**UTILITY SERVICE (FIND PRIME FACTORS OF GIVEN NUMBER)**

It is a rest based application build to find the prime factors of given number. To run this application we need tomcat server version 8 or greater.

**Software used:**

Java : JDK 1.8

Jars : jaxrs-ri-2.26

Server : Apache tomcat 9.0.2

ID : Eclipse

**Java source code:**

Created two java files in application and is as follows:

1. UtilityServiceResource.java

It is service resource file which takes the request

1. PrimeFactor.java

It is java file contains actual prime factor calculation logic.

**Procedure:**

To run the application we need to deploy the UtilityService.war file on tomcat server with the help of tomcat manager. For testing the application we need to hit the below URL on RESTED or POSTMAN application which also known as browsers extensions.

**URL:**

http://<ip>:<port>/UtilityService/rs/utilityservice/primefactors/{numString}

**Description:**

|  |  |
| --- | --- |
| **Parameter** | **Description** |
| ip | IP address of server where rest application is running |
| port | Tomcat server local port i.e 8080 |
| {numString} | It is input field which passed by client. Length of input is Range: -9,223,372,036,854,775,808 to 9,223,372,036,854,775,807 |

**For Example:**

http://127.0.0.1:8080/UtilityService/rs/utilityservice/primefactors/8

**Result:**

Prime factor(s) are: 2 2 2