

Data Science Workshop

An Experiential Journey with Data to Inspire *Your* Work

(Prework: Setup Instructions)

George Stark

Maureen Norton

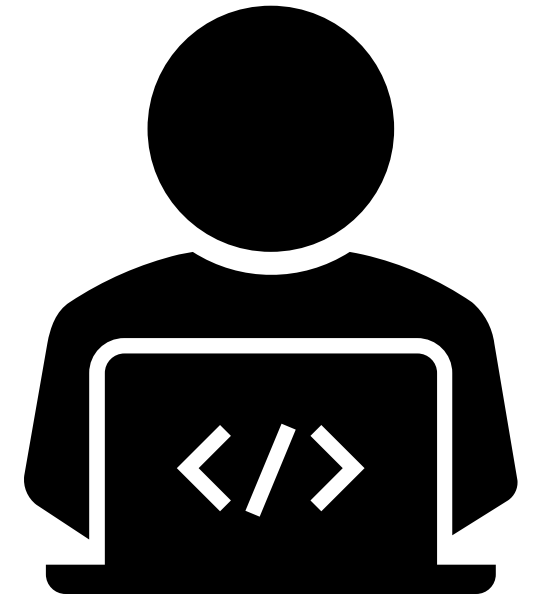
Neeraj Madan

April 29th, 2020

Performing Data Science requires a Predictive Analytics and Machine Learning environment

The objective of this section of workshop is to

- setup an environment on IBM Cloud in preparation for the workshop



Agenda

1. [Predictive Analytics and Machine Learning Solutions](#)
2. Overview of [Watson Studio](#) and [Watson Machine Learning](#)
3. Setup an Environment
 - Registration ([Create an account](#))
 - Setup an Environment ([Watson Studio](#), [Watson Machine Learning](#), [Cloud Object Storage](#))
 - [Create a Project and Notebook](#)

Predictive Analytics and Machine Learning Solutions

While there are many tools that could be used for building predictive analytics and machine learning solutions (see below for examples), this workshop will be based on IBM Watson Studio for the experiential learning session.

To name a few:

1. IBM Watson Studio
2. SAS Advanced Analytics
3. RapidMiner
4. Amazon SageMaker
5. Azure Machine Learning Studio (Microsoft)
6. Google Cloud AI Platform

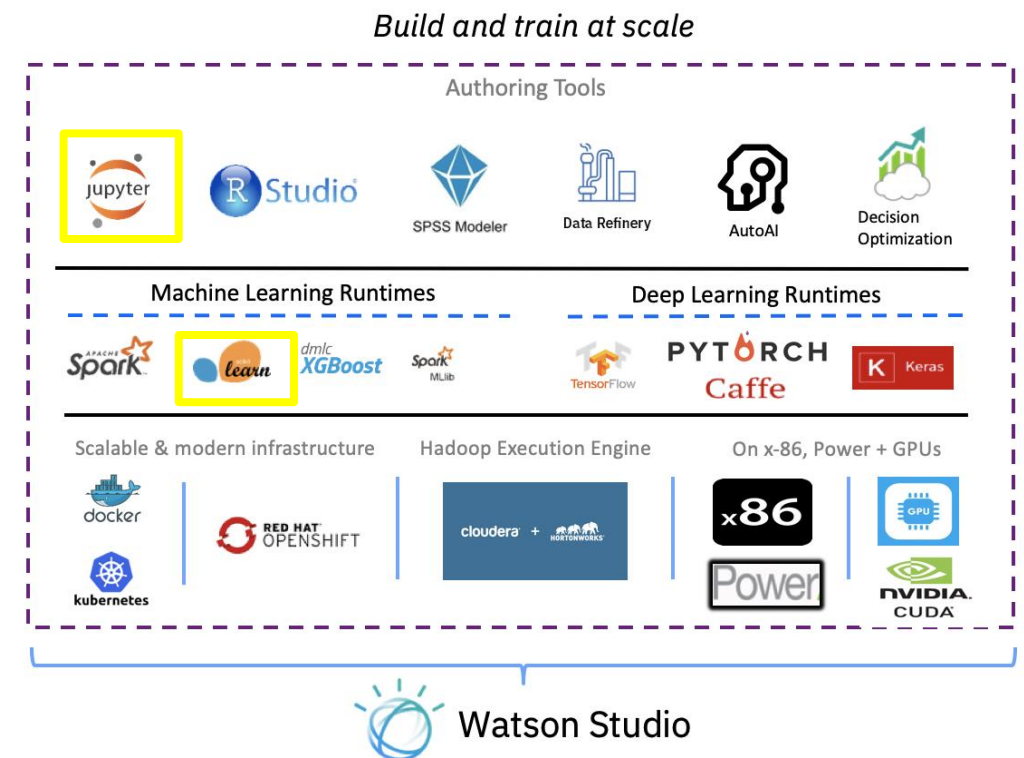
IBM Watson Studio Overview (1 of 4)

(Enterprise Data Science platform that helps your team work together to build models to make better data driven decisions for your business)

Analyze any data, no matter where it lives

Empower your entire organization with notebooks, visual productivity, and automation tools

One platform to rule them all from discovery to production



IBM Watson Studio Overview (2 of 4)

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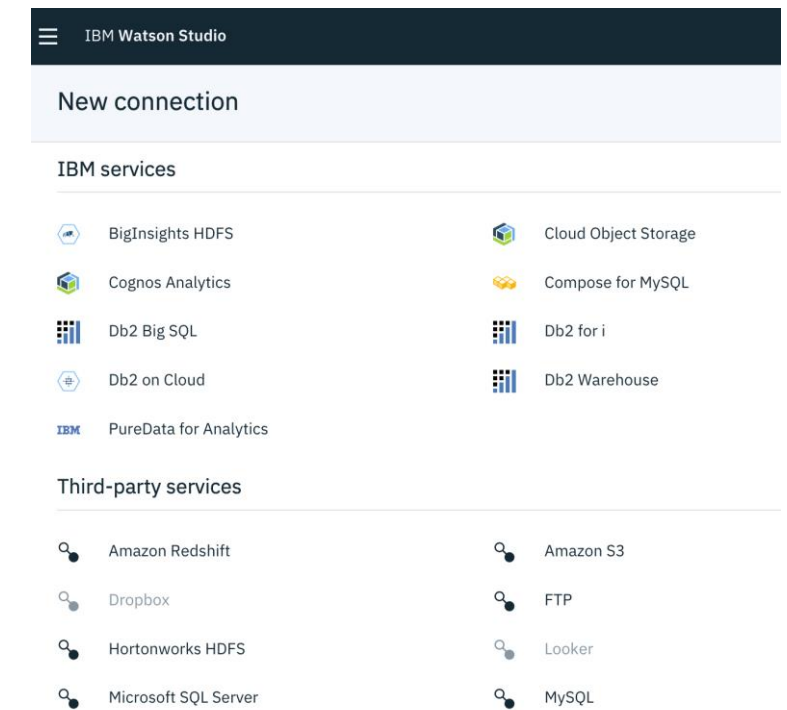
Connect to and analyze your data without moving a single byte through dozens of connectors and multiple deployment options.

Empower your entire organization with notebooks, visual productivity, and automation tools

Leverage your entire organization with a variety of tools in a single integrated platform.

One platform to rule them all from discovery to production

Analyze data, build predictive models, and seamlessly integrate Watson Machine Learning to deploy at scale



IBM Services like Cognos & DB2

3rd Party Services like Amazon S3, Hadoop, & Microsoft SQL Server

We have Public Cloud, Private Cloud, & Desktop/Server deployment options

IBM Watson Studio Overview (3 of 4)

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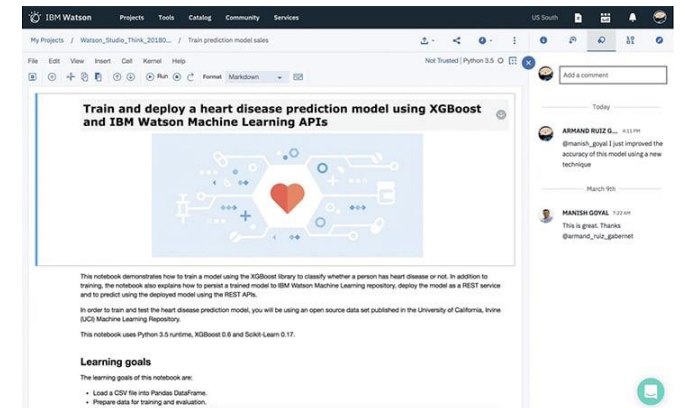
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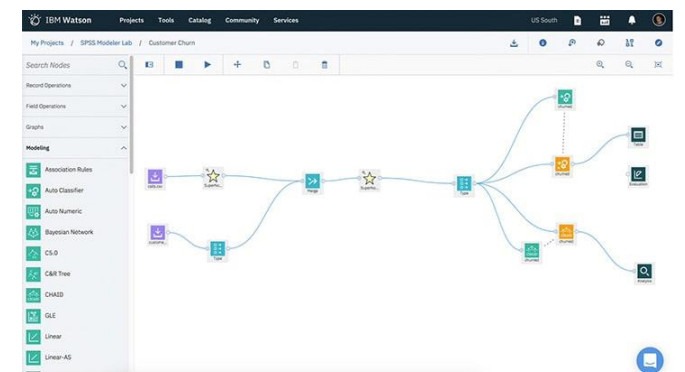
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Super charged Jupyter Notebooks & R Studio as most popular IDEs for data scientists well integrated with data connectors and rich set of default environments



Visual tools such as SPSS Modeler, Data Refinery, & AutoAI for non coders to analyze data and build models

IBM Watson Studio Overview (4 of 4)

(Enterprise Data Science platform that helps your team work together to build models to make better data driven decisions for your business)

Analyze any data, no matter where it lives

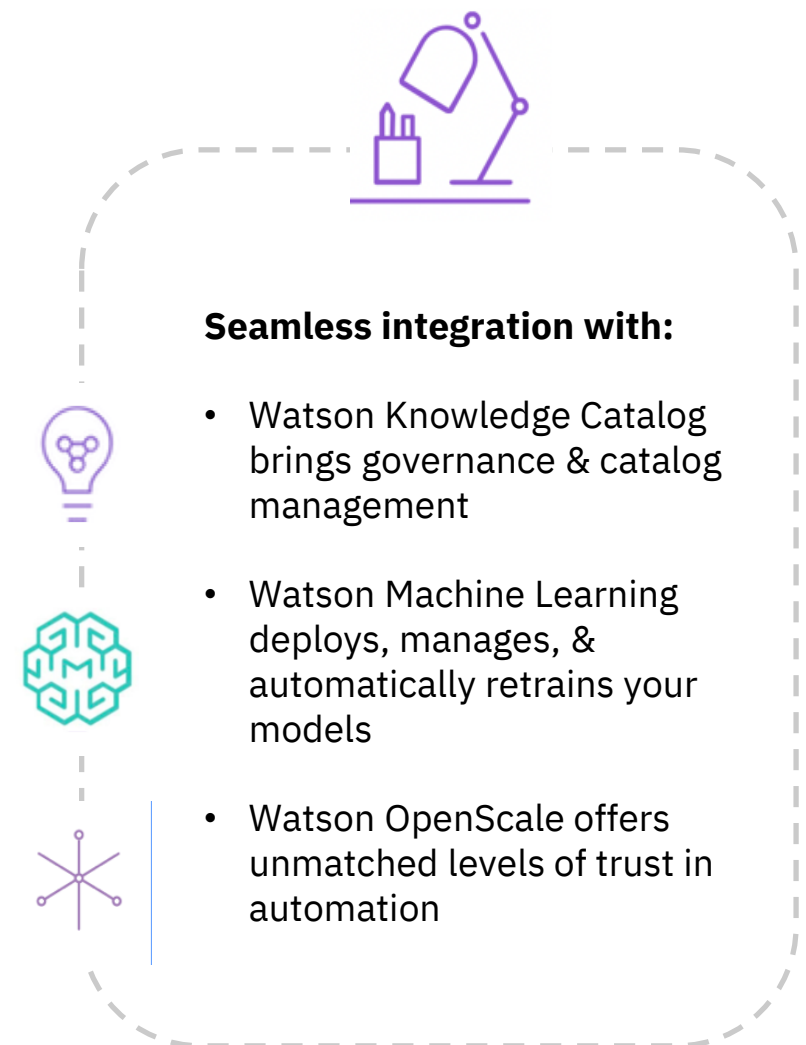
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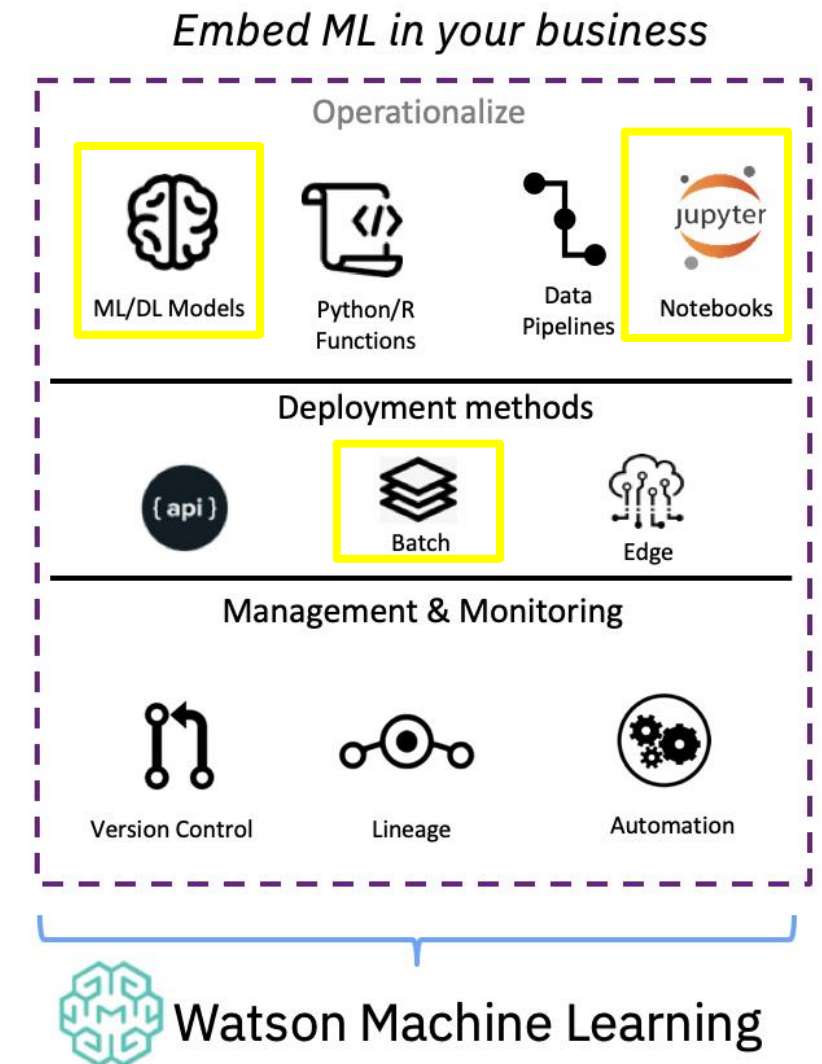
IBM Watson Machine Learning Overview (1 of 4)

(Embed Machine Learning and Deep Learning in your Business)

Deploy and Manage Models

Intelligent Model Operations

Accelerate Compute Intensive Workloads



IBM Watson Machine Learning Overview (2 of 4)

(Embed Machine Learning and Deep Learning in your Business)

Deploy and Manage Models

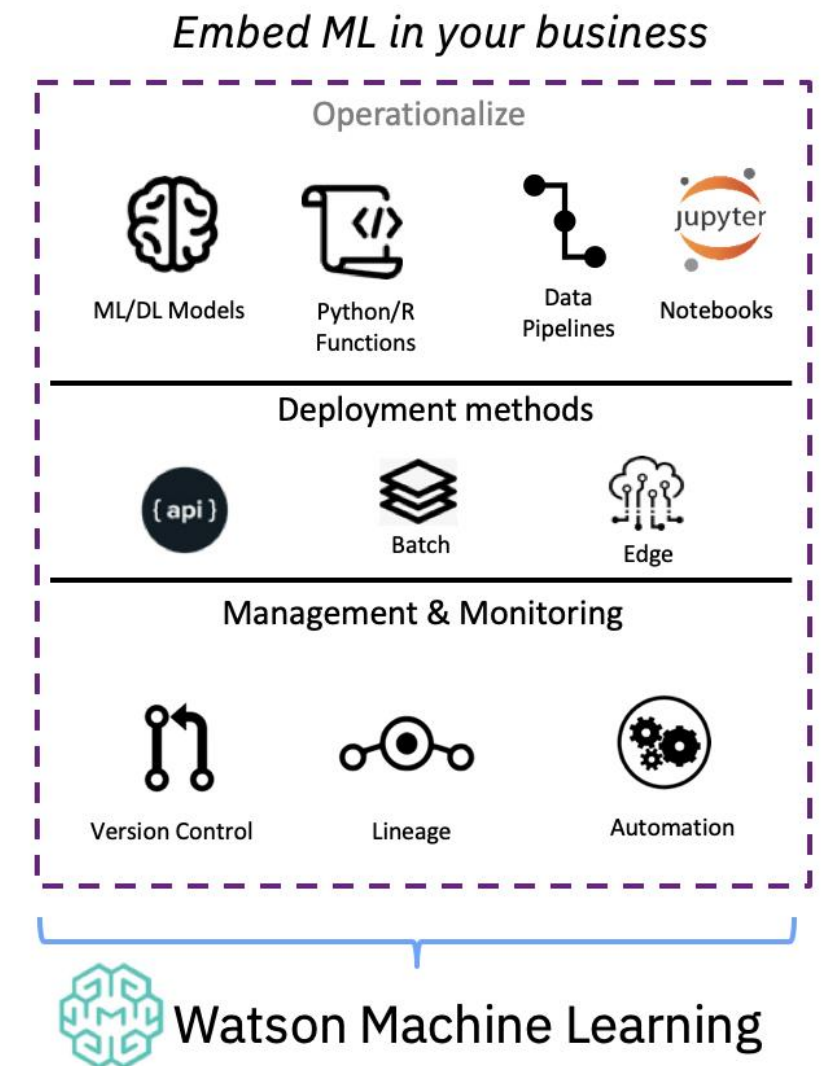
Move models to production, in an easy, secure, and compliant way.

