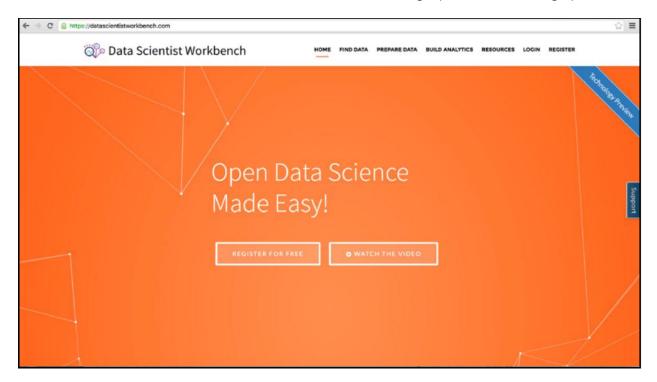
### Lab: Introducing Data Scientist Workbench

This Lab must be done on the Data Scientist Workbench. If you have not signed up yet, go to datascientistworkbench.com and click REGISTER FOR FREE. Then login (2<sup>nd</sup> link from the right):



### **Contents**

| LAB 1 | INTRODUCING DATA SCIENTIST WORKBENCH |   |   |
|-------|--------------------------------------|---|---|
|       | 1.1                                  | GETTING STARTED WITH DATA SCIENTIST WORKBENCH             | 4 |
|       | 1.2                                  | SUMMARY   | 4 |
|       | 1.3                                  | GETTING STARTED WITH DATA SCIENTIST WORKBENCH - SOLUTIONS | 5 |

### Lab 1 Introducing Data Scientist Workbench

After completing this hands-on lab, you will know:

- How to register an account on Data Scientist Workbench (DSWB).
- How to upload and work with your data on DSWB.
- How to use OpenRefine to prepare your data on DSWB.
- How to open and do simple tasks with the build analytics tools on DSWB, Jupyter & Zeppelin Notebbooks, RStudio IDE, and Seahorse.
- How to change your profile settings on DSWB.
- How to open the Feedback Forum and vote on your favourite ideas.
- How to see the courses available for free on Big Data University.

Allow 30 minutes to complete this section of the lab.

NOTE: This is a guided Lab. Solutions are found at the end of this document

### 1.1 Getting Started with Data Scientist Workbench

| 1.  | Register an account on DSWB  |
|-----|--|
| 2.  | Upload data by going to My Data, and Upload Data   |
| 3.  | Explore each of the tools: Click OpenRefine  |
| 4.  | Click on Jupyter Notebook and explore the interface, like clicking on one of the tutorial notebooks  |
| 5.  | Click on Zeppelin Notebook and import one of the sample notebooks  |
| 6.  | Click on RStudio IDE and run 1+1 in the console  |
| 7.  | Open Seahorse and open one of the tutorials  |
| 8.  | Change your profile settings by toggling the left-hand sidebar and clicking on your username (https://my.datascientistworkbench.com/profile). Select a preferred data center to optimize your account's performance (upload/download speeds for you) |
| 9.  | Click on the Feedback Forum and read through some of the top ideas. Vote for your favorite idea.   |
| 10. | Click on Online Learning to check out courses on Big Data University   |

## 1.2 Summary

Congratulations! ...

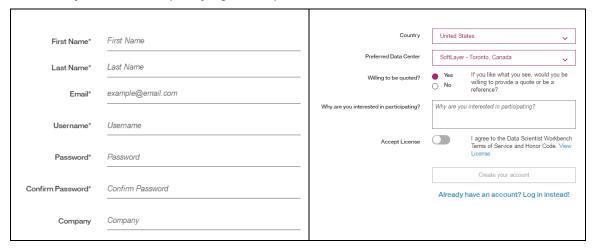
### 1.3 Getting Started with Data Scientist Workbench - Solutions



### Create an account using



Or create your account specifying the required information:



Based on your location, use the default Data Center, or select one from the dropdown.

Then view the License terms, and click Accept License to create your account.

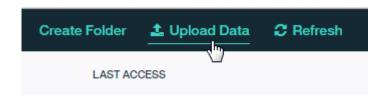


\_\_2. **Upload data by going to My Data, and Upload Data:** From the DSWB home page, click My Data:

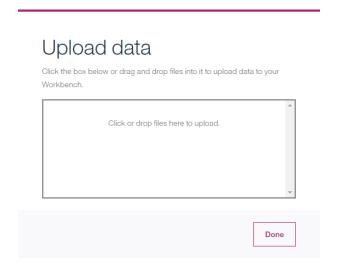
### What do you want to do today?



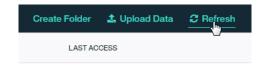
To upload a file to the default /resources/data directory, click Upload Data (top right):



Drag and drop the files you want to upload and click **Done**:



To check if your files have been uploaded, click Refresh:



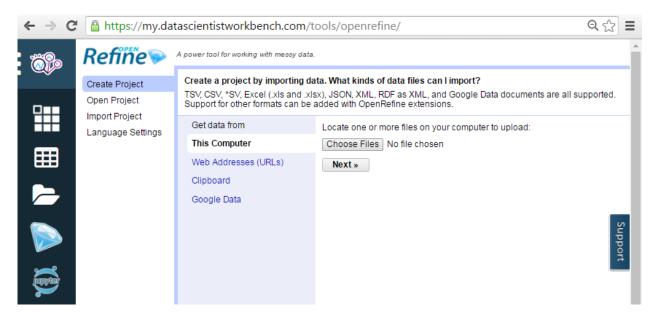


### \_3. Explore each of the tools: Click OpenRefine:

## What do you want **to do** today?



### OpenRefine opens – explore some of the options:



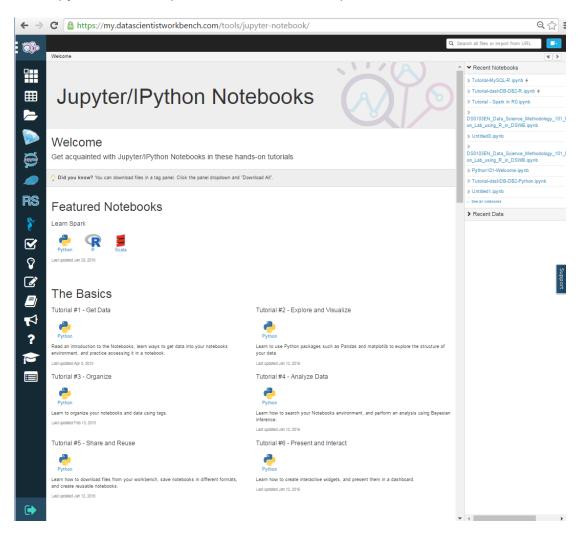


\_\_4. Click on Jupyter Notebook and explore the interface, like clicking on one of the tutorial notebooks:

## What do you want **to do** today?



The Jupyter Notebook opens – scroll down and explore some of the tutorials:



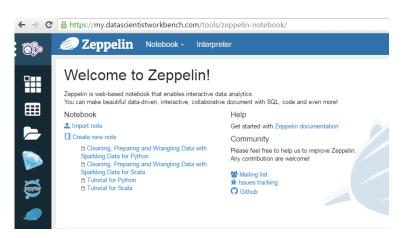


### \_5. Click on Zeppelin Notebook and import one of the sample notebooks:

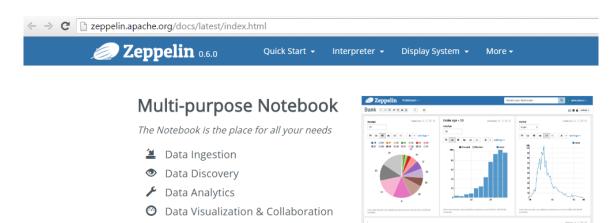
### What do you want to do today?



### The Zeppelin Notebook opens:



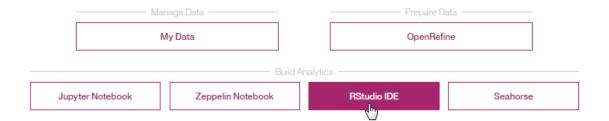
### Click Help to explore what this Notebook does:



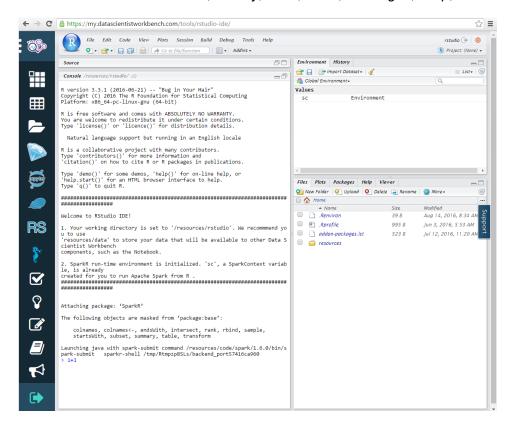


#### 6. Click on RStudio IDE and run 1+1 in the console:

### What do you want **to do** today?



RStudio IDE opens; type 1+1 on the Console (left pane) – as shown below; right pane shows environment variables, history, Files, Plots, Packages, Help, and Viewer:



To run the code, press Enter; the output displays below the code:



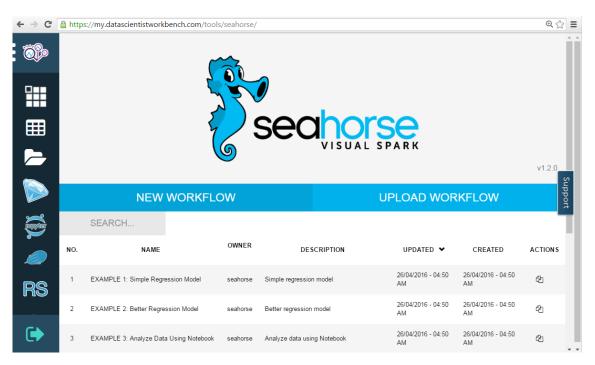


### \_7. Open Seahorse and open one of the tutorials:

## What do you want to do today?



#### Seahorse opens:

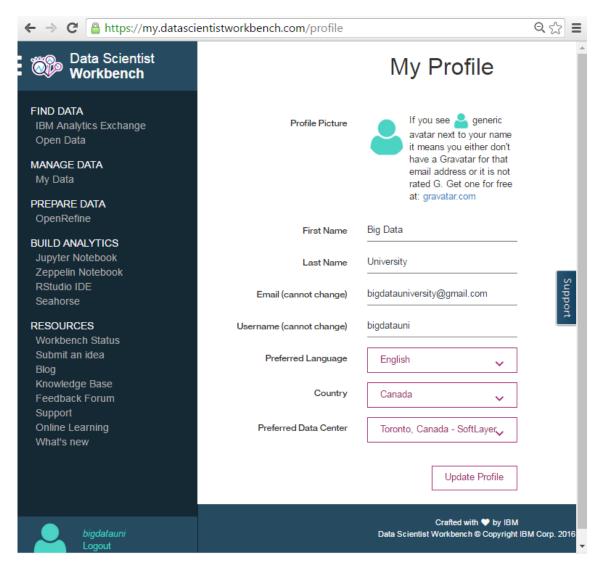


#### Explore one of the tutorials (by clicking on it):



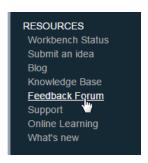


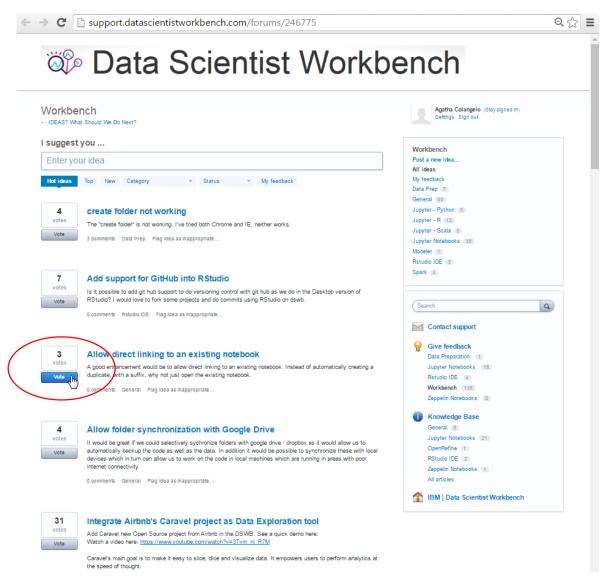
\_\_8. Change your profile settings by toggling the left-hand sidebar (bottom left) and clicking on your username:





\_9. Click on the Feedback Forum and read through some of the top ideas. Vote for your favorite idea:



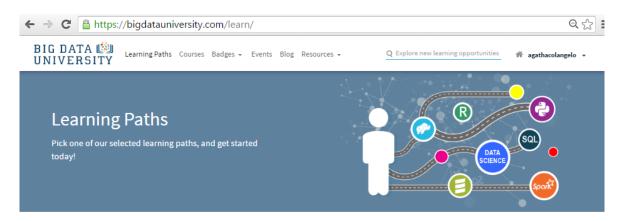




### \_\_10. Click on Online Learning to check out courses on Big Data University:



#### Check out the Learning paths:



#### **FEATURED**





#### Big Data Fundamentals

Are you interested in understanding 'Big Data' beyond the terms used in headlines? Then select this learning path as an introduction to tools like Apache Hadoop and Apache Spark Frameworks, which enable data to be analyzed on mass, and start the journey towards your headline discovery.



## Scala Programming for Data Science

■ Badges: 2 ■ Courses: 3

To light a fire, do you use a match, a lighter, or a torch? Depends on the size of the fire, much like the decisions that lead one to use Python, R, or Scala. Spark your interest in selecting the tools you need to tackle Big Data with ease, that will not just blow out.





#### Hadoop Fundamentals

■ Badges: 5 ■ Courses: 4

Are you interested in moving beyond the elephant in the room and understanding Hadoop as a foundational tool set in your future? Then select this learning path to gain exposure to the tools used in Big Data, Hadoop's core components and supporting open source projects.



#### Spark Fundamentals

■ Badges: 2 **@** Courses: 3

Solid understanding and experience, with core tools, in any field promotes excellence and innovation. Apache Spark, as a general engine for large scale data processing, is such a tool within the big data realm. This learning path addresses the fundamentals of this program's design and its application in the everyday.



### **Data Science for Business**

■ Badges: 1 **B** Courses: 2

If a trend is identified using big data, how can it be applied to solving complex day-to-day problems? Are there implications of using this data? This learning path addresses the principles of data science to explore data privacy, regression analysis, text analytics, data visualization and predictive modeling to promote topical awareness.



### **Big Data Analytics**

■ Badges: 2 ■ Courses: 3

Is the thought of writing code limiting your interest to visualize and analyzing big data efficiently? If so, the Big Data Analytics learning path offers a foundation of both methods and tools to go beyond coding and equip you to achieve the results you require using Big Data.



#### And some of the free courses:

