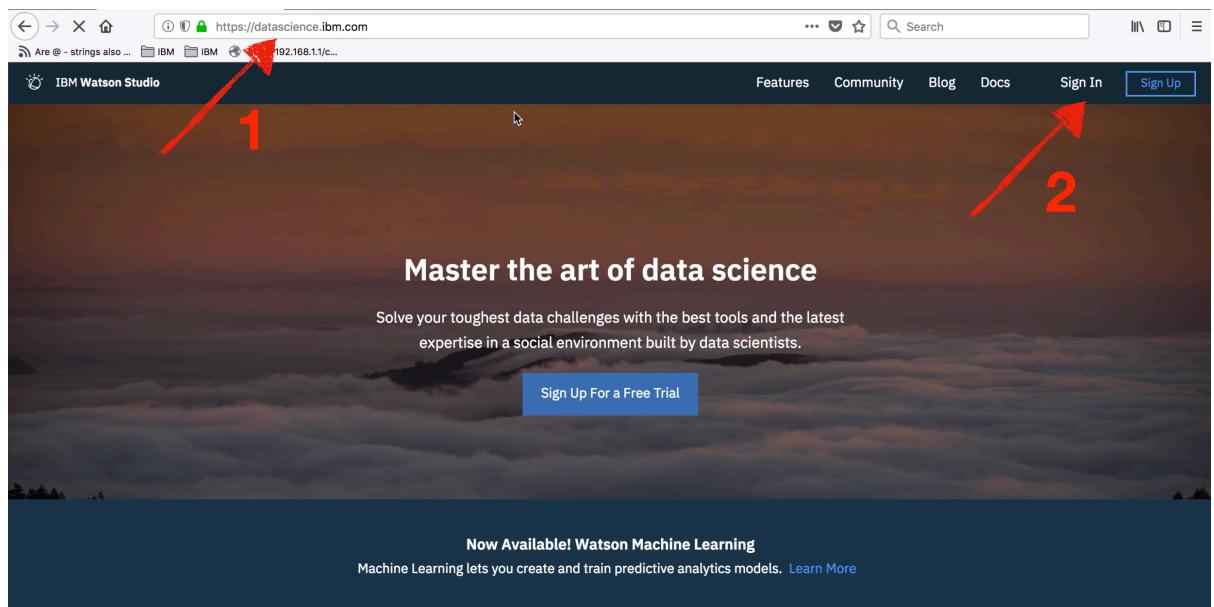


Create and setup a IBM Watson Studio project for jupyter and Apache Spark in the IBM Cloud Free Tier

Note: IBM Data Science Experience has been renamed to IBM Watson Studio and now includes a lot more functionality which we don't need during this course

Step 1: Signup for DSX

1. Start the process



- a. Open the following URL (1)
<http://datascience.ibm.com>
HINT: In case you've accidentally created your resource in United Kingdom instead of US South you can just use the following link instead:
<https://eu-gb.datascience.ibm.com/>.
- b. Click on "Sign In" (2)

2. Make use all dropdowns are filled

Select Organization and Space

Confirm your IBM Cloud organization and space information below.
[Or create new organization and space](#)

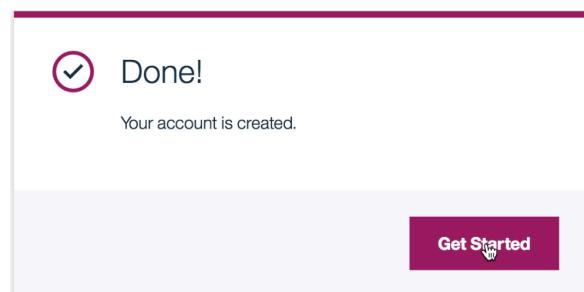
Select IBM Cloud account
Dummyuser23.1.ormium@spamgourmet.com ▾

IBM Cloud Organization
Dummyuser23.1.ormium@spamgourmet.com ▾

IBM Cloud Space
dev ▾

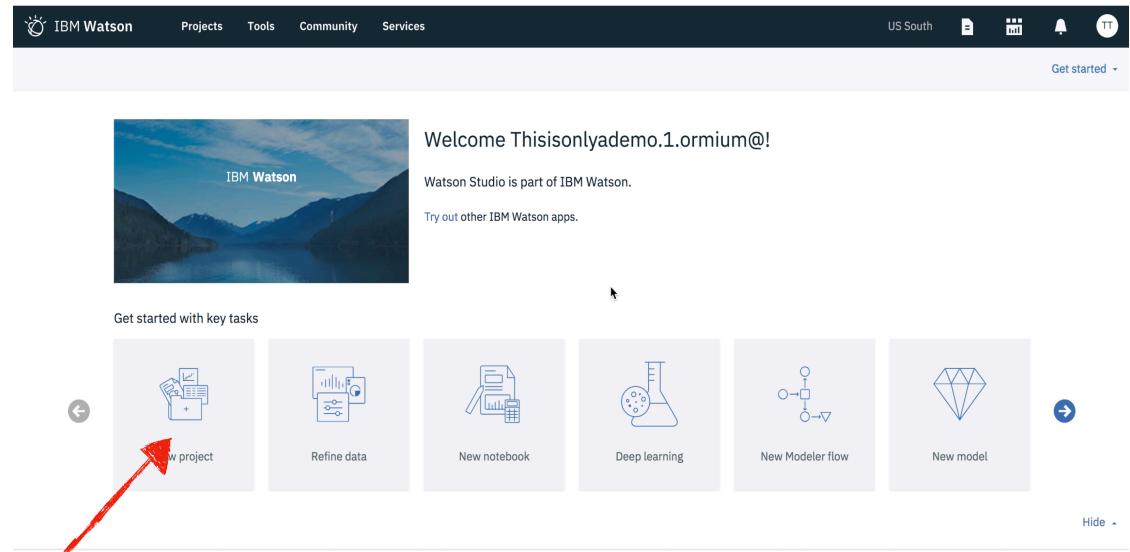
 Continue

3. Once the process is finished (it may take up some time) click on “Get Started”



4. In the UI, create a new Project

- a. Click on “New Project”



- b. Make sure that “Jupyter notebooks” are activated

The screenshot shows the 'New project' screen in IBM Watson. On the left, there's a sidebar with a profile picture placeholder, a 'Get started' button, and a back arrow. The main area displays nine project tiles:

- Basic**: Want to start simple? Upload data in your project and add tools later.
- Jupyter Notebooks** (selected): Analyze data to discover insights and share your findings with others. (A red arrow points to this tile.)
- Visual Recognition**: Tag and classify visual content using the Watson Visual Recognition service.
- Experiment Assistant**: Find the best model by training and comparing multiple variations.
- Modeler**: Build modeler flows to train SPSS and Spark models or design deep neural networks.
- Dashboards**: Create visual dashboards from your data to gain insights faster.
- Streams Designer**: Ingest, analyze, monitor, and correlate data as it arrives from real-time data sources.
- Data Preparation**: Combine, cleanse, analyze, and shape data using Data Refinery.
- Complete**: Want to explore every corner of Watson Studio? See every tool in one project.

At the bottom right, there are 'Cancel' and 'OK' buttons. The top right corner has a close 'X' button.

- c. Click on “OK”
d. Set a project name and click on “Create”

The screenshot shows the 'New project' wizard. At the top, there's a navigation bar with 'IBM Watson', 'Projects', 'Tools', 'Community', 'Services', 'US South', and a bell icon. Below the title 'New project', there are two main sections:

- Define project details**:
 - Name**: A text input field containing 'default'.
 - Description**: A text area with placeholder text 'Project description'.
- Storage**: A section showing a storage volume labeled 'cloud-object-storage-dsx'.

Below these sections is a 'Choose project options' section with a checkbox for 'Restrict who can be a collaborator'. It also mentions integration with 'Object Storage' and additional tools available in Project Settings.

At the bottom right, there are 'Cancel' and 'Create' buttons. The 'Create' button is highlighted with a blue border.

e. Now this turns you to the overview page, please click on "Settings"

The screenshot shows the IBM Watson Project Overview page. At the top, there's a navigation bar with links for Projects, Tools, Community, Services, and a dropdown for US South. Below the navigation is a header bar with 'My Projects / default', 'Add to project', and several icons. The main content area has tabs for Overview, Assets, Environments, Bookmarks, Deployments, Collaborators, and Settings. The 'Overview' tab is currently selected. The 'default' project is listed with 'Last Updated: Apr 04 2018'. To the right, there are summary statistics: 0 Assets, 0 Bookmarks, and 1 Collaborator. A red arrow points from the text above to the 'Settings' tab. On the left side, there are sections for Date created (Apr 04 2018), Description (No description available), Storage (0% of 5 GB used), Collaborators (View all (1) with one entry: Thisisonlyademo.1.ormium@Admin), and Bookmarks (View all (0)).

- f. Please make sure that “Jupyter notebooks” are activated

The screenshot shows the 'Project information' page for a project named 'default'. The 'Tools' section is highlighted with a red arrow pointing to the 'Jupyter Notebooks' checkbox, which is checked. Other tools listed include Visual Recognition, Experiment Assistant, Dashboards, Streams Designer, and Data Preparation.

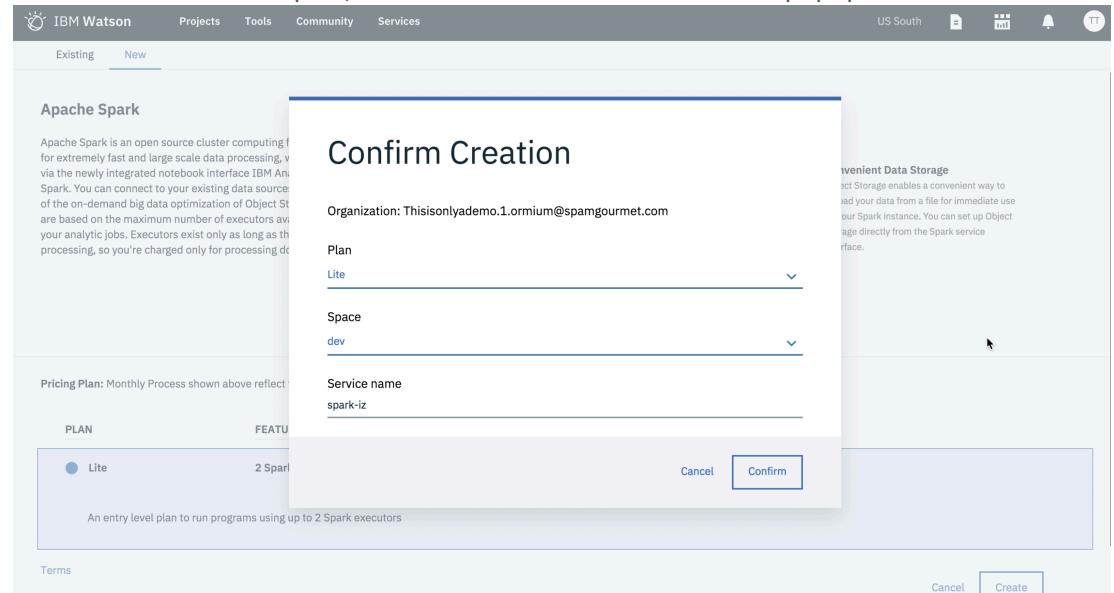
NAME	SERVICE TYPE	PLAN	ACTION
			Add service
			Amazon EMR Spark
			IBM Analytics Engine
Spark			
			Machine Learning
			Streaming Analytics
			Analytics Dashboard

- g. Please add Apache Spark Service (Associated Services->Add service->Spark)

The screenshot shows the 'Associated services' page. The 'Add service' dropdown menu is open, and 'Spark' is selected. Other options in the menu include Amazon EMR Spark, IBM Analytics Engine, Machine Learning, Streaming Analytics, and Analytics Dashboard.

NAME	ROLE	CREATED	LAST USED	AC
				Watson

- h. Please select the “Lite” plan, the create and then confirm on the popup



- i. Now please click on the “Assets” tab, then on “Add Notebook”

NAME	TYPE	SERVICE	CREATED BY	LAST MODIFIED	ACTIONS
you currently have no data assets					

NAME	SHARED	SCHEDULED	STATUS	LANGUAGE	LAST EDITOR	LAST MODIFIED	ACTIONS
you currently have no notebooks							

- j. IMPORTANT: In case you want to use Apache Spark, when creating a notebook or importing it from a local or remote location, you need to select the appropriate

Apache Spark service as shown below

The screenshot shows the IBM Watson Studio interface. At the top, there is a navigation bar with the IBM Watson logo, Projects, Tools, Community, Services, US South, and a gear icon. Below the navigation bar, the URL is My Projects / default / Add Notebook. The main area is titled "New notebook" and has tabs for Blank, From file, and From URL, with "Blank" selected. There is a "Description" input field containing "Type your Description here". Below this, the "Language*" section shows "Python 3.5" selected. A dropdown menu for "Environments" is open, listing several options under "Watson Studio": Default Anaconda Free (1vCPU and 4GB RAM), Default Anaconda XS (2vCPU and 8GB RAM), Default R Environment (2vCPU and 8GB RAM), Default Anaconda S (4vCPU and 16GB RAM), and Default R Environment S (4vCPU and 16GB RAM). A note at the bottom of the dropdown says "Learn more about capacity unit hours and Watson Studio pricing plans." At the bottom right of the form are "Cancel" and "Create Notebook" buttons.

5. Congratulations, your DSX setup is complete!