Intelligent Model Operations

Embed intelligent training services, with feedback loops that constantly learn from new data, regardless where it resides.

Accelerate Compute Intensive Workloads

Distribute your deep learning training and Hadoop/Spark workloads with multi-tenant job scheduling .



IBM Watson Machine Learning Overview (3 of 4)

(Embed Machine Learning and Deep Learning in your Business)

Deploy and Manage Models

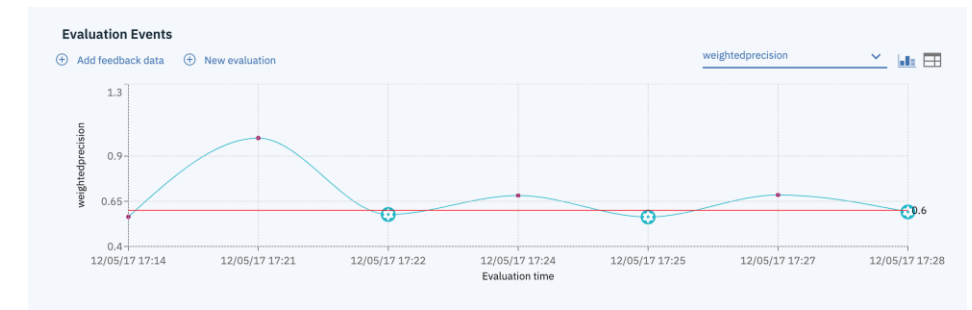
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Intelligent Model Operations

Embed intelligent training services, with feedback loops that constantly learn from new data, regardless where it resides.

Accelerate Compute Intensive Workloads

Distribute your deep learning training and Hadoop/Spark workloads with multi-tenant job scheduling .



- **Configure learning systems**
- **Flexible management experience**
 - User Interface
 - CLI
 - APIs
 - Python SDK

IBM Watson Machine Learning Overview (4 of 4)

(Embed Machine Learning and Deep Learning in your Business)

Deploy and Manage Models

Move models to production, in an easy, secure, and compliant way.

Intelligent Model Operations

Embed intelligent training services, with feedback loops that constantly learn from new data, regardless where it resides.

Accelerate Compute Intensive Workloads

Distribute your deep learning training and Hadoop/Spark workloads with multi-tenant job scheduling .



- **Visually monitor training jobs**
 - Experiments
 - AutoAI
- **WML Accelerator for optimized Spark and GPU jobs**
- **Integration with Hadoop for in-place batch training and scoring**

Getting Started: Setup an Environment

Registration (Sign up / Log into [IBM Cloud](#)) (1 of 3)

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

Create a free account

Join us in the cloud and start building today.

Email

Enter your email id **STEP A**

Enter an email address.

First Name

Last Name

Country or Region

United States

Password

IBM may use my contact data to keep me informed of products, services and offerings:

☒ by email. ☒ by telephone.

You can withdraw your marketing consent at any time by sending an email to netssupp@us.ibm.com. Also you may unsubscribe from receiving marketing emails by clicking the unsubscribe link in each such email.

More information on our processing can be found in the [IBM Privacy Statement](#). By submitting this form, I acknowledge that I have read and understand the IBM Privacy Statement.

I accept the product [Terms and Conditions](#) of this registration form.

Create Account

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

Create a free account

Join us in the cloud and start building today.

Email

nmadan@us.ibm.com

STEP B

First Name

Neeraj

Last Name

Madan

Country or Region

United States

Password

IBM may use my contact data to keep me informed of products, services and offerings:

☒ by email. ☒ by telephone.

You can withdraw your marketing consent at any time by sending an email to netssupp@us.ibm.com. Also you may unsubscribe from receiving marketing emails by clicking the unsubscribe link in each such email.

More information on our processing can be found in the [IBM Privacy Statement](#). By submitting this form, I acknowledge that I have read and understand the IBM Privacy Statement.

I accept the product [Terms and Conditions](#) of this registration form.

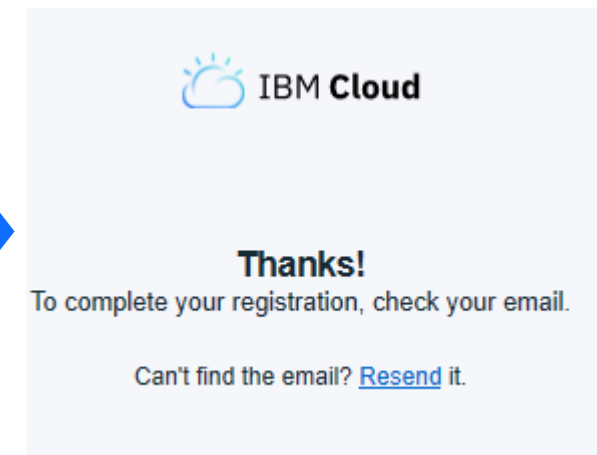
Create Account

STEP C

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[How to handle error "Failure during registration" when creating an IBM Cloud account?](#)



Note: Incase you already have an IBM Cloud account, go to Verify Services and Storage. If any Service or Cloud Object Storage is missing, follow the respective section.

Getting Started: Setup an Environment

Registration [Confirm your account (Email verification)] (2 of 3)

Action required: Confirm your IBM Cloud account



Hello Neeraj,

Thank you for signing up for IBM Cloud! Confirm your account to get started.

Confirm account



STEP D

By confirming your account, you accept the [Terms of Use](#).

Welcome and happy building!

Thank you,
IBM Cloud

Visit the [IBM Cloud console](#).

© Copyright IBM Corporation 2014, 2020.

IBM



Welcome!

You confirmed your IBM Cloud account, and it is now activated. Log in to get started.

Log in



STEP E



About your IBMid Account Privacy

This notice provides information about accessing your IBMid user account (Account). If you have previously been presented with a version of this notice, please refer to "Changes since the previous version of this notice" below for information about the new updates.

+ [Changes since the previous version of this notice](#)

+ What data does IBM collect?

+ Why IBM needs your data

+ How your data was obtained

+ How IBM uses your data

+ How IBM protects your data

+ How long we keep your data

Your rights

Our [Privacy Statement](#) provides more information about your personal data rights. It also provides contact information if you have questions or concerns regarding our handling of your personal data.

Acknowledgement

I acknowledge that I understand how IBM is using my Basic Personal Data and I am at least 16 years of age.

