



Predicting Win Scenarios in PUBG with IBM Watson Studio

Open Lab | Digital Summit 2019



Predicting Win Scenarios in PUBG with IBM Watson Studio

Introduction

This document contains a step-by-step process for creating a Machine Learning model in IBM Watson Studio and will teach you the end to end process for ML model building to predict the winning probability of PUBG users.

This guide was prepared by **Miracle's Innovation Labs**.

Pre-Requisites

All attendees must have their workstation (with Internet) to participate in the lab (Both PC and MAC are compatible). The following pre-requisites will help you to make the Hands-on Lab experience easier.

Active email ID for registering with IBM Cloud to get access for IBM Watson Studio

Technology Involved

- IBM Cloud
- IBM Watson Studio

Lab Steps

So, let us get started with the application!

The following steps will outline how you can create a Machine Learning model using Watson Studio. This application helps in predicting the Winning percentage of PUBG users based on the historical data of players.

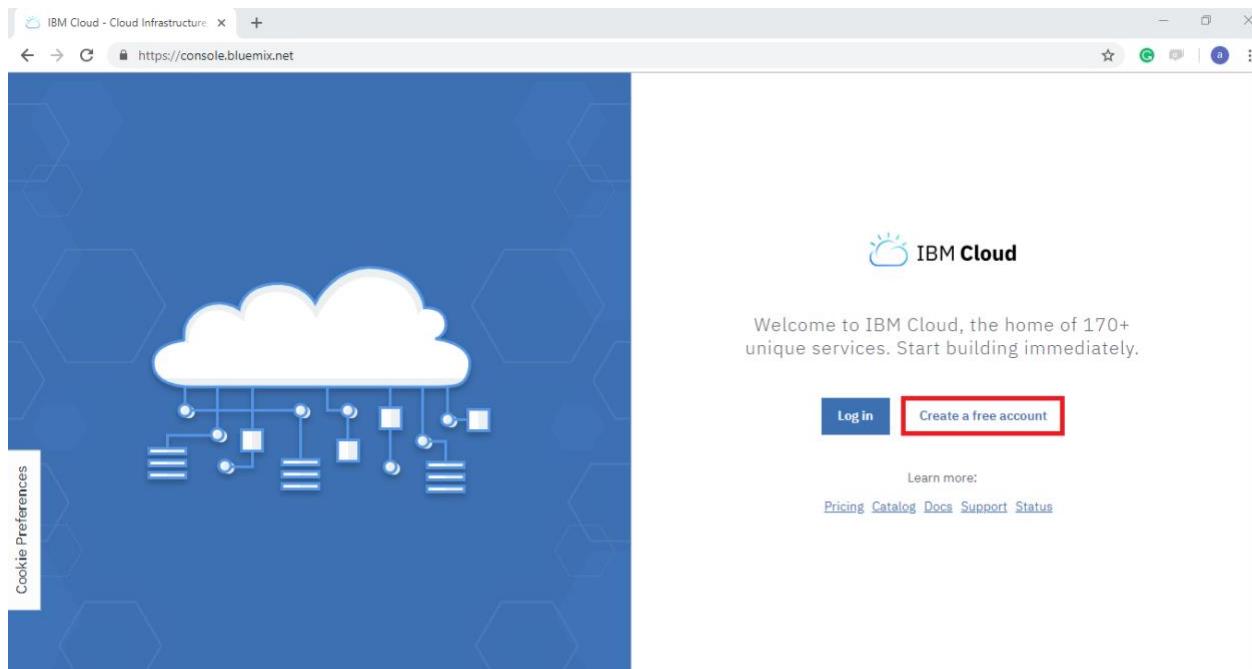
Step #1 | Creating Watson Studio in IBM Cloud

The first step is to make sure that we have access to the IBM Cloud with either a free trial option (or) a paid subscription.

Login to IBM Cloud at <http://bluemix.net> (or) register today at,

<https://console.bluemix.net/registration>

If you are a new user, click on **Create a free account**.



Now, you need to provide the details to the fields that are marked as required and click on **Create Account**.

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 a \$200 credit when you upgrade
 After you upgrade to a Pay-As-You-Go account, you can use the credit to try new services or scale your projects. The credit is valid for 1 month and can be used with any of our IBM Cloud offerings.

Ready to get started? Sign up today!

Email*

First Name*

Last Name*

Country or Region*

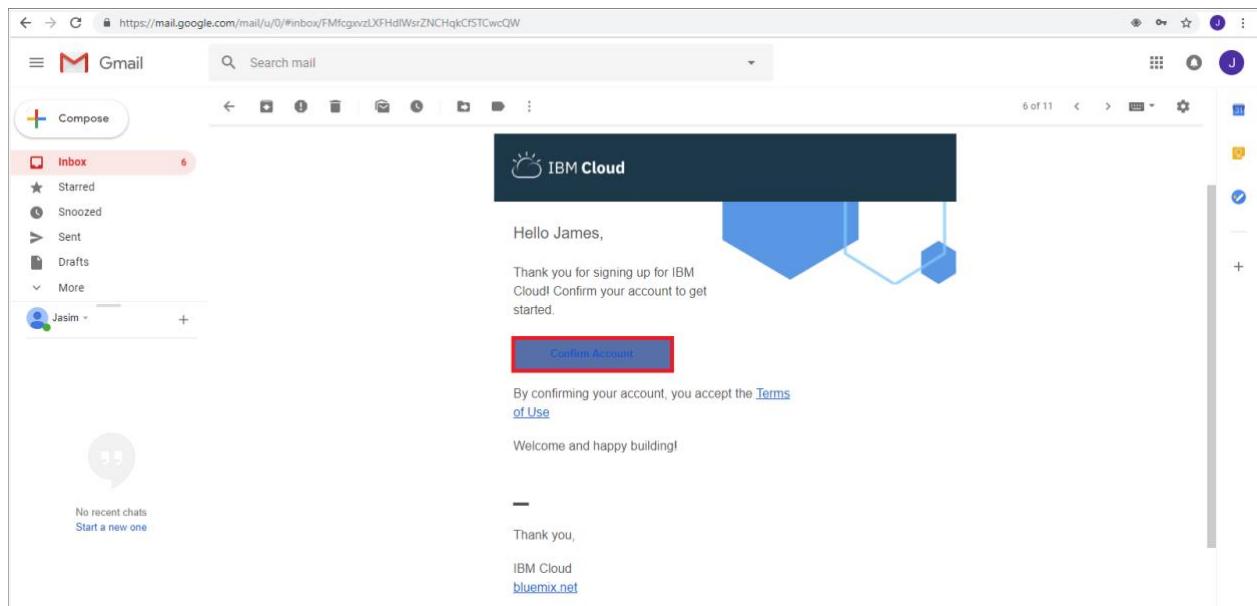
Password*

IBM may use my contact data to keep me informed of products, services and offerings:
 by email
 You can withdraw your marketing consent at any time by sending an email to newsmp@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 form.

Create Account

After creating account, confirmation mail will be sent to the registered mail id. Click on **Confirm Account** and then login to your Bluemix Account.



Now, login to your Bluemix Account.

The login page for IBM Cloud features a header 'Log in to IBM'. Below it, there's a link 'Don't have an IBMid?' and 'Create an account'. To the right, there's a 'Forgot IBMid?' link. The main form has two input fields: 'IBMid' and 'Password', each with its own 'Forgot [type]' link. Below the inputs are 'Remember me' and 'Log in' buttons. There's also a link 'Need help? Contact the IBM Help Desk'.

You can see the dashboard as shown in the below image. Now, click on **Catalog** option.

The screenshot shows the IBM Cloud dashboard. At the top, there's a navigation bar with 'IBM Cloud', a search bar, and a red-highlighted 'Catalog' button. Below the navigation is a 'Dashboard' section with a 'Customize' link. The main area has three main sections: 'Resource summary' (Services: 3, Storage: 1), 'For you' (Get started with AI and Cloud Object Storage in 15 minutes, Tutorial: Get Started with Watson Studio, Maybe later), and 'Planned maintenance' (Next event: Wed, Nov 20, 2019 1:30 AM, DB2 Warehouse on Cloud November Update). To the right, there's a 'Location status' section for Asia Pacific, Europe, North America, and South America, all marked as green. Below that is a 'Usage' section with a bar chart icon and the text 'Estimated total \$0.00'. A feedback link is visible on the right side.

