

GOVERNMENT OF INDIA

**MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP**

DIRECTORATE GENERAL OF TRAINI

**NATIONAL SKILL TRAINING INSTITUTE**

NSTI (W), Salt Lake, Kolkata-700091

**CERTIFICATE**

This is to certify that following trainees have completed their project titled

**“NSTI Smart Cloud Campus”**

**For IBM Program – IT, Networking and Cloud (Technical Diploma)**

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| |  |  |  |  | | --- | --- | --- | --- | | Ms. Arpita Roy | Mr. K. L. Kuli | Mr. G. C. Ramamurthy | Mr. Sarbojit Neogi | | IBM Faculty | ADIT Director | Principal | Section-In-Charge | |  |  |  |
|  |  |  |  |
|  |  |  |  |

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Create a Java Server Application in Eclipse and deploy it in IBM BLUEMIX PLATFORM

**Submitted by**

Sakshi Kumar Shreya Das

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Create a Java Server Application in Eclipse and deploy it in IBM BLUEMIX PLATFORM

The WebSphere Liberty architecture shares the same code base as the open sourced [Open Liberty](https://openliberty.io/) (link resides outside IBM) server runtime, which provides additional benefits such as low-cost experimentation, customization and seamless migration from open source to production. Eclipse makes a great local development environment for developing and deploying Java EE applications to Bluemix.

**Services and Tools Required**

***Eclipse***

***IBM Bluemix***

***mysql database***

***mysql-connector-java-8.0.11-bin.jar***

**Architecture**

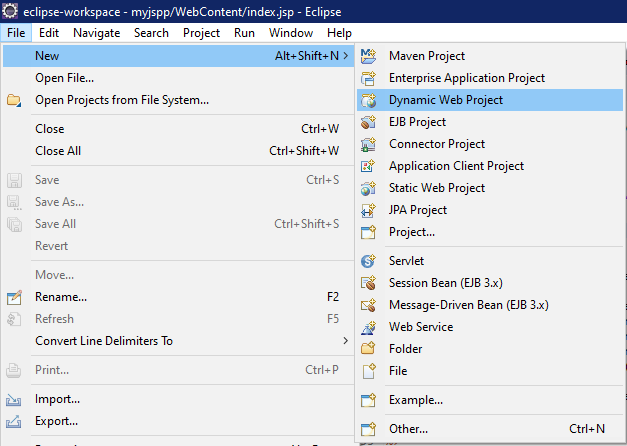
MYSQL DATABASE

Project Budget

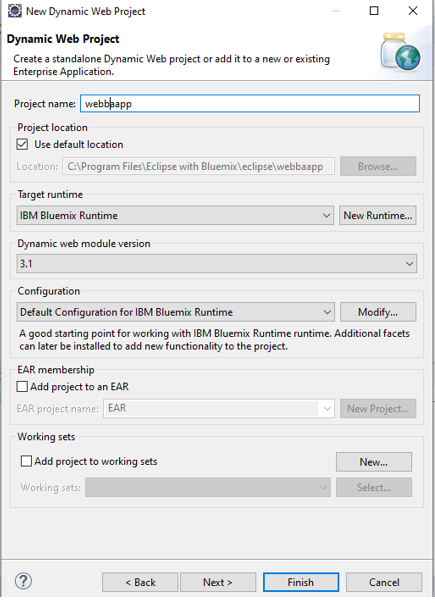
Here we don’t need to pay any price for making this project.

**Steps & Process**

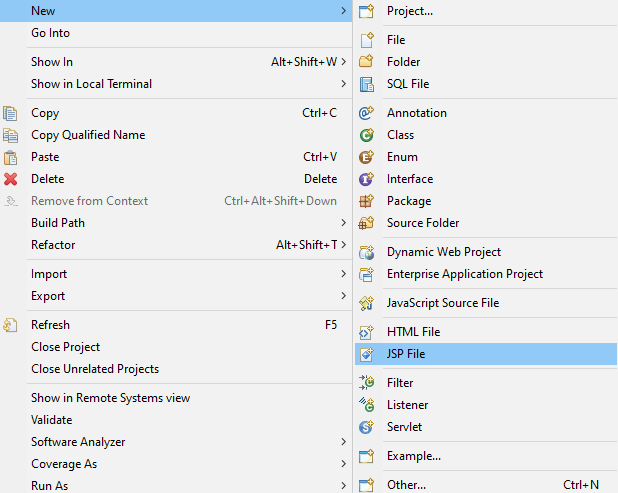
**Step: 1 – Creating JSP File**

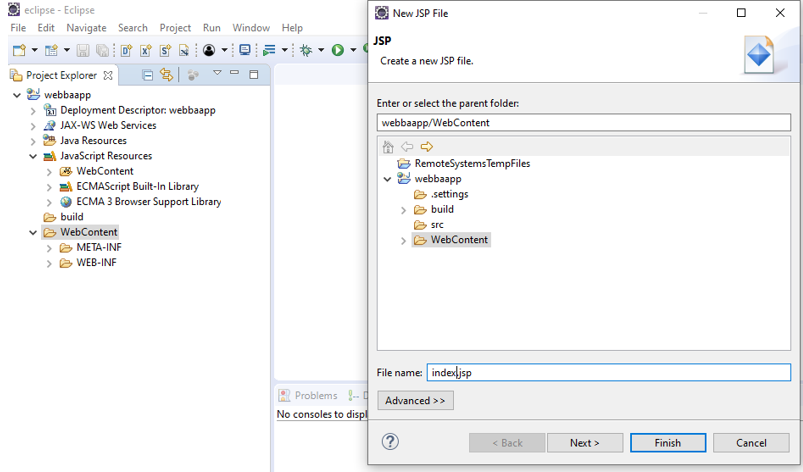
1. Open eclipse and create a new **‘Dynamic Web Project’**

Then write project name (for e.g.:- webbaapp) and click **Finish*.***



B) After creating the project, right click on the project and select a new jsp file with the name **“index. jsp”.**





C) And write down the code using file Name **“index. jsp”**

<%@ page language=*"java"* contentType9=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"* import=*"java.sql.\*"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Trip</title>

<style>

**body**

{

background-image:*url("download (1).jpg")*;

background-repeat: *no-repeat*;

width:*99%*;

background-size: *cover*;

}

*.header*

{

width:*85%*;

height: *60px*;

background: *white*;

margin:*70px 0px 0px 100px*;

}

*.head1*

{

height:*90px*;

width:*100px*;

float:*left*;

margin:*0px 0px 0px 100px*;

}

*.head2*

{

float: *right*;

display: *inline-flex*;

margin: *0px 30px 0px 0px*;

color: *black*;

}

*.head2* **ul**

{

list-style: *none*;

display:*inline-flex*;

}

*.head2* **ul** **li**

{

margin:*0px 20px 10px 0px* ;

padding:*7px*;

}

*.head2* **a**

{

text-decoration: *none*;

font-size: *25px*;

color:*blue*;

}

*.middle*

{

width:*30%*;

float: *left*;

}

*.middle* **p**

{

color: *white*;

font-size: *60px*;

}

*.content*

{

width: *350px*;

height: *580px*;

position: *relative*;

margin: *10px 0px 0px 700px*;

background: *linear-gradient(to top,blue,white)*;

opacity: *0.9*;

padding: *5px*;

margin-top: *100px*;

}

**h2**

{

font-family: *Arial*;

text-align: *center*;

}

**hr**

{

width: *50%*;

}

*.con*

{

top:*110px*;

transition: *6s*;

margin-left: *40px*;

font-size: *20px*;

}

**form** **label**

{

font-weight: *normal*;

display: *table-cell*;

vertical-align: *middle*;

font-size: *17px*;

text-transform: *uppercase*;

letter-spacing: *.15em*;

display: *block*;

margin-bottom: *10px*;

}

**input**[type=text]**,** **input**[type=date]

{

width: *80%*;

padding: *8px*;

margin: *5px 0 10px 0*;

display: *inline-block*;

border: *none*;

background: *#f1f1f1*;

}

**select**

{

width: *85%*;

padding: *8px*;

margin: *5px 0 10px 0*;

display: *inline-block*;

border: *none*;

background: *#f1f1f1*;

}

**button**

{

background-color: *darkblue*;

color: *white*;

padding: *14px 20px*;

margin: *8px 0*;

border: *none*;

cursor: *pointer*;

width: *85%*;

opacity: *0.9*;

font-size: *18px*;

}

**button***:hover*

{

opacity:*5*;

}

</style>

</head>

<body>

<div class=*"header"*>

</div>

<div class=*"middle"*>

<h1>Planing Trip To Anywhere in The Country?</h1>

</div>

<div class=*"content"*>

<h2>Book Your Trip</h2>

<hr><br>

<form action=*"#"*>

<div class=*"con"*>

<label for=*"fullname"*>Your Name</label>

<input type=*"text"* name=*"fulln"* class=*"form-control"*>

</div>

<div class=*"con"*>

<label for=*"activities"*>Activities</label>

<select name=*"#"* name=*"acti"* class=*"form-control"*>

<option value=*""*>Hiking</option>

<option value=*""*>Caving</option>

<option value=*""*>Swimming</option>

<option value=*""*>Skydiving</option>

</select>

</div>

<div class=*"con"*>

<label for=*"destination"*>Destination</label>

<select name=*"#"* name=*"dest"* class=*"form-control"*>

<option value=*""*>Himachal Pradesh</option>

<option value=*""*>Karnataka</option>

<option value=*""*>Jammu & Kasmir</option>

<option value=*""*>Goa</option>

<option value=*""*>Maharashtra</option>

</select>

</div>

<div class=*"con"*>

<label for=*"date-start"*>Date Travel</label>

<input type=*"date"* name=*"date"* class=*"form-control"*>

</div>

<div class=*"con"*>

<button type=*"submit"* name=*"btn"* value=*"SUBMIT"*>SUBMIT</button>

</div>

</form>

</div>

<%

**if**("SUBMIT".equals(request.getParameter("btn")))

{

String fullname=request.getParameter("fulln");

String activities =request.getParameter("acti");

String destination=request.getParameter("dest");

String date=request.getParameter("date");

System.out.println("Hello "+fullname+" your activities is "+activities+", Your Designation is "+destination+" and Your date is "+date);

}

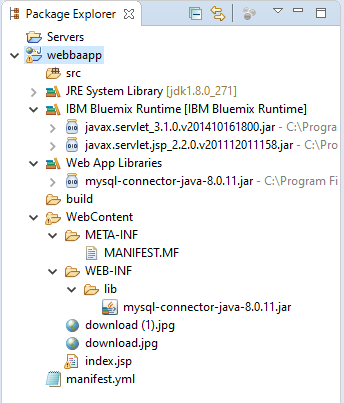
%>

</body>

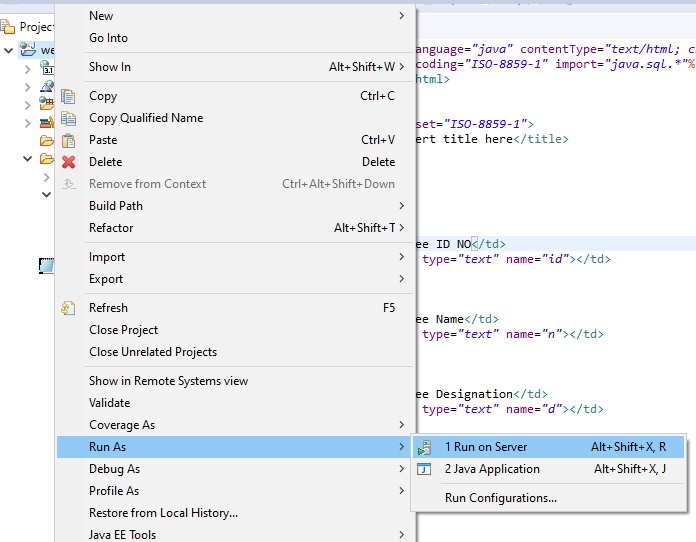
</html>

**Step: 2- Adding Files & Servers**

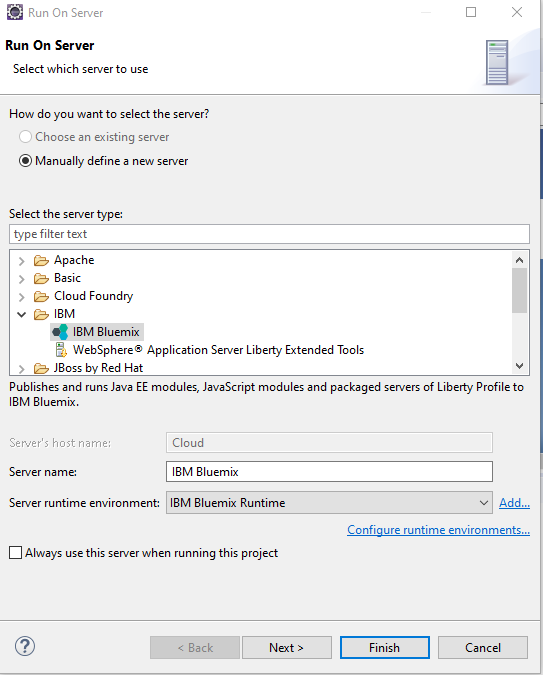
A) Next **“mysql-connector-java”** file paste into **“lib”** folder for connection



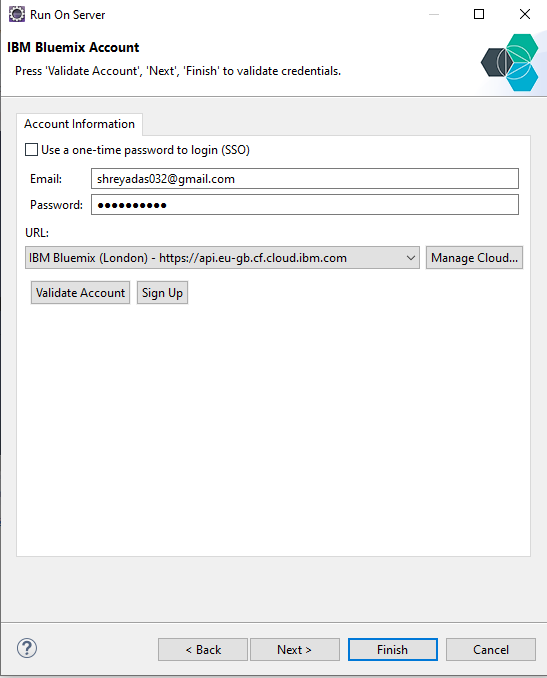
B) Next we have to go webbaapp and right click on **Run as**and then click **“Run on Server”**



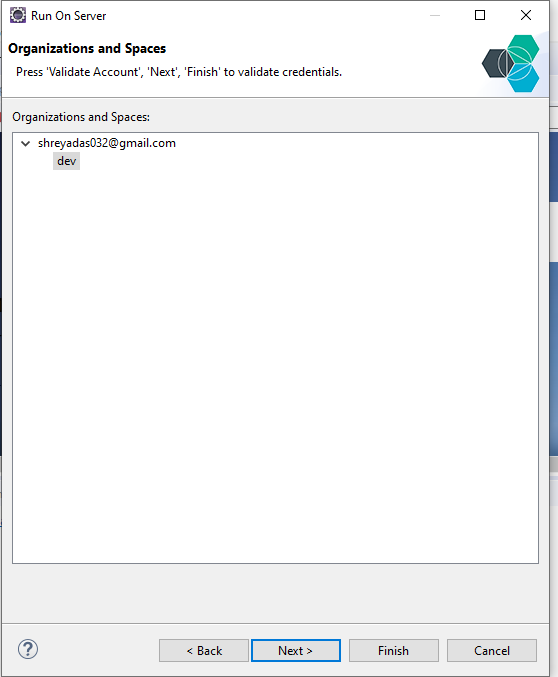
C) Now we have to select **“IBM Blumix”** and click on next



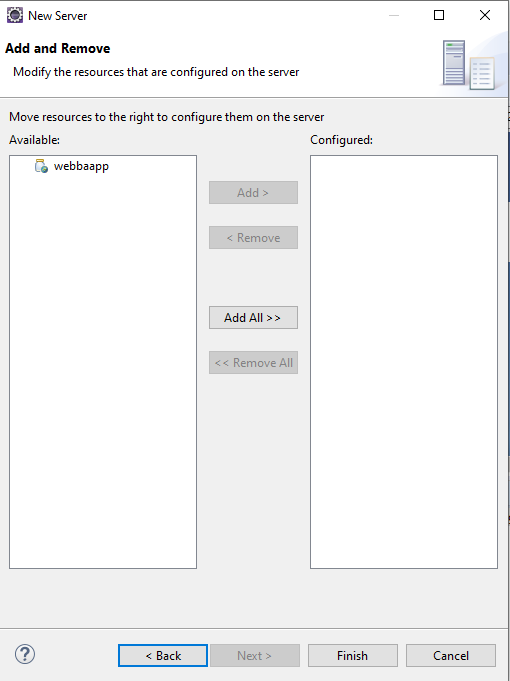
D) Now we have to put Email & Password and select **“Manage cloud”** then click **“Validate Account”** then click **“next”.**

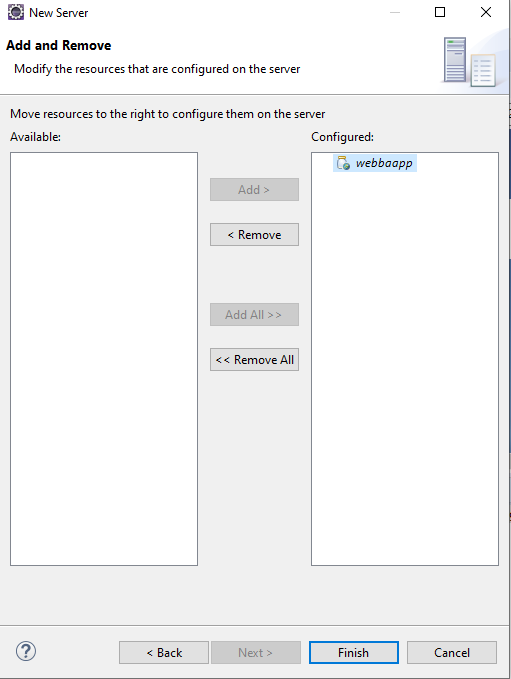


E) Click next.

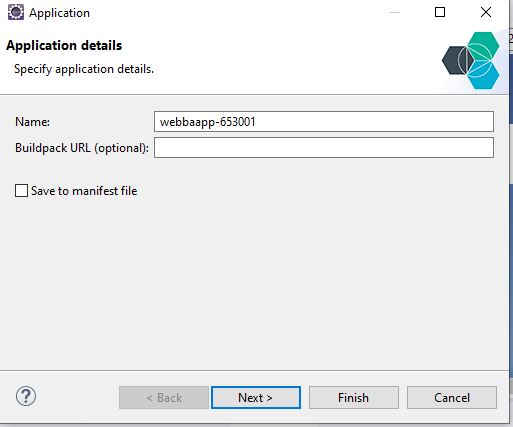


F) Then click **“Add**” and click **“Finish”**

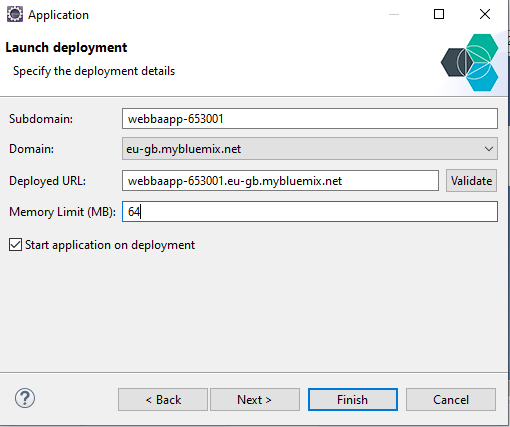




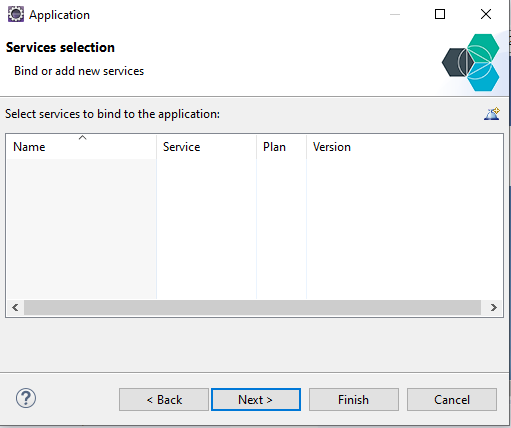
G) We have to create **mainifest.yml** and click next.



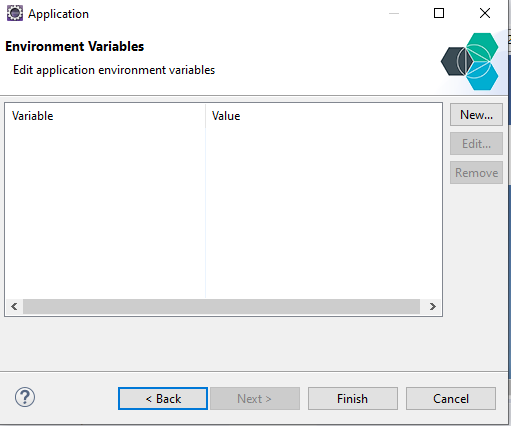
H) We have to put “**Memory Limit (256)”** then click next.



