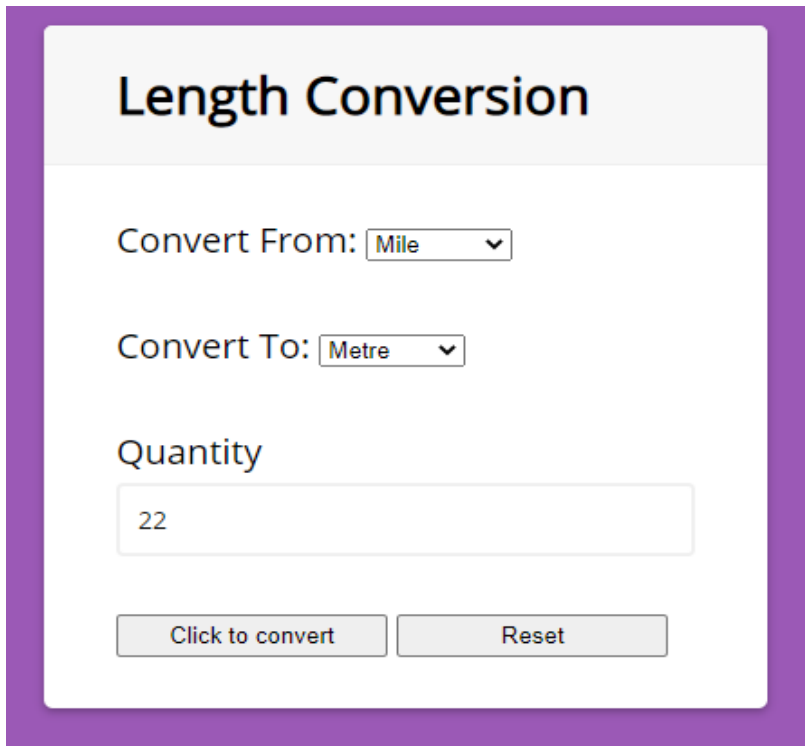
Convert From: Kilometre ▼

Convert To: Mile ▼

Quantity

Click to convert Reset

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



A second screenshot of the "Length Conversion" application. In this state, the "Convert From:" dropdown is set to "Mile" and the "Convert To:" dropdown is set to "Metre". The "Quantity" input field now contains the value "22". The "Click to convert" and "Reset" buttons remain at the bottom.

Length Conversion

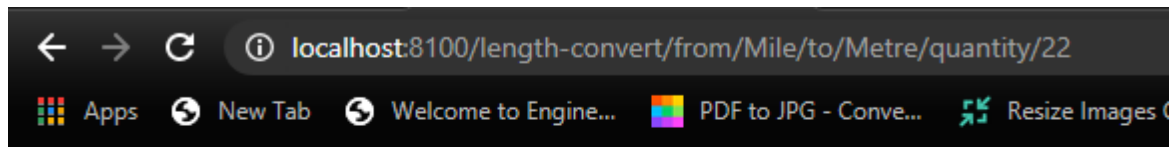
Convert From: Mile ▼

Convert To: Metre ▼

Quantity

Click to convert Reset

3. The required result is displayed in the browser




The value in Metre is 35405.4800

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

A screenshot of a web application titled 'Length Conversion'. The interface has a light gray header with the title. Below the header, there are two dropdown menus: 'Convert From:' and 'Convert To:', both currently set to 'Kilometre'. Below these is a text input field labeled 'Quantity' containing the value '1.0'. At the bottom, there are two buttons: 'Click to convert' and 'Reset'.

5. Eureka naming server running on port 8761

HOMELAST 1000 SINCE STARTUP

System Status

Environment	test	Current time	2020-07-19T10:54:06 +0530
Data center	default	Uptime	00:07
		Lease expiration enabled	true
		Renews threshold	6
		Renews (last min)	10

DS Replicas

localhost

Instances currently registered with Eureka

Application	AMIs	Availability Zones	Status
LENGTH-CONVERSION-SERVICE	n/a (1)	(1)	UP (1) - SMAP:length-conversion-service:8100
LENGTH-MULTIPLE-SERVICE	n/a (2)	(2)	UP (2) - SMAP:length-multiple-service:8000 , SMAP:length-multiple-service:8001

6. Database Table

	id	convert_from	convert_to	conversion_multiple
▶	1	Kilometre	Mile	0.6200
	2	Metre	Foot	3.2808
	3	Kilometre	Metre	1000.0000
	4	Kilometre	Foot	3280.8400
	5	Metre	Kilometre	0.0010
	6	Metre	Mile	0.0006
	7	Mile	Kilometre	1.6093

gth_multiple 1 ×