Proceed

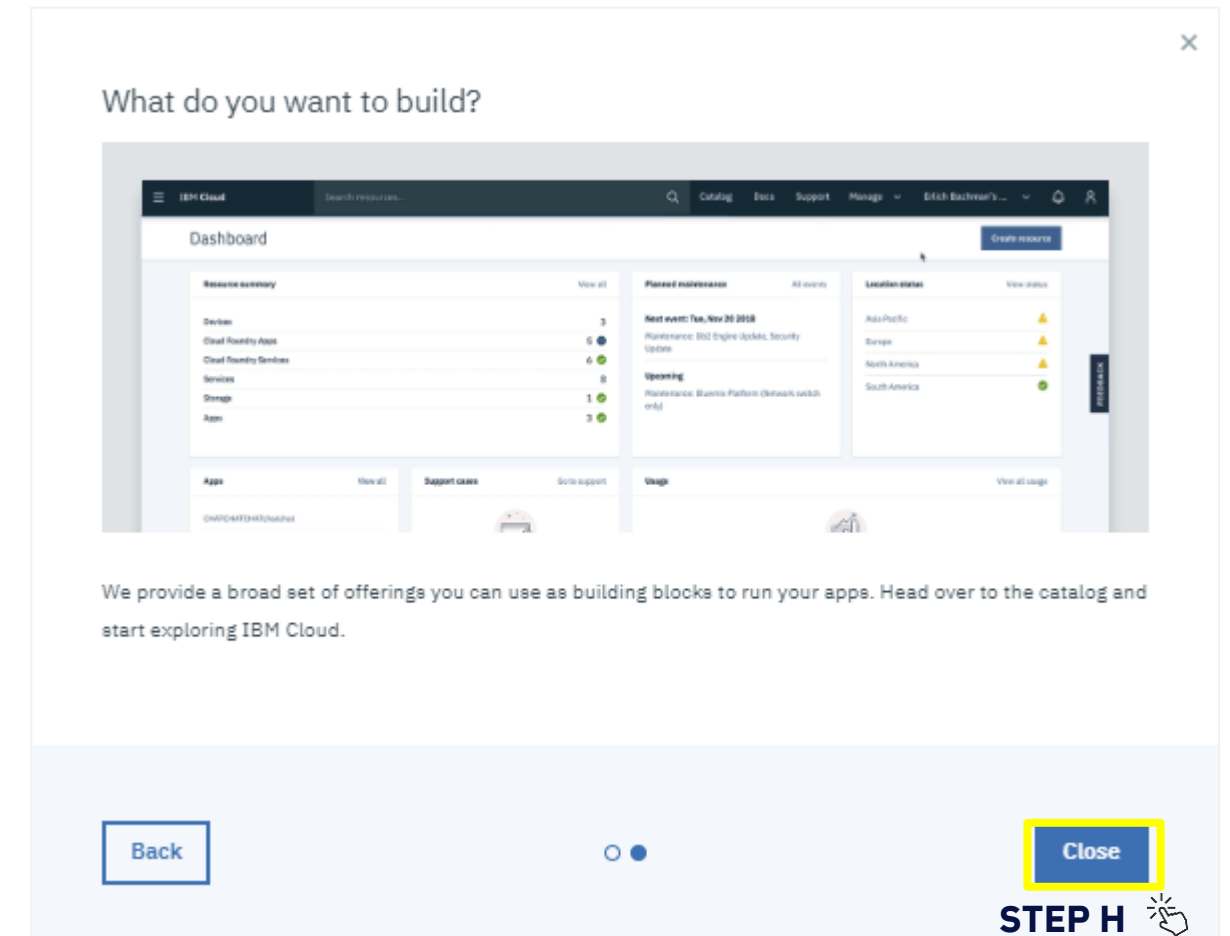
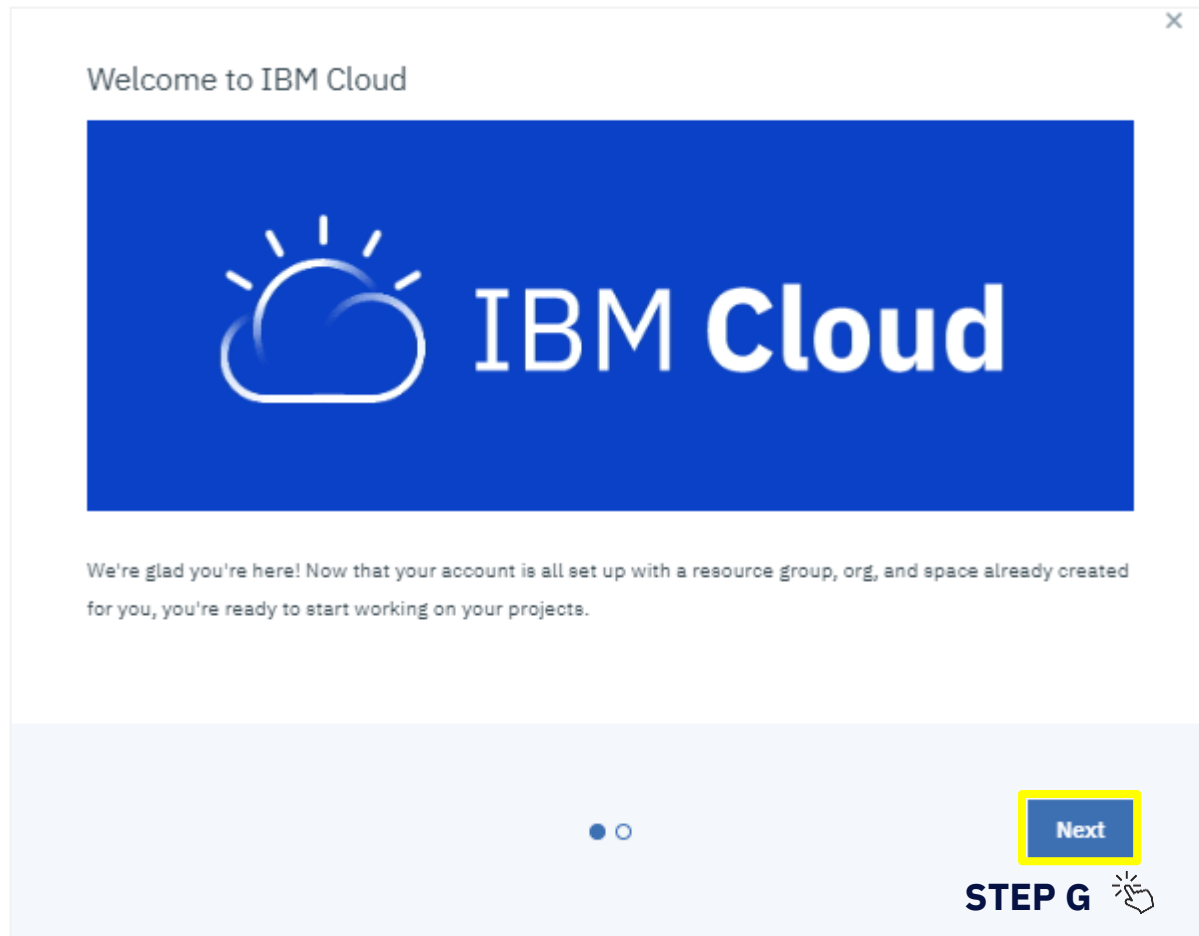
Cancel Sign In

STEP F



This document was last updated on 2018-05-04

Getting Started: Setup an Environment Registration (Welcome to IBM Cloud) (3 of 3)



Getting Started: Setup an Environment

Watson Studio Service (1 of 2)

The screenshot displays the IBM Cloud Catalog interface. At the top, the 'Catalog' tab is highlighted in the navigation bar. Below the navigation bar, a blue banner contains the text: 'Try the best of the Catalog for free with no time restrictions with Lite plans. The Lite filter is enabled. Remove the filter to see the full Catalog.' To the right of this text is a lightbulb icon and the label 'STEP A'.

Below the banner, the 'Catalog' section is shown. A search bar contains the text 'watson studio' and has a lightbulb icon to its right, labeled 'STEP B'. Below the search bar, there are two tabs: 'Services (2)' and 'Software (0)'. The 'Services (2)' tab is selected.

On the left side, there is a sidebar with a list of categories. 'AI (1)' is highlighted with a right-pointing arrow. Other categories include 'All Categories (2)', 'VPC Infrastructure', 'Compute', 'Containers', 'Networking', 'Storage', 'Analytics (1)', 'Databases', 'Developer Tools', 'Integration', 'Internet of Things', 'Security and Identity', 'Web and Mobile', and 'Web and Application'.

The main content area is titled 'Services' and contains the text: 'Explore our broad portfolio of managed services for infrastructure, developer tools, and more to build your apps on the public cloud.' Below this text, there are filters: 'Filters: Lite x Clear all'. A 'FEEDBACK' button is located on the right side of the main content area.

Under the 'AI' category, a card for 'Watson Studio' by IBM is highlighted with a yellow box. The card contains the text: 'Embed AI and machine learning into your business. Create custom models using your own data.' and the category 'AI'. To the right of the card is a lightbulb icon and the label 'STEP C'.

Getting Started: Setup an Environment Watson Studio Service (2 of 2)

IBM Cloud Search resources and offerings... Catalog Docs Support Manage Neeraj Madan's Account

Watson Studio

Author: IBM • Date of last update: 03/10/2020 • [Docs](#)

Create About

Select a region

Select a region

Dallas

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: [United States](#)

Plan	Features	Pricing
Lite	<ul style="list-style-type: none">1 authorized user50 capacity unit-hours monthly limit1 free small compute environment with 1 vCPU and 4 GB RAM (does not require capacity unit-hours) <p>The Lite plan for Watson Studio offers everything you need to become a better data scientist or domain expert in a collaborative environment.</p> <p>Lite plan services are deleted after 30 days of inactivity.</p>	Free
Standard v1	<ul style="list-style-type: none">1 authorized user + unlimited viewer collaborators50 capacity unit-hours included monthly (additional capacity available)Unlimited elastic compute environmentsEnvironment = # of capacity units required per hour	<ul style="list-style-type: none">\$99.00 USD/Instance\$0.50 USD/Capacity Unit-Hour\$99.00 USD/Authorized User

Summary

Watson Studio Free

Region: Dallas

Plan: Lite

Service name: Watson Studio-nw

Resource group: Default

FEEDBACK

STEP D

STEP E

Create

Add to estimate

View terms

Getting Started: Setup an Environment

Watson Machine Learning (1 of 3)

The screenshot displays the IBM Cloud Catalog interface. At the top, a navigation bar includes the IBM Cloud logo, a menu icon, and several tabs: **STEP A**, **Catalog** (highlighted with a yellow box), **Docs**, **Support**, **Manage**, and a user profile icon. Below the navigation bar, a search bar contains the text "watson machine" (highlighted with a yellow box). To the right of the search bar, a lightbulb icon is labeled **STEP B**. Below the search bar, there are two tabs: **Services (1)** (active) and **Software (0)**. On the left side, a sidebar lists various categories: **All Categories (1)** (highlighted with a yellow box), **VPC Infrastructure**, **Compute**, **Containers**, **Networking**, **Storage**, **AI (1)**, **Analytics**, **Databases**, **Developer Tools**, **Integration**, **Internet of Things**, **Security and Identity**, **Web and Mobile**, and **Web and Application**. The main content area is titled **Services** and contains a description: "Explore our broad portfolio of managed services for infrastructure, developer tools, and more to build your apps on the public cloud." Below this, there are filters: **Free** (with an 'x' icon) and **Clear all**. A section titled **All Categories** displays a card for **Machine Learning** (highlighted with a yellow box). The card includes the IBM logo, the text "Machine Learning", "IBM • AI", a description: "IBM Watson Machine Learning - make smarter decisions, solve tough problems, and improve user outcomes.", and a footer: "Lite • Free • IAM-enabled". To the right of the card, a lightbulb icon is labeled **STEP C**. On the far right, a vertical **FEEDBACK** button is visible.


Getting Started: Setup an Environment Watson Machine Learning (2 of 3)

IBM Cloud

Search resources and offerings...

Catalog Docs Support Manage

Neeraj Madan's Account

 Machine Learning

Author: IBM • Date of last update: 04/09/2020 • Docs

Create About

Select a region

Select a region

Dallas

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: [United States](#)

Plan	Features	Pricing
Lite	<div>Service instance 5 model deployments 5,000 predictions 50 capacity unit-hours (CUH) included: Capacity Type:<ul style="list-style-type: none">• 1 (one) NVIDIA K80 GPU = 2 capacity units required per hour• 1 (one) NVIDIA V100 GPU = 8 capacity units required per hour• 1 vCPU and 4 GB RAM = 0.5 capacity units required per hour• 2 vCPU and 8 GB RAM = 1 capacity units required per hour• 4 vCPU and 16 GB RAM = 2 capacity units required per hour• 8 vCPU and 32 GB RAM = 4 capacity units required per hour• 16 vCPU and 64 GB RAM = 8 capacity units required per hourAuto AI<ul style="list-style-type: none">• 8 vCPU and 32 GB RAM = 20 capacity units required per hourDecision Optimization<ul style="list-style-type: none">• 2 vCPU and 8 GB RAM = 30 capacity units required per hour• 4 vCPU and 16 GB RAM = 40 capacity units required per hour• 16 vCPU and 64 GB RAM = 60 capacity units required per hour</div> <div>The Lite plan instance of the IBM Watson Machine Learning service provides you with a maximum of 5 deployed models, 5,000 predictions per month, and 50 capacity unit-hours per month during which model can be trained, evaluated, and deployed to be available to accept prediction events, with a minimum of 1 minute per training job.</div> <div>Lite plan services are deleted after 30 days of inactivity.</div>	Free
Standard	<div>Service instance Pay-go prediction events Pay-go capacity unit-hours (CUH) included:</div>	<div>\$0.50 USD/1,000 predictions \$0.50 USD/capacity unit-hour</div>

Create

Add to estimate

View terms

Summary

Machine Learning

Region: Dallas

Plan: Lite

Service name: Machine Learning-ex

Resource group: Default

Free

STEP D

STEP E

FEEDBACK

Getting Started: Setup an Environment

Watson Machine Learning (3 of 3)

IBM Cloud

Search resources and offerings...

Catalog Docs Support Manage Neeraj Madan's Account

Manage

Service credentials

Machine Learning-d3

Resource group: Default Location: Dallas Add tags

Service credentials

Credentials are provided in JSON format. The JSON snippet lists credentials, such as the API key and secret, as well as connection information for the service. [Learn more](#)

Service credentials

New credential

Click New credentials to create a set of credentials for this instance

STEP A

STEP B



Add new credential

Name:

Service credentials-1

Role:

Writer

Select Service ID (Optional)

Auto Generate

STEP C

Select a valid JSON object to upload

Choose file

Cancel Add

STEP D



Service credentials-1

JAN 28, 2020 - 05:45:09 AM

View credentials

STEP E

```
{
  "apikey": "",
  "iam_apikey_description": "Auto-generated for key ",
  "iam_apikey_name": "Service credentials-1",
  "iam_role_crn": "crn:v1:bluemix:public:iam::::serviceRole:Writer",
  "iam_serviceid_crn": "crn:v1:bluemix:public:iam-identity::",
  "instance_id": "",
  "url": "https://us-south.ml.cloud.ibm.com"
}
```

STEP F

Keep these credentials (apikey and instance_id) handy as we are going to use them while running the project notebook

Getting Started: Setup an Environment

Cloud Object Storage (1 of 2)

The screenshot displays the IBM Cloud Catalog interface. At the top, a dark navigation bar contains the 'IBM Cloud' logo, a 'STEP A' indicator, and a 'Catalog' tab highlighted with a yellow box. To the right of the 'Catalog' tab are links for 'Docs', 'Support', and 'Manage', along with a user profile icon and a notification bell. Below the navigation bar, a search bar labeled 'Catalog' contains the text 'object storage' and is also highlighted with a yellow box. To the right of the search bar is a 'STEP B' indicator. Below the search bar, there are two tabs: 'Services (3)' and 'Software (1)'. The 'Services (3)' tab is active, and a sidebar on the left lists various categories. The 'Storage (1)' category is highlighted with a yellow box and a right-pointing arrow. The main content area, titled 'Services', describes the portfolio of managed services. Below this, a 'Filters' section shows 'Free' as an active filter. The 'Storage' section displays a card for 'Object Storage' by IBM, which is highlighted with a yellow box. The card includes the IBM logo, the title 'Object Storage', the subtitle 'IBM • Storage', a description: 'Provides flexible, cost-effective, and scalable cloud storage for unstructured data.', and tags: 'Lite • Free • IAM-enabled'. To the right of the 'Object Storage' card is a 'STEP C' indicator. On the far right of the main content area, there is a vertical 'FEEDBACK' button.

IBM Cloud

STEP A

Catalog

Docs Support Manage 1704755 ...

Catalog object storage

STEP B

Services (3) Software (1)

All Categories (3)

VPC Infrastructure

Compute

Containers

Networking

Storage (1)

AI

Analytics (1)

Databases (1)

Developer Tools (1)

Integration

Internet of Things

Security and Identity

Web and Mobile

Web and Application

Services

Explore our broad portfolio of managed services for infrastructure, developer tools, and more to build your apps on the public cloud.

Filters: Free Clear all

Storage

Object Storage

IBM • Storage

Provides flexible, cost-effective, and scalable cloud storage for unstructured data.

STEP C

FEEDBACK

Lite • Free • IAM-enabled

Getting Started: Setup an Environment

Cloud Object Storage (2 of 2)

IBM Cloud

Search resources and offerings...

Q

Catalog

Docs

Support

Manage

Neeraj Madan's Account

Cloud Object Storage

Author: IBM • Date of last update: 03/11/2020 • Docs • API docs

Create

About

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: [United States](#)

Plan	Features	Pricing
Lite	<div>1 COS Service Instance</div> <div>Storage up to 25 GB/mo.</div> <div>Up to 20,000 GET requests/mo.</div> <div>Up to 2,000 PUT requests/mo.</div> <div>Up to Data Retrieval 10 GB/mo.</div> <div>Up to 5GB Public Outbound</div> <div>Applies to aggregate total across all storage bucket classes</div>	

The Lite service plan for Cloud Object Storage includes Regional and Cross Regional resiliency, flexible data classes, and built in security.

Lite plan services are deleted after 30 days of inactivity.

 Free || Standard | There is no minimum fee, so you pay only for what you use. | [See pricing details](#) |

Configure your resource

Service name:

Cloud Object Storage-vy

Select a resource group:

Default

Tags

Examples: env:dev, version-1

[Create](#)

[Add to estimate](#)

[View terms](#)