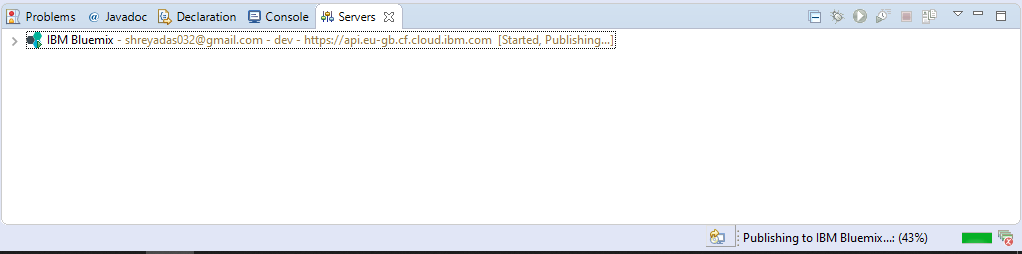
I) Click next.



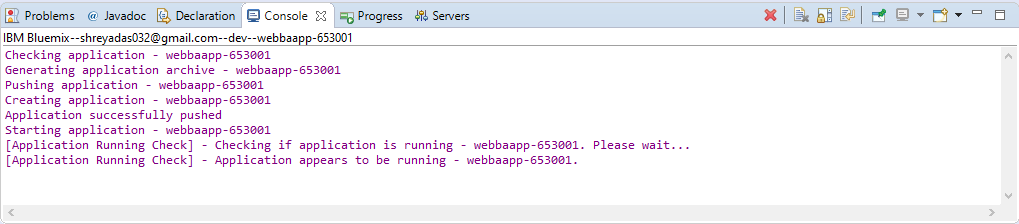
J) Then click finish.



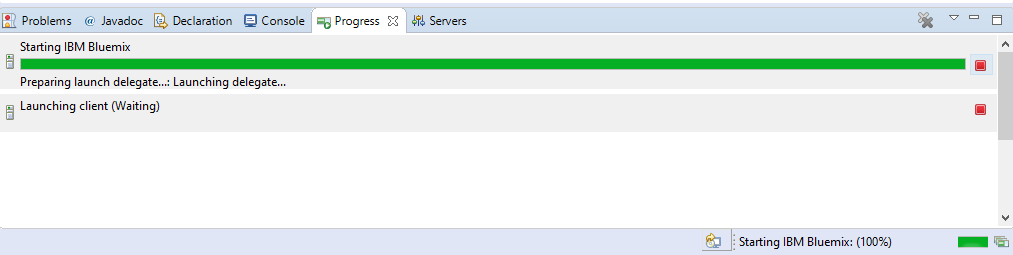
k) We have create “ **Server”.**



L) Application successfully pushed in **“IBM Bluemix”.**

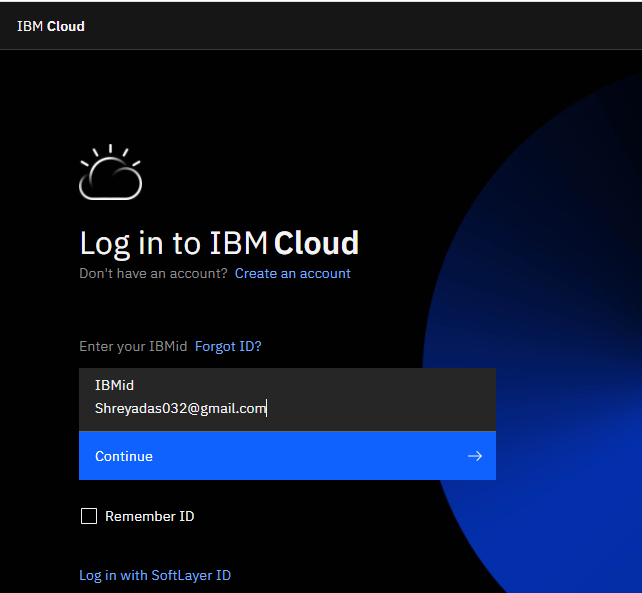


M) Progress in launching.

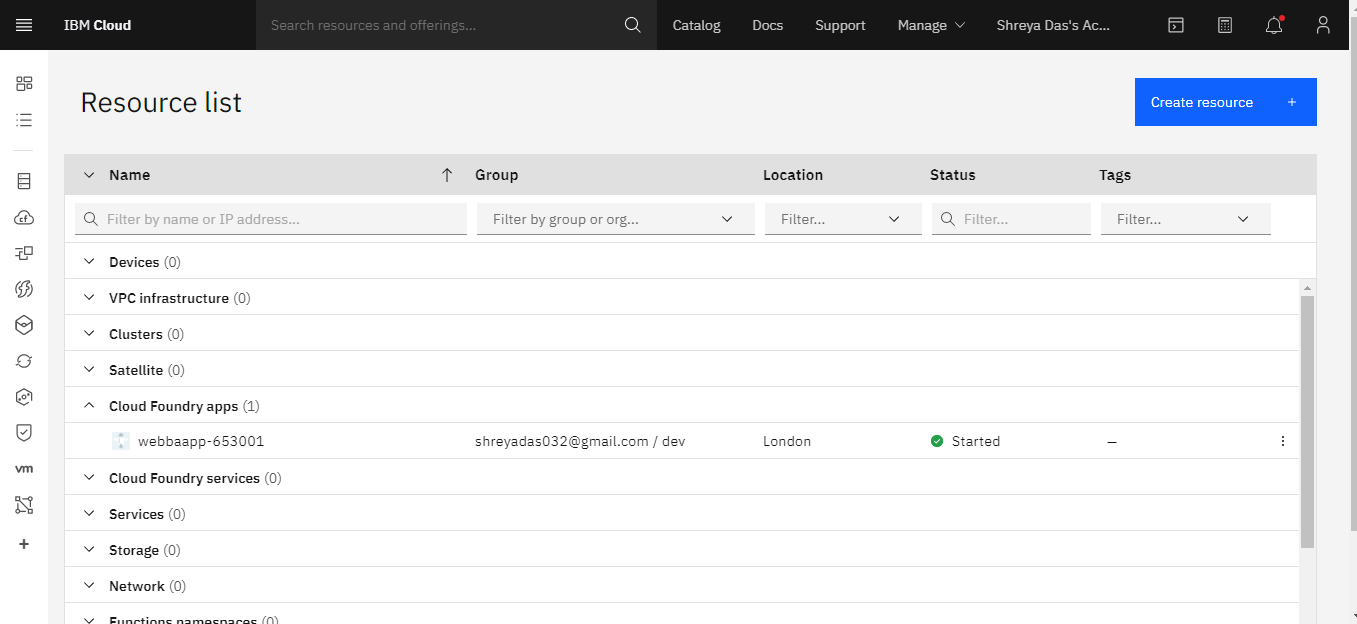


**Step: 3- Deploy in IBM Cloud**

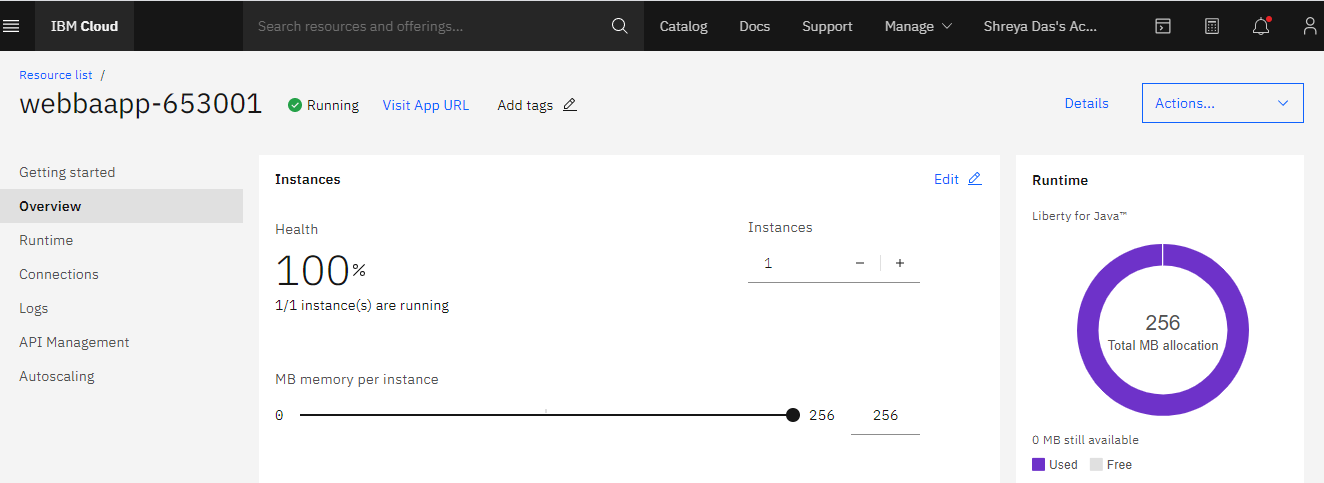
A) Login in **“IBM Cloud”.**



B) Open **“Resource list”** and click on **“Cloud Foundry apps”** then double click on **“ webbaapp-653001”.**

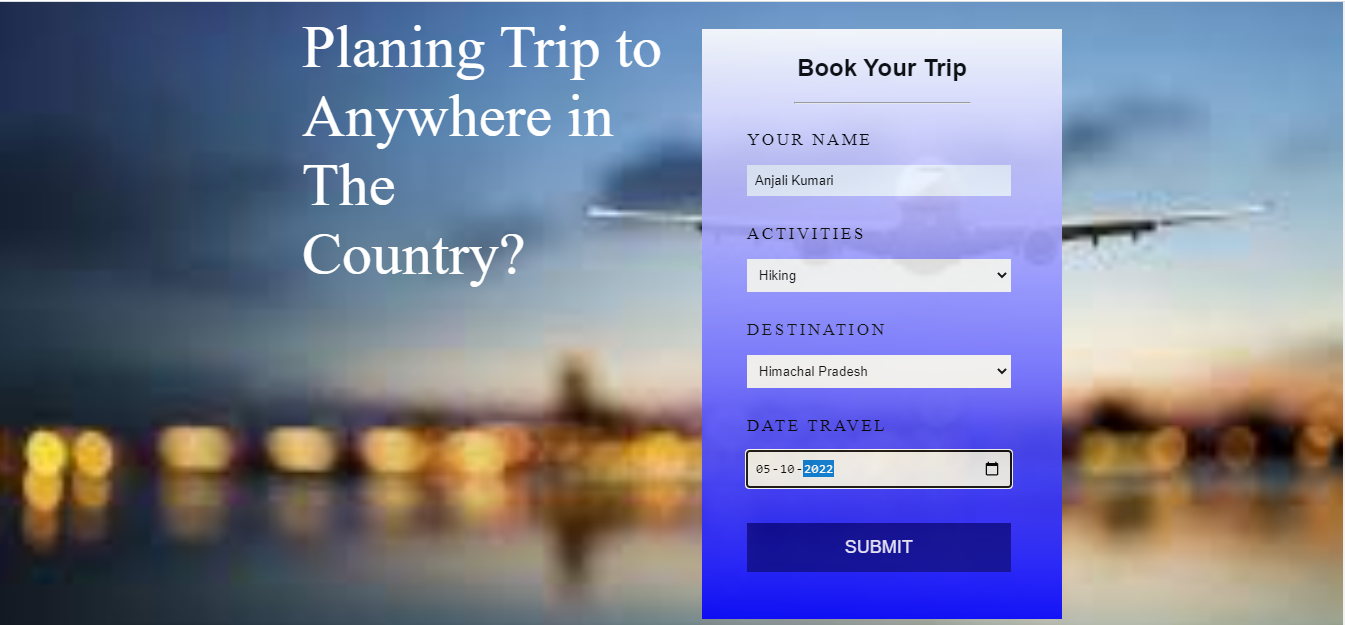


C) Click on **“ Visit App URL “.**



**Output**

**Step:4 – Getting Output**



**Conclusions**

Eclipse makes a great local development environment for developing and deploying Java EE applications to Bluemix. This the whole process where I have described in the documentation how I made a web application using jsp /java with the Eclipse, MySQL in the IBM Bluemix.

**REFERENCES**

1. <https://dev.mysql.com/downloads/installer/>

2. <https://www.sitepoint.com/top-5-paas-solutions-developing-java-applications/>

3. <https://cloud.ibm.com/login>

**THANK YOU**