

## LAB 1: Create your IBM Cloud account and Provision your Database instance

The hands-on labs for this course require an environment for working with a relational database. To get you up and running quickly we will do so on the Cloud so you don't have to worry about downloading or installing anything, rather, simply access your database from your web browser. IBM Cloud provides a large number of Data and Analytics services, including IBM Db2, a next generation SQL database. And best of all you can create a Lite account on IBM Cloud and provision an instance of Db2 (Lite Plan) at no charge, and without providing any credit card.

You will complete this Lab in three parts:

- I. Create an IBM Cloud Lite account
- II. Provision an instance of IBM Db2 Lite plan
- III. Note down credentials to access your database instance

### Part I: Create an IBM Cloud Lite account

First let us introduce you to IBM Cloud (formerly Bluemix). IBM Cloud is IBM's innovative cloud computing platform which combines platform as a service (PaaS) with infrastructure as a service (IaaS). It includes a rich catalog of cloud services that can be easily integrated with PaaS and IaaS to build business applications rapidly. It lets you quickly create, deploy, and manage your applications in the cloud. You don't have to deal with any of the underlying infrastructure. And you don't have to deal with the hosting and the managing of your cloud-based applications. You can use the tools and languages of your choice. IBM Cloud comes with a catalog full of awesome services, or APIs, from IBM and from third parties that you can use in your applications. You can scale your applications with literally a couple of clicks.

Please follow the steps given below to create an IBM Cloud account.

**IMPORTANT:** When signing up for the IBM Cloud account **specify your country/region as United States or Canada**. This is a temporary workaround to access the free version of the database service in Part II.

1. Sign up for IBM Cloud at: [http://cocl.us/IBM\\_CLOUD\\_PROMO\\_COURSERA\\_SQL](http://cocl.us/IBM_CLOUD_PROMO_COURSERA_SQL)

Note: If you already have an IBM Cloud account (perhaps you created it for another course) which you created by specifying your country as United States or Canada, you can skip this step and simply log in. Otherwise create a new IBM Cloud account with a different email address and country as US or Canada.

2. As part of the sign-up process you will receive an email in your inbox. You will need to click on the link in this email to verify your email and activate your account.

3. Log-in to IBM Cloud by going to the link in step 1.

← → ↻ Secure | [https://console.bluemix.net/registration/?cm\\_mmc=Email\\_Newsletter\\_-\\_Developer\\_Ed+Tech\\_-\\_WW\\_WW...](https://console.bluemix.net/registration/?cm_mmc=Email_Newsletter_-_Developer_Ed+Tech_-_WW_WW...) ☆

IBM Cloud

Sign up for an IBMId and create your IBM Cloud account

## Build on IBM Cloud for free with no time restrictions

**Guaranteed free development with Lite plans**  
Develop worry-free and at no cost with cap based Lite plan services for as long as you like.

**Start on your projects right away**  
Skip entering your credit card info and get working in just a few short steps.

**Get \$200 to do more on our platform.**  
Use the credit to try new services or scale your projects. Offer is available for 1 month after upgrade, for platform services only.

**Ready to get started? Sign up today!**

Already have an IBM Cloud account? [Log in](#)

---

**Email\*** ✓  
sql@coursera.org

---

**First Name\*** ✓  
Rav

---

**Last Name\*** ✓  
Ahuja

---

**Company** ✓  
IBM

---

**Country or Region\***  
Canada ▼

---

**Password\***  
.....

\*Password must contain 8-31 characters with at least one upper-case, one lower-case, one number, and one special character ( - \_ . @ )

---

Keep me informed of products, services, and offerings from IBM companies worldwide.

☐ By email

By clicking Create Account, I accept the [IBM Cloud privacy policy](#) and [IBM Cloud terms](#).

Create Account

## Part II: Provision an instance of IBM Db2 Lite plan

Now let us introduce you to Db2 on Cloud. IBM Db2 is a next generation SQL database provisioned for you in the cloud. You can use Db2 just as you would use any database software (RDBMS), but without the overhead and expense of hardware setup or software installation and maintenance. Among the service plans offered for Db2 on IBM Cloud is the Lite plan, which is free to use. You can use your database instance to store relational data, analyze data using built-in SQL editor, or by connecting your own apps.

Note that IBM Cloud also provides other variants of Db2 such as Db2 Hosted and Db2 Warehouse on Cloud, which is often referred to in this course. However for our labs we will utilize the Db2 service since it comes with a Lite plan which is free to use.

Please follow the steps given below to provision an instance of a Db2 on IBM Cloud.

1. Ensure you are logged in to IBM Cloud. and go to:  
<https://console.bluemix.net/catalog/services/db2>

Note: Alternatively you can click on the **Catalog** menu item, scroll down to the section for **Data and Analytics**, and click on the tile for **Db2** service.

2. Make sure the **region/location selected is US South** since the Lite plan is not yet available in other regions

**NOTE:** If you did not specify your country/region as US / Canada when signing up for an IBM Cloud account, you will not be able to provision the Db2 Lite service in US South. In which case, please create a new IBM Cloud account with a different email address and specifying a North American country to complete this step.

3. **Enter your email address** - if you do not do this the Create button at the bottom will be greyed out

4. Scroll down to Pricing Plans and **select the Lite plan**,

5. Then click on the **Create** button towards the bottom right of the page

Note: if the Create button is greyed out / not clickable, please ensure you did steps 2 and 3 above.

It will spin for a few seconds (typically less than 30s) and then you should see a Service Created message indicating that your instance of Db2 was created successfully.

1 <https://console.bluemix.net/catalog/services/db2>

IBM Cloud Catalog Docs Support Manage

← View all

## Db2

A fully-managed cloud SQL database. Powered by a turbo-charged Db2 engine.

Service name: Db2-5d

2 Choose a region/location to deploy in: US South

Choose an organization: rsahuja@ca.ibm.com

Choose a space: dev

3 Email: email@example.com

View Docs Terms

AUTHOR IBM

PUBLISHED 04/03/2018

TYPE Service

LOCATION Sydney, Germany, United Kingdom, US South

Features

### Pricing Plans

Monthly prices shown are for country or region: [Canada](#)

| PLAN  | FEATURES  | PRICING  |
|---|---|--|
| ✓ 4 Lite  | Shared multitenant system<br>100 MB of data storage<br>5 simultaneous connections       | Free   |
| <p>The Lite plan provides a free Db2 service for development and evaluation. You can continue using the Lite plan for as long as needed, however, users are asked to re-extend their service every 30 days by email. If you do not re-extend, your service is removed 60 days later. This helps provide free resources for everyone.</p> <p>Lite plan services are deleted after 30 days of inactivity.</p> |   |  |
| Flex (Recommended)  | Scalable RAM, CPU and storage.<br>Flexible pricing.<br>Uses dedicated virtual machines. | \$200.00<br>CAD/Instance<br>\$200.00<br>CAD/Instance (High |

5 Create

## Part III: Note down credentials to access your database instance

These credentials will be required to connect from Jupyter notebooks for labs and assignment in the last two weeks of the course.

After your database instance has been provisioned you should automatically be taken to the dashboard. If you are doing this step at a later stage, you can go directly to the dashboard:

<https://console.bluemix.net/dashboard/apps>

1. Locate and click on the Db2 service listed under Cloud Foundry Services
2. Click on **Service Credentials** in the left menu
3. Click on the button to create **New credentials**
4. Check the box to **View credentials**
5. Copy and save the credentials making a note of the following:
  - **port** is the database port
  - **db** is the database name
  - **username** is the username you'll use to connect
  - **host** is the hostname of the database instance
  - **password** is the password you'll use to connect  
(you will need to scroll to the bottom to see the password)

The screenshot shows the IBM Cloud console interface. On the left, the 'Service credentials' link is highlighted in the 'Manage' menu. The main content area shows the 'Db2-50' service instance. Below the service name, there is a 'Service credentials' section. A 'New credential' button is visible. A table lists the credentials, with one entry 'Credentials-1' created on May 1, 2018. The 'View credentials' button for this entry is highlighted. Below the table, the JSON snippet for the credentials is displayed, with the 'port' value (50000) highlighted.

```
{
  "port": 50000,
  "db": "BLUDB",
  "username": "qcm54853",
  "sslConnection": true,
  "host": "dashdb-txn-sbox-yp-dal09-04.services.dal.bluemix.net:50001/BLUDB:s"
}
```

Good luck!