Summary

Cloud Object Storage

Region: Global

Plan: Lite

Service name: Cloud Object Storage-vy

Resource group: Default

Free

FEEDBACK

STEP D

STEP E

https://cloud.ibm.com/



Getting Started: Setup an Environment

Verify Services and Storage

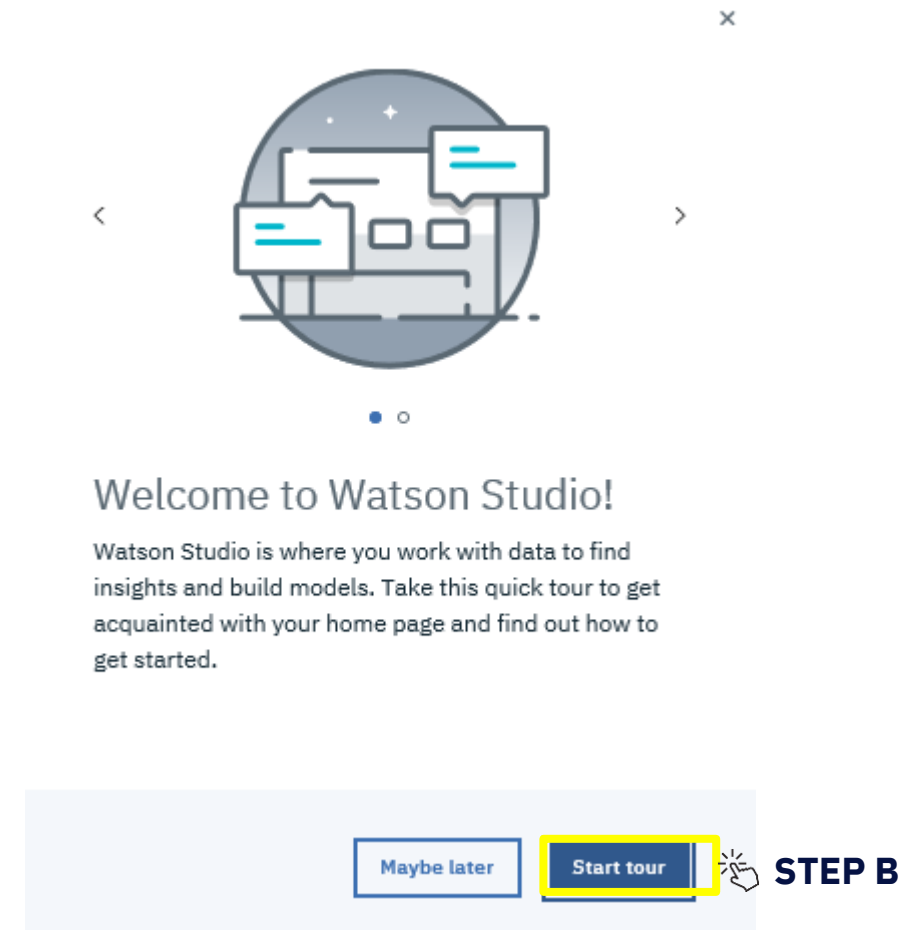
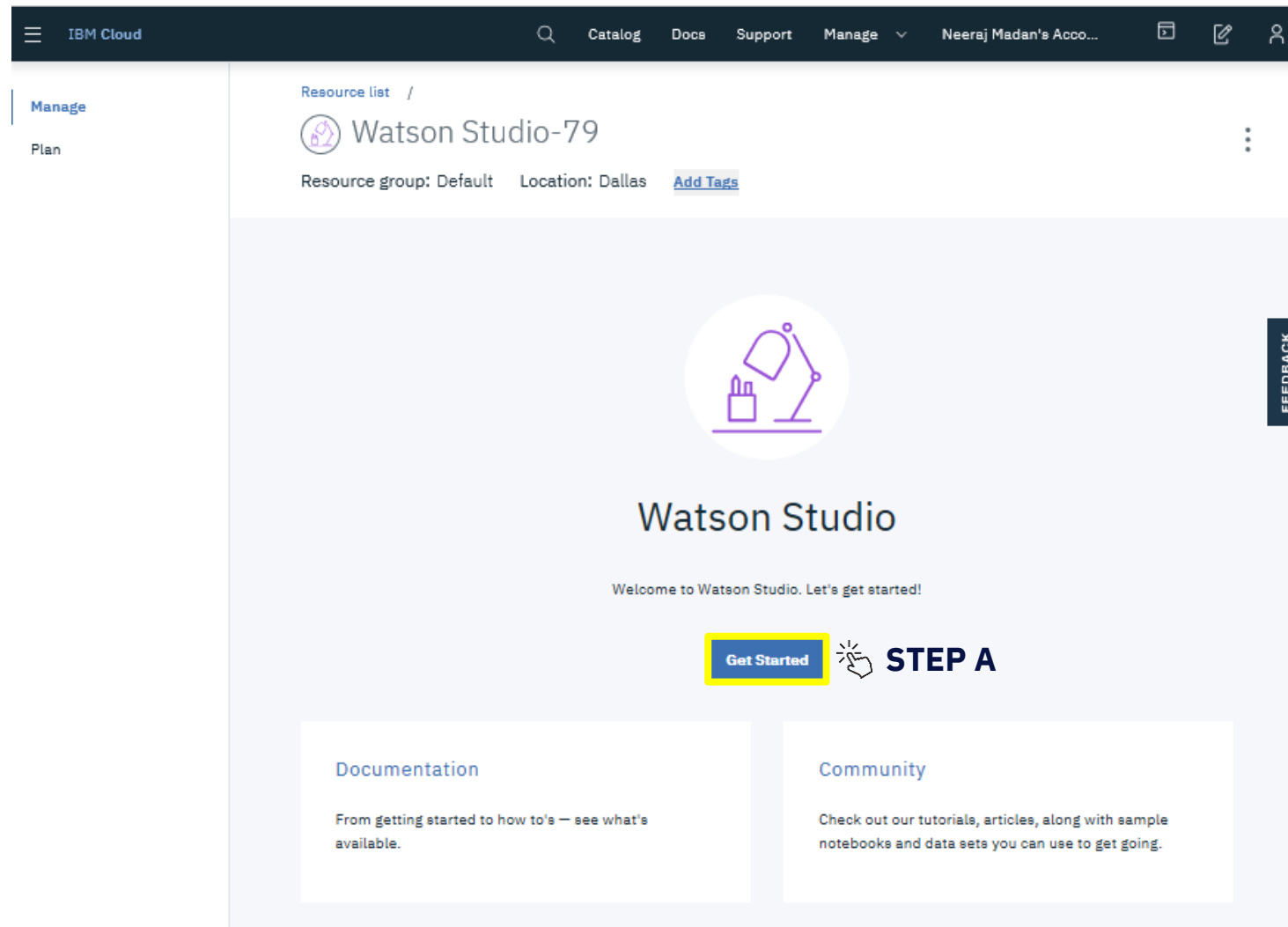
The image shows the IBM Cloud dashboard interface. On the left, a navigation menu highlights the 'Dashboard' option (STEP A). The main dashboard area shows a 'Resource summary' section with a 'View resources' link (STEP B). Below this, a table lists resources, including 'Watson Studio-79' (STEP D), 'pm-20-jx', and 'cloud-object-storage-qx'. The table has columns for Name, Group, Location, Offering, and Status.

Name	Group	Location	Offering	Status
Services (2)				
Watson Studio-79		Dallas	Watson Studio	Active
pm-20-jx	Default	Dallas	Machine Learning	Active
Storage (1)				
cloud-object-storage-qx	Default	Global	Cloud Object Storage	Provisioned

STEP C
Services to show Watson Studio and Machine Learning Services.
Storage to show Cloud Object Storage.

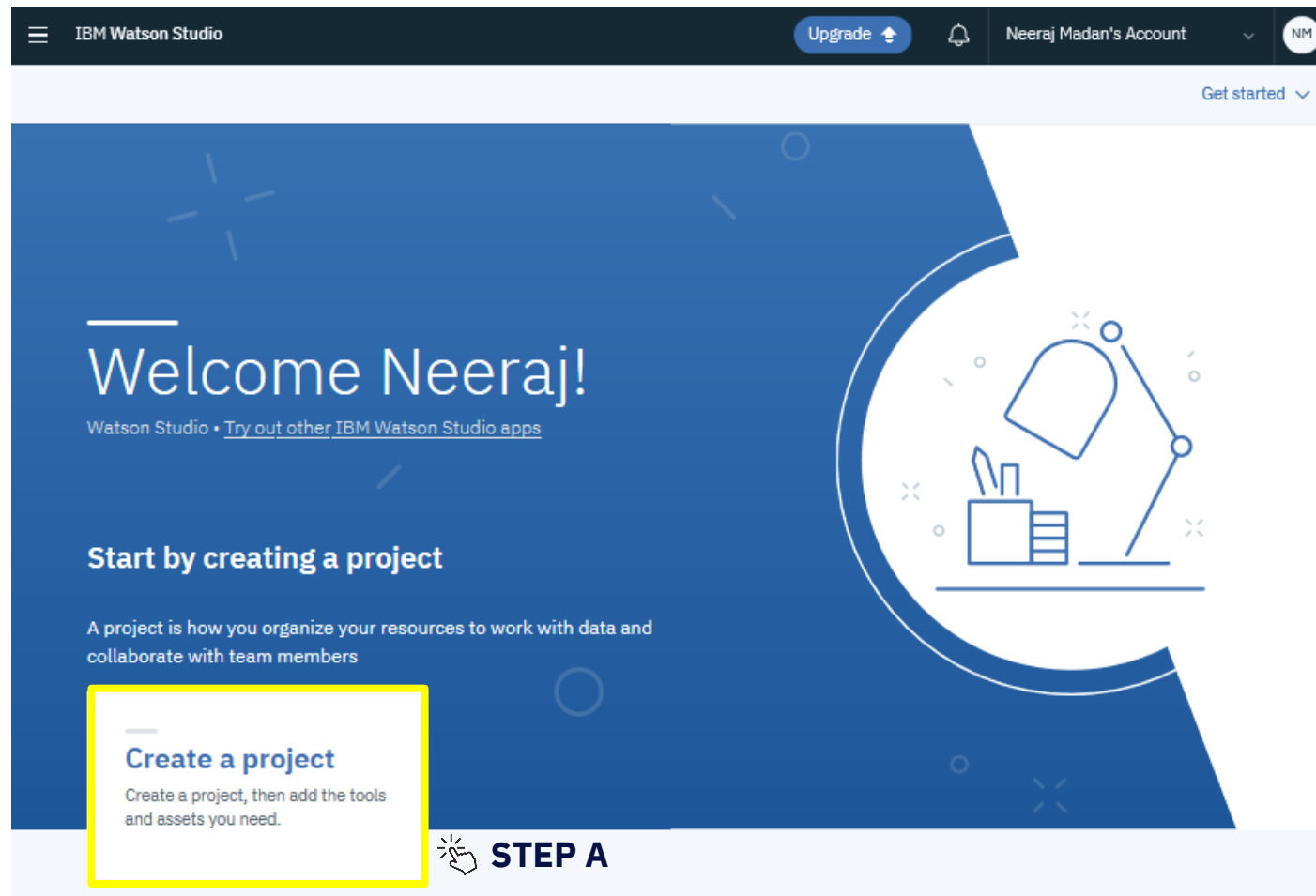
Getting Started: Create a Project

Launch Watson Studio



Getting Started: Create a Project

Select an Empty Project



The image shows the IBM Watson Studio 'Welcome Neeraj!' screen. The header includes the IBM Watson Studio logo, an 'Upgrade' button, a notification bell, and the user's account name 'Neeraj Madan's Account' with a dropdown arrow and a profile icon labeled 'NM'. A 'Get started' link with a dropdown arrow is in the top right. The main content area has a blue background with a large white 'Welcome Neeraj!' text. Below it, a link says 'Watson Studio • Try out other IBM Watson Studio apps'. A section titled 'Start by creating a project' explains that a project is how you organize resources to work with data and collaborate with team members. A yellow box highlights a 'Create a project' button with the text 'Create a project, then add the tools and assets you need.' Below this box is a lightbulb icon and the text 'STEP A'. On the right side of the main content area, there is a large white circular graphic containing a line-art illustration of a desk with a lamp, a notepad, and a pen.

IBM Watson Studio Upgrade Neeraj Madan's Account NM

Get started

Welcome Neeraj!

Watson Studio • Try out other IBM Watson Studio apps

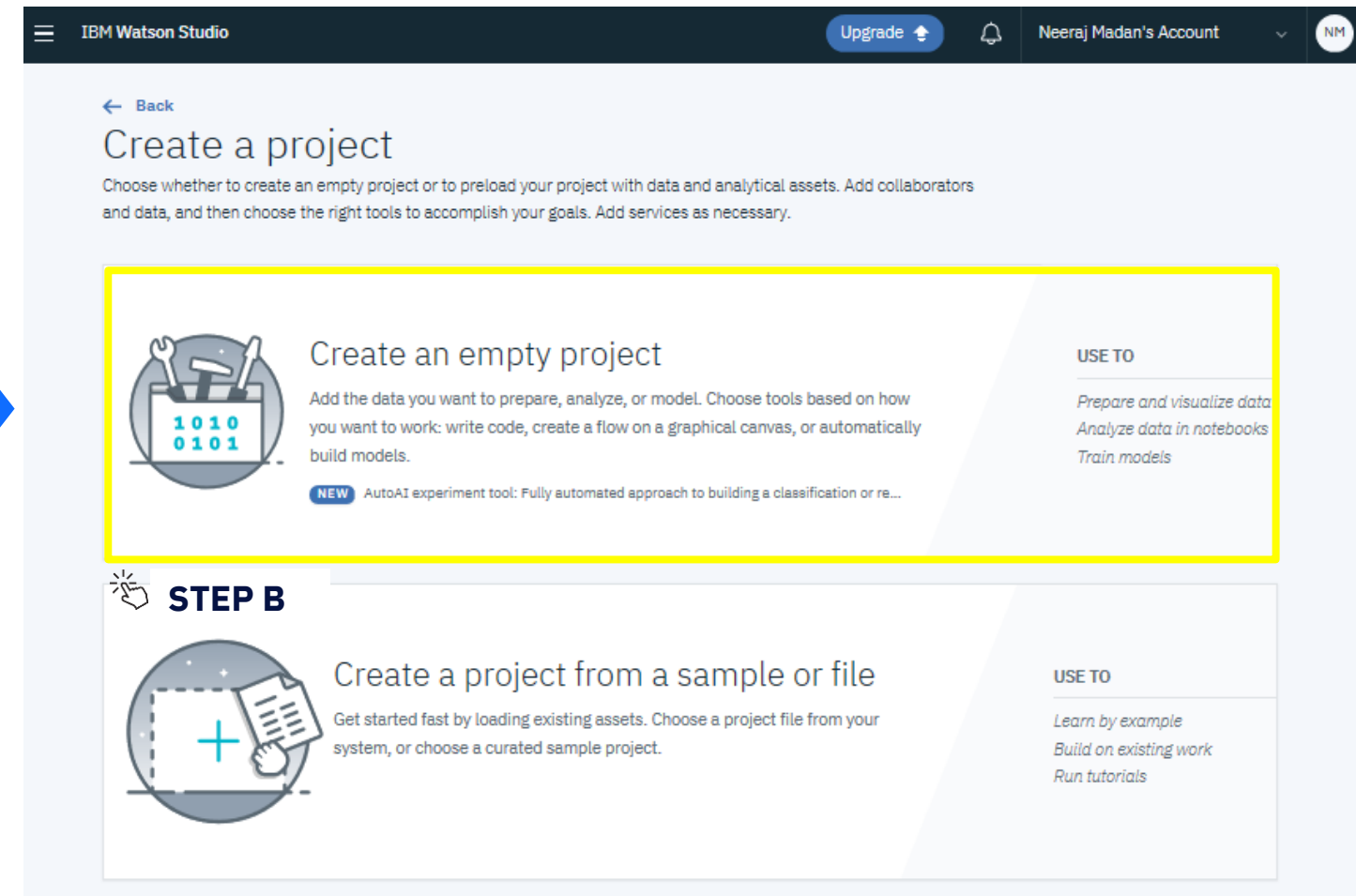
Start by creating a project

A project is how you organize your resources to work with data and collaborate with team members

Create a project

Create a project, then add the tools and assets you need.

STEP A




The image shows the 'Create a project' screen in IBM Watson Studio. The header is identical to the previous screen. Below the header, there is a 'Back' link. The main title is 'Create a project', followed by a paragraph: 'Choose whether to create an empty project or to preload your project with data and analytical assets. Add collaborators and data, and then choose the right tools to accomplish your goals. Add services as necessary.' There are two main options, each with an icon, a title, a description, and a 'USE TO' section. The first option, 'Create an empty project', is highlighted with a yellow border. It features an icon of a toolbox with a wrench and a hammer, and a small box with the binary code '1010 0101'. The description says: 'Add the data you want to prepare, analyze, or model. Choose tools based on how you want to work: write code, create a flow on a graphical canvas, or automatically build models.' The 'USE TO' section lists: 'Prepare and visualize data', 'Analyze data in notebooks', and 'Train models'. Below this is a 'NEW' badge and a link to 'AutoAI experiment tool: Fully automated approach to building a classification or re...'. The second option, 'Create a project from a sample or file', features an icon of a document with a plus sign and a hand. The description says: 'Get started fast by loading existing assets. Choose a project file from your system, or choose a curated sample project.' The 'USE TO' section lists: 'Learn by example', 'Build on existing work', and 'Run tutorials'. Below these options is a 'STEP B' section with a lightbulb icon.

Back

Create a project

Choose whether to create an empty project or to preload your project with data and analytical assets. Add collaborators and data, and then choose the right tools to accomplish your goals. Add services as necessary.




Create an empty project

Add the data you want to prepare, analyze, or model. Choose tools based on how you want to work: write code, create a flow on a graphical canvas, or automatically build models.

NEW AutoAI experiment tool: Fully automated approach to building a classification or re...

USE TO

- Prepare and visualize data
- Analyze data in notebooks
- Train models



Create a project from a sample or file

Get started fast by loading existing assets. Choose a project file from your system, or choose a curated sample project.


USE TO


- Learn by example
- Build on existing work
- Run tutorials



STEP B

Getting Started: Create a Project

Mention the Project Name

 IBM Watson Studio

Upgrade 

 Neeraj Madan's Account 

NM

New project


Define project details

Storage

Name

cloud-object-storage-qx


Net Promoter Score Prediction

 **STEP A** (Please type "Net Promoter Score Prediction")

Description

Project description


Choose project options

☐ Restrict who can be a collaborator 


Project includes integration with [Cloud Object Storage](#) for storing project assets.


Cancel


Create

 **STEP B**










Gather your resources

Your project can contain many types of resources, but the most important are your team and your data. Add collaborators and data sets, and then create analytic assets like notebooks and models to work with your data.

Maybe later

Start tour

 **STEP C**

Getting Started: Create a Project

Generate a Project Token

The screenshot illustrates the process of generating a project token in IBM Watson Studio. It is divided into five steps, each marked with a lightbulb icon and a label:

- STEP A:** The user is in the 'NPS Prediction' project page. The 'Settings' tab in the top navigation bar is highlighted with a yellow box.
- STEP B:** The 'Access tokens' section is highlighted with a yellow box. The 'New token' button, located at the top right of the section, is also highlighted with a yellow box.
- STEP C:** The 'Name' input field in the 'New Token' dialog is highlighted with a yellow box and contains the text 'NPS'. A note next to it says '(Please type "NPS")'.
- STEP D:** The 'Access role for project' dropdown menu is highlighted with a yellow box and shows 'Editor' selected.
- STEP E:** The 'Create' button at the bottom right of the 'New Token' dialog is highlighted with a yellow box.

Blue arrows indicate the flow from Step A to Step B, and from Step B to Step C.

NAME	ROLE	CREATED	LAST USED	ACTIONS
You don't have any Access tokens yet.				

New Token

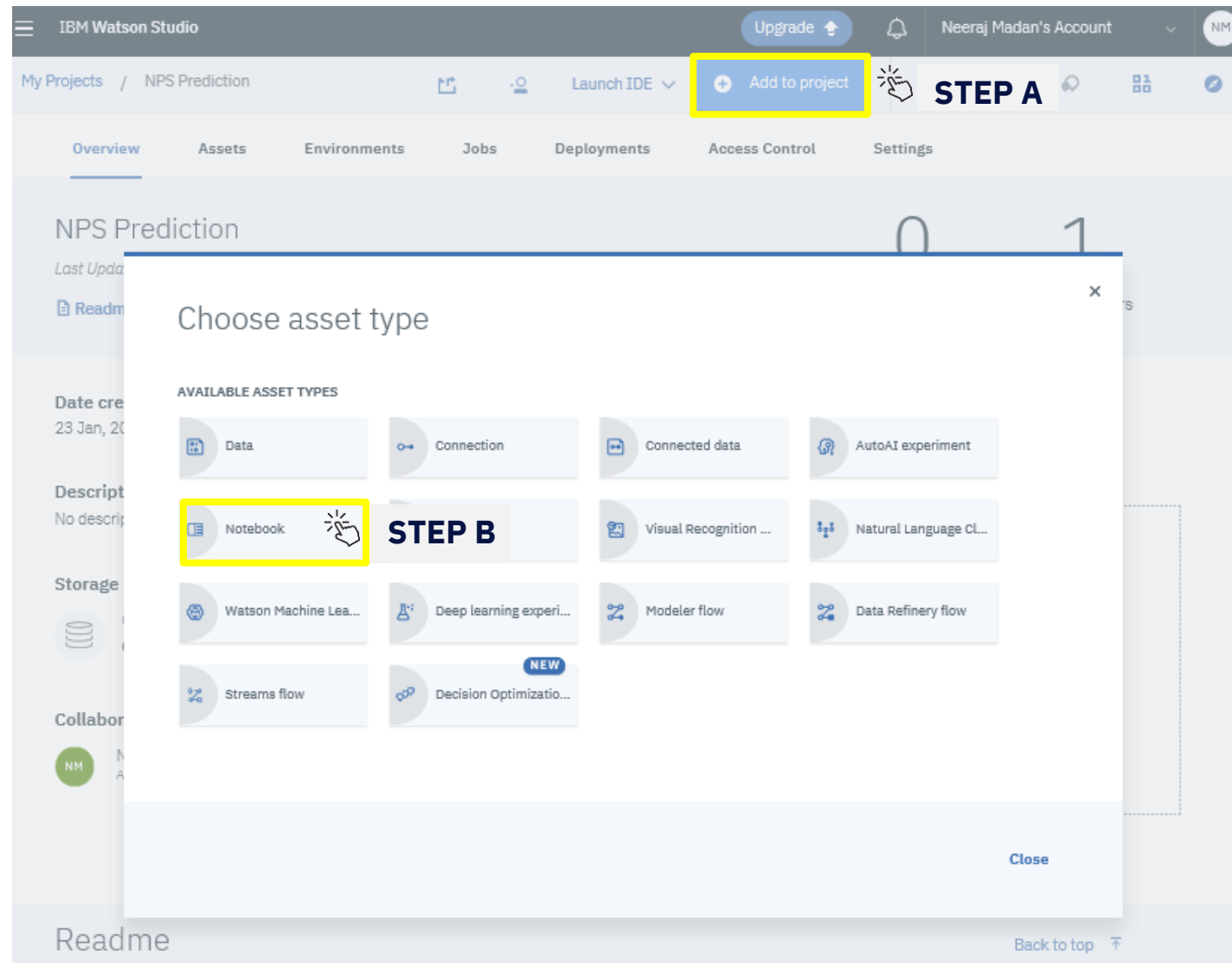
Name
NPS

Access role for project
Editor

Cancel Create

Getting Started: Create a Project

Add a notebook to your project



Getting Started: Create a Project

Import a notebook from GitHub

The screenshot shows the 'New notebook' form in IBM Watson Studio. The form is divided into two main sections: 'Name' and 'Description (optional)' on the left, and 'Select runtime' and 'Notebook URL' on the right. The 'From URL' tab is selected under the 'New notebook' header. Annotations with lightbulb icons and step labels (STEP A, STEP B, STEP C, STEP D) point to specific fields: 'From URL' (STEP A), 'Name' (STEP B), 'Select runtime' (STEP C), and 'Notebook URL' (STEP D). The 'Name' field contains 'Workshop Setup Instructions Notebook' with a character count of 26 remaining. The 'Description' field is empty with a character count of 500 remaining. The 'Select runtime' dropdown is set to 'Default Python 3.6 Free (1 vCPU and 4 GB RAM)'. The 'Notebook URL' field contains 'https://bit.ly/ogdf_test'. A note below the runtime selection states: '(Please type "NPS Prediction" vCPU and 4 GB RAM and is free. Learn more about capacity unit hours and Watson Studio pricing plans.)'.

IBM Watson Studio

Upgrade

Neeraj Madan's Account

My Projects / NPS Prediction / Add Notebook

New notebook

Blank From file **From URL** **STEP A**

Name

Workshop Setup Instructions Notebook **STEP B**

26 characters remaining

Description (optional)

Type your Description here

500 characters remaining

Select runtime

Default Python 3.6 Free (1 vCPU and 4 GB RAM) **STEP C**

(Please type "NPS Prediction" vCPU and 4 GB RAM and is free. [Learn more](#) about capacity unit hours and Watson Studio pricing plans.)

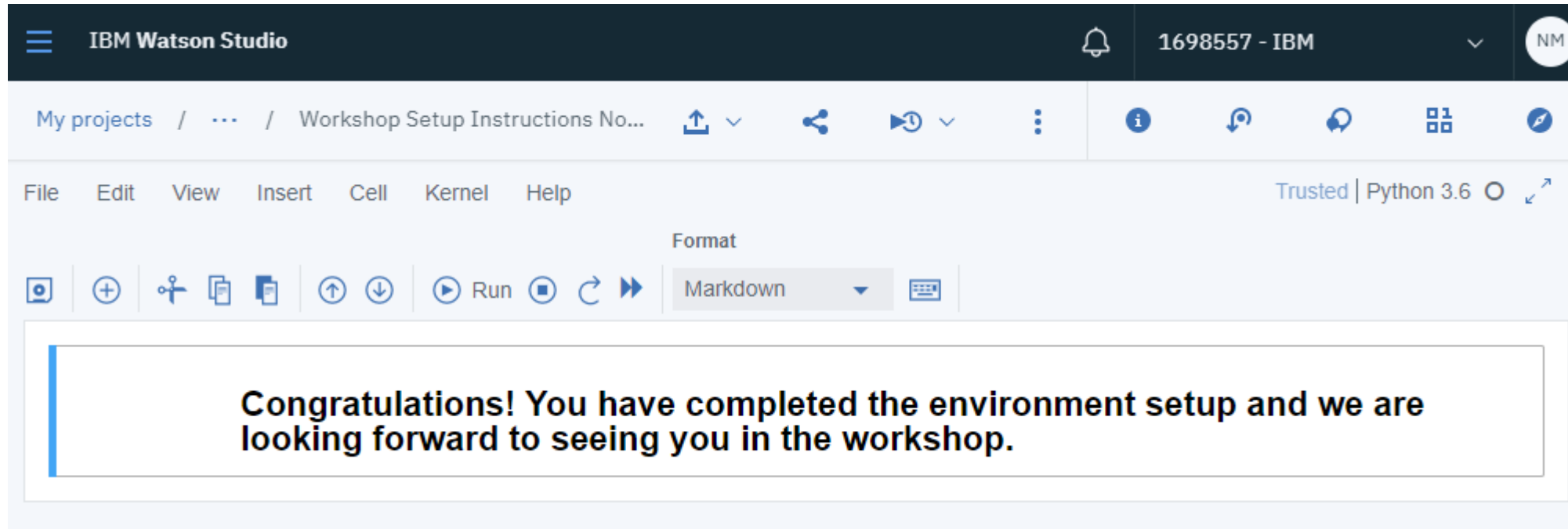
Notebook URL

https://bit.ly/ogdf_test **STEP D** (Enter Notebook URL Link)

Notebook URL: https://bit.ly/ogdf_test

Getting Started: Create a Project

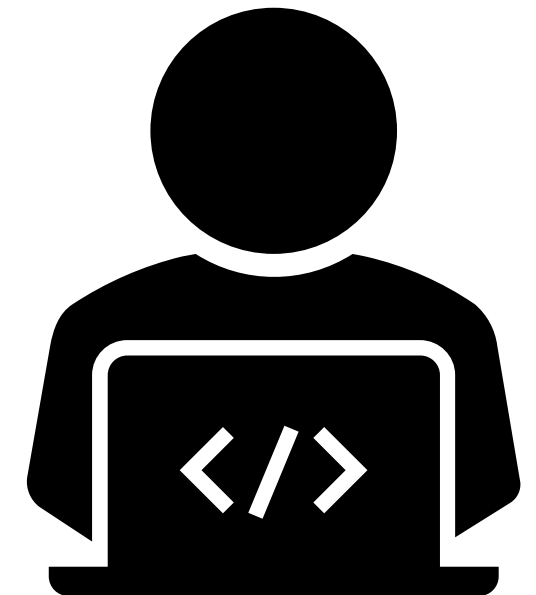
Let's get started!



Takeaway

Now, I am able to

- ✓ setup the Predictive Analytics and Machine Learning environment on IBM Cloud



Contact Us

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How to handle error "Failure during registration" when creating an IBM Cloud account

Question

When you sign-up and create a new IBM Cloud account, the following error message occurs:

"Failure during registration

Try again in a few minutes. If you continue having problems, contact us at this link: <https://watson.service-now.com/wcp>"

Answer

As noted in the error, wait a few minutes then try again by going directly to <https://cloud.ibm.com/login>.

If the error continues, use the steps below to eliminate or work around any web browser problems:

1. Refresh or restart your browser.
2. In your current browser, clear the cookies or the cache of the browser, then restart.
3. Use the private browsing mode of your browser, for example, a private or incognito window.
4. Use a different browser. For more information about browsers that are supported by IBM Cloud, see [IBM Cloud prerequisites](#).
5. Try another computer or network-connect device, such as a phone or tablet.
6. Try a different domain email ID to create the account.

If none of these steps resolve the issue, follow the link given in the error message to [create a service request in the IBM Cloud Portal](#).