In Catalog section, under the **AI** category you will be able to see all the Watson Services. Click on **Watson Studio** tile for building the application.

The screenshot shows the IBM Cloud Catalog page. The top navigation bar includes 'Catalog' which is also highlighted in red. The left sidebar shows categories like 'Services (45)', 'Software', and 'All Categories (45)'. Under 'All Categories (45)', the 'AI (16)' option is selected and highlighted with a red box. The main content area is titled 'Services' with a sub-section 'AI'. It lists several services: 'Watson Assistant' (selected and highlighted with a red box), 'Watson Studio' (also highlighted with a red box), 'Discovery', 'Knowledge Catalog', 'Compare and Comply', and 'Knowledge Studio'. Each service has a brief description and an 'AI' tag below it. A feedback link is visible on the right side.

Once you click on Watson Studio, you will have to select the **Lite** plan and click on the **Create** button.

Watson Studio Lite IBM Service IAM-enabled

Author: IBM • Date of last update: 07/18/2019

Create **About**

Select a region

London

Select a pricing plan

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

PLAN	FEATURES	PRICING
Lite	1 authorized user 50 capacity unit-hours monthly limit 1 free small compute environment with 1 vCPU and 4 GB RAM (does not require capacity unit-hours)	Free
Standard v1	1 authorized user + unlimited viewer collaborators 50 capacity unit-hours included monthly (additional capacity available) Unlimited elastic compute environments Capacity Type: 1 vCPU and 4 GB RAM = 0.5 capacity units required per hour Capacity Type: 2 vCPU and 8 GB RAM = 1 capacity units required per hour Capacity Type: 3 vCPU and 12 GB RAM = 1.5 capacity units required per hour	\$99.00 USD/Instance \$0.50 USD/Capacity Unit-Hour \$99.00 USD/Authorized User

The Lite plan for Watson Studio offers everything you need to become a better data scientist or domain expert in a collaborative environment.
Lite plan services are deleted after 30 days of inactivity.

[View terms](#)

Create **Add to estimate** **FEEDBACK**

Note - Creation of service may take up to a minute or two.

Once the service is created successfully, we will see a screen as shown below. Click on **Get Started** button to work with the Watson Studio.

Watson Studio-1e

Resource group: Default Location: London [Add Tags](#)

Watson Studio

Welcome to Watson Studio. Let's get started!

Get Started

Documentation

From getting started to how to's – see what's available.

Community

Check out our tutorials, articles, along with sample notebooks and data sets you can use to get going.

Step #2 | Create a Project in Watson Studio

Now we have landed into **IBM Watson Studio** platform where we can create our models using different tools and services.

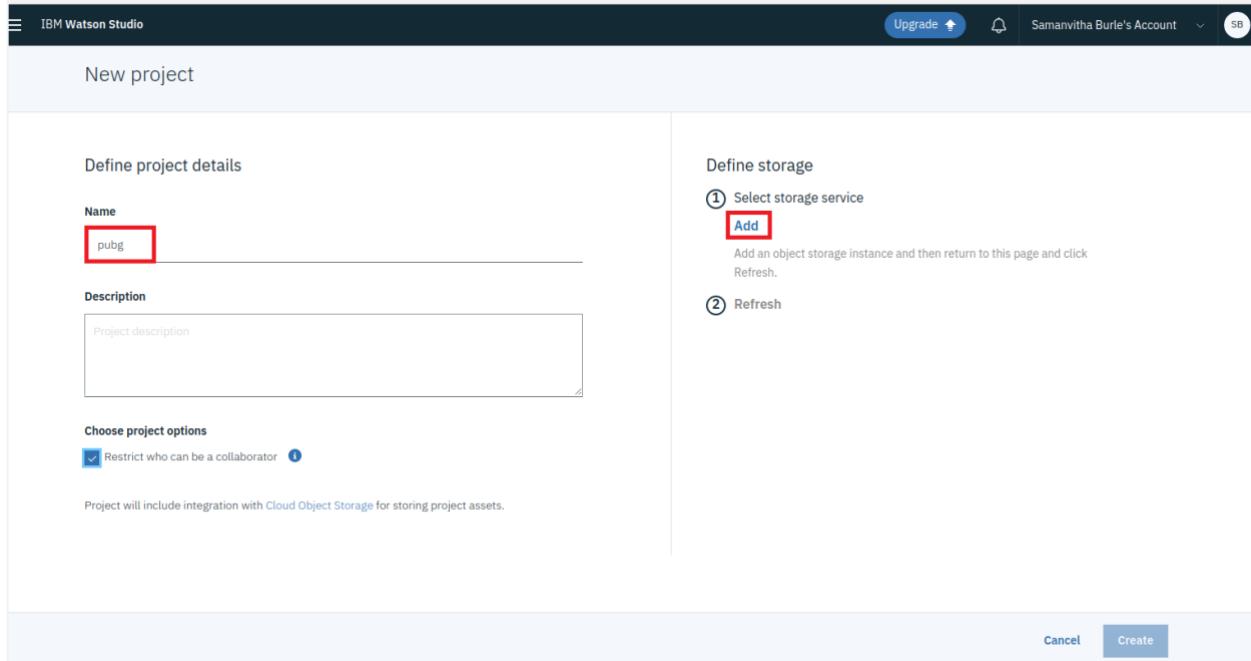
Initially, we have to create a project. Click on the **New Project** button.

The screenshot shows the IBM Watson Studio dashboard. At the top, there's a header with the IBM Watson Studio logo, upgrade options, account information, and a 'Get started' button. Below the header, the main area is divided into sections: 'Recently updated projects', 'Watson services', and 'New in gallery'. The 'Recently updated projects' section has a message: 'No projects to show. You haven't made a project yet.' with a 'New Project' button. The 'Watson services' section also has a similar message: 'No Watson services to show. You don't have any Watson services yet.' with a 'New Service' button. At the bottom, there's a 'New in gallery' section with several small cards labeled 'NOTEBOOK' and an 'Explore' button.

Once we click on New Project we can see two options - Create an empty project and Create a project from sample or file. Click on **Create an empty project**.

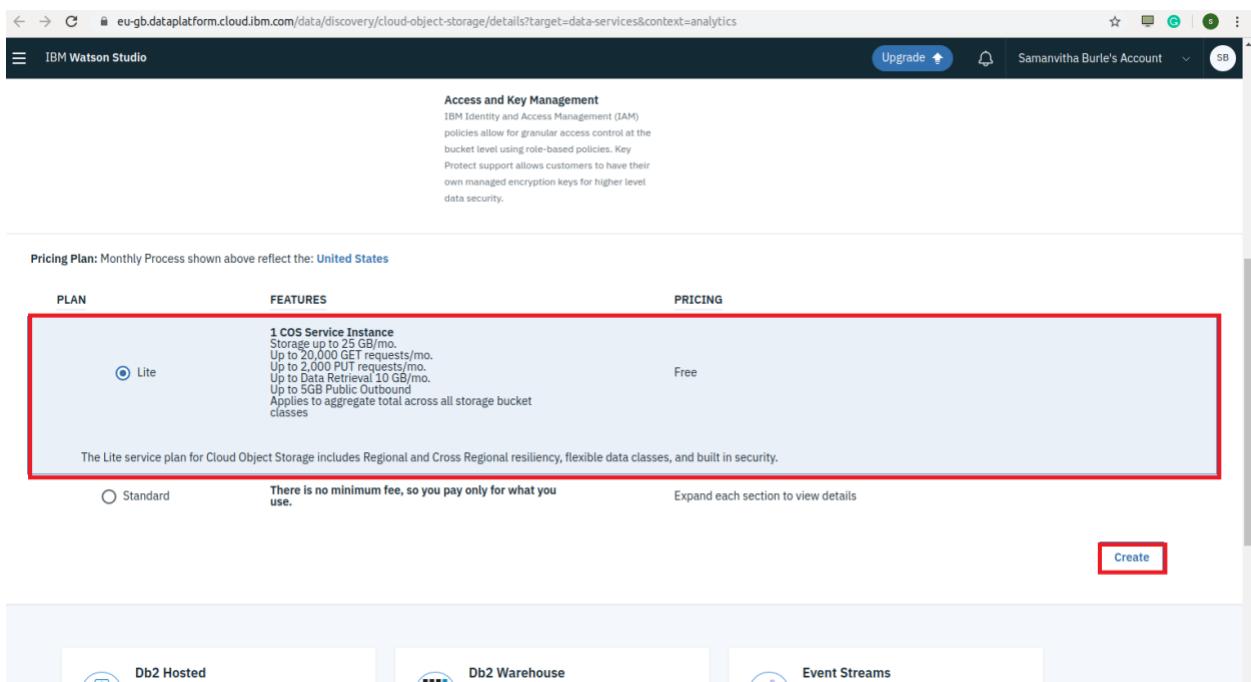
The screenshot shows the 'Create a project' dialog box. It has a back button and a title 'Create a project'. Below the title, there's a sub-instruction: 'Choose whether to create an empty project or to preload your project with data and analytical assets. Add collaborators and data, and then choose the right tools to accomplish your goals. Add services as necessary.' There are two main options: 'Create an empty project' and 'Create a project from a sample or file'. The 'Create an empty project' option is highlighted with a red border. It includes an icon of a wrench and screwdriver, a brief description, and a 'NEW' badge indicating it's a new feature. The 'Create a project from a sample or file' option includes an icon of a document with a plus sign, a brief description, and a 'USE TO' section with three items: 'Prepare and visualize data', 'Analyze data in notebooks', and 'Train models'. Both options have 'USE TO' sections with three items each: 'Create an empty project' has 'Prepare and visualize data', 'Analyze data in notebooks', and 'Train models'; 'Create a project from a sample or file' has 'Learn by example', 'Build on existing work', and 'Run tutorials'.

Provide a **Name** to the project. Here we need to add Object storage instance of IBM Cloud to our project. For that click on **Add**.



The screenshot shows the 'New project' creation interface in IBM Watson Studio. On the left, under 'Define project details', the 'Name' field is filled with 'pubg'. On the right, under 'Define storage', step 1 'Select storage service' has an 'Add' button highlighted with a red box. Step 2 'Refresh' is also visible.

Here, we are creating a **New Cloud Object Storage** instance to our project. Choose the **Lite** plan option and click on **Create**.

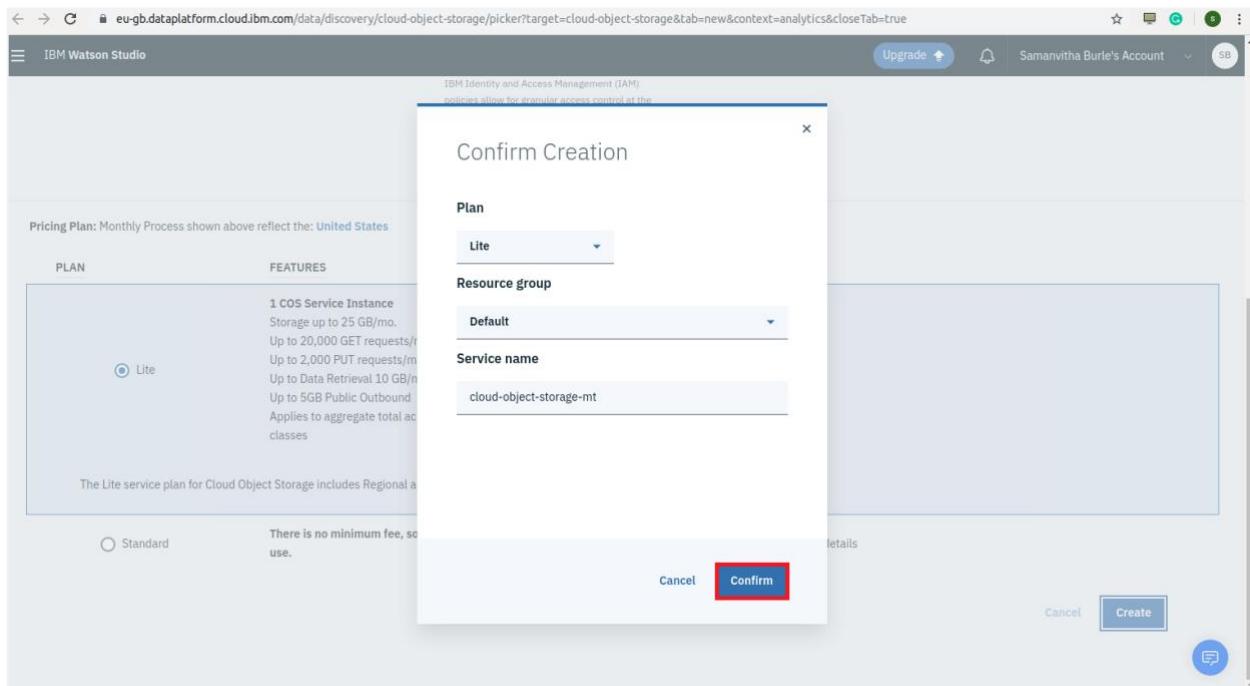


The screenshot shows the 'Cloud Object Storage' details page on eu-gb.dataplatform.cloud.ibm.com. The 'Lite' plan is selected, and the 'Create' button is highlighted with a red box.

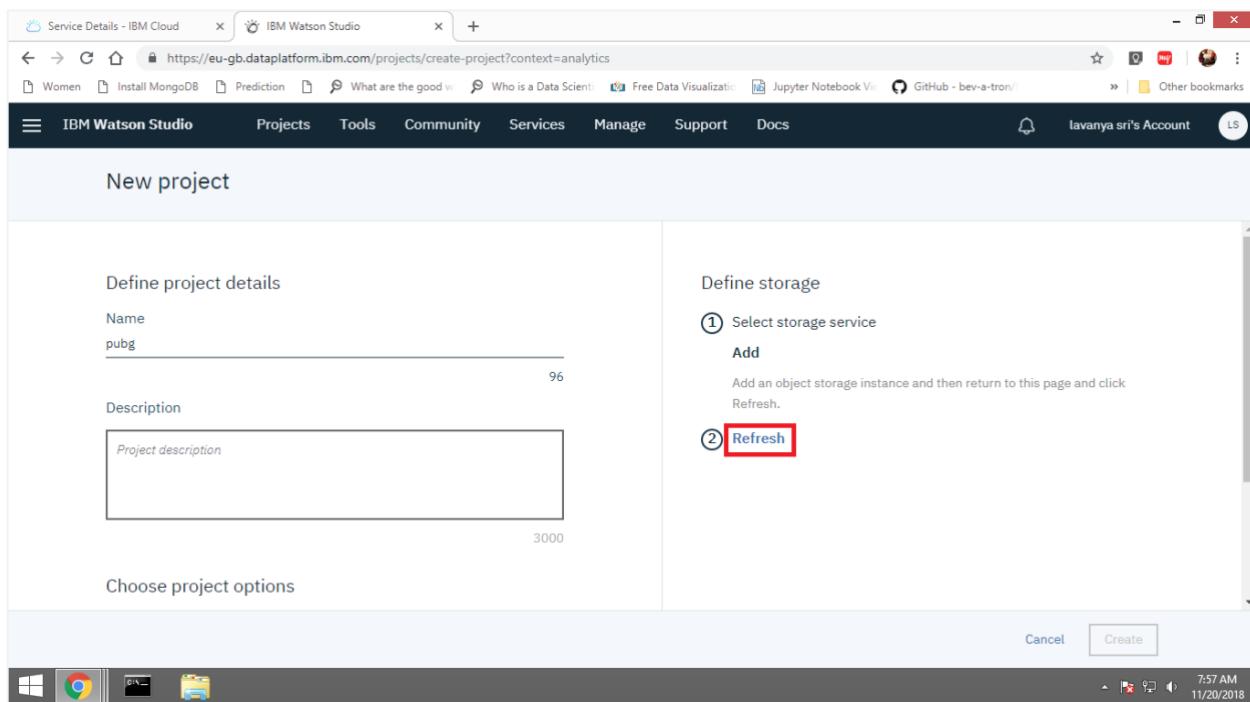
PLAN	FEATURES	PRICING
<input checked="" type="radio"/> Lite	1 COS Service Instance Storage up to 25 GB/mo. Up to 20,000 GET requests/mo. Up to 2,000 PUT requests/mo. Up to 10 GB Public Inbound Up to 5GB Public Outbound Applies to aggregate total across all storage bucket classes	Free

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

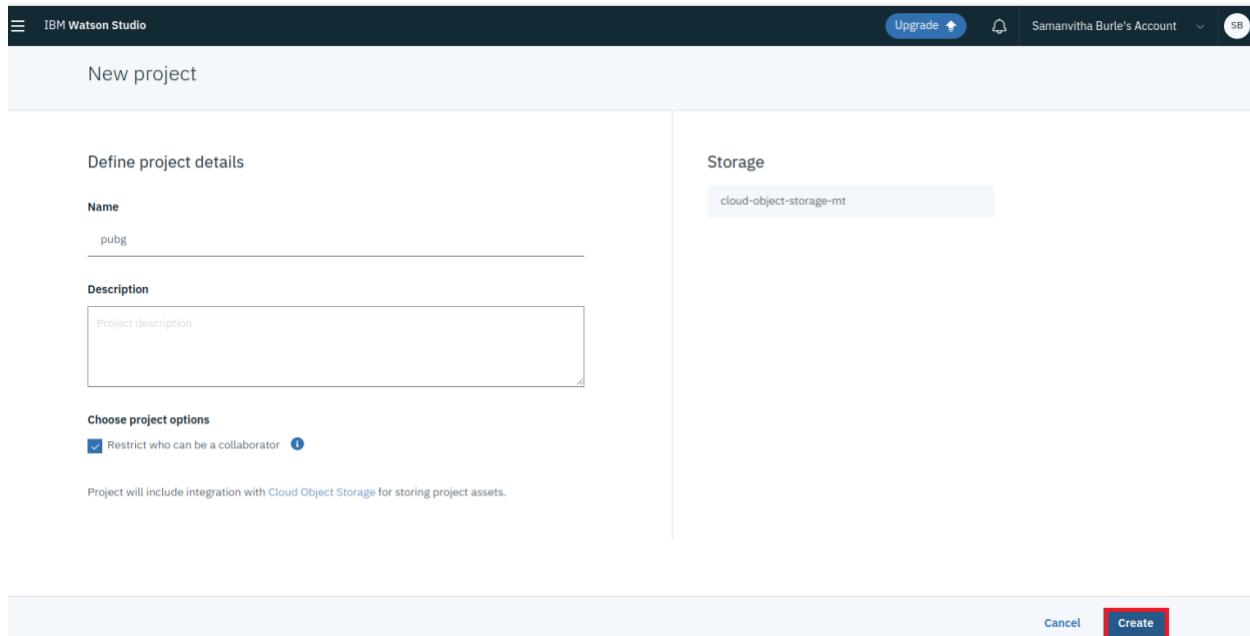
Click on **Confirm** to create the instance.



Click on **Refresh**, so we can see the storage instance as shown below.



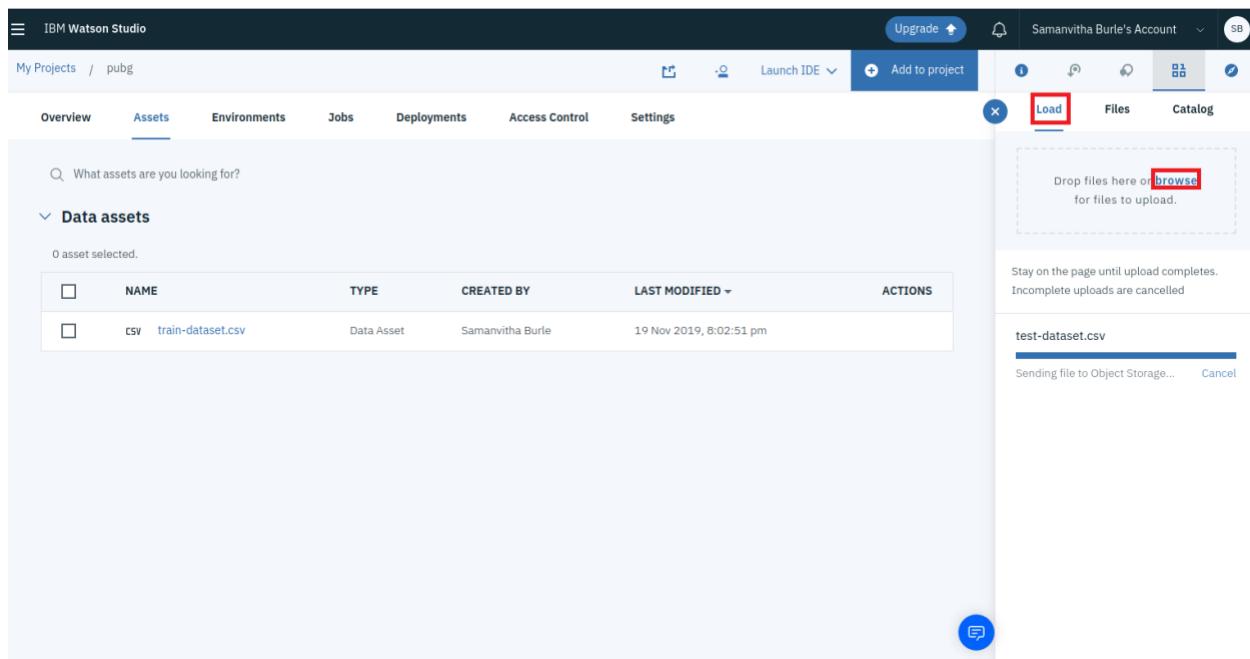
Click on **Create**.



The screenshot shows the 'New project' creation interface in IBM Watson Studio. On the left, under 'Define project details', the 'Name' field is set to 'pubg'. The 'Description' field contains the placeholder 'Project description'. Under 'Choose project options', there is a checked checkbox for 'Restrict who can be a collaborator'. A note below states: 'Project will include integration with Cloud Object Storage for storing project assets.' On the right, the 'Storage' section shows a single entry: 'cloud-object-storage-mt'. At the bottom right of the interface is a prominent blue 'Create' button.

Step #3 | Importing Datasets and Performing Data Refinement

Import the PUBG datasets into our project, click on **browse** and get the datasets. To build and test a model we need both train and test the datasets.



The screenshot shows the 'Assets' tab in IBM Watson Studio. The 'Overview' tab is selected. In the center, there's a search bar and a section titled 'Data assets' which lists one asset: 'train-dataset.csv' (Data Asset, created by Samanvitha Burle on 19 Nov 2019, 8:02:51 pm). On the right side, there's a 'Load' button (highlighted with a red box) and a 'browse' area (also highlighted with a red box) where a file named 'test-dataset.csv' is being uploaded to Object Storage. A progress message says 'Sending file to Object Storage...'.

Once the datasets are loaded into data assets as shown, we need to refine them. So, click on the 3 vertical dots located under the Actions and select Refine option for the **train.csv**.

The screenshot shows the IBM Watson Studio interface with the 'Assets' tab selected. There are two data assets listed: 'test-dataset.csv' and 'train-dataset.csv'. A context menu is open over the 'train-dataset.csv' row, with the 'Refine' option highlighted.

	NAME	TYPE	CREATED BY	LAST MODIFIED	ACTIONS
<input type="checkbox"/>	CSV test-dataset.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 6:31:46 pm	
<input type="checkbox"/>	CSV train-dataset.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 6:31:44 pm	Refine (highlighted) Download Remove

Click on the symbol which is highlighted above to change the format of dataset.

The screenshot shows the Data Refinery Flow editor. It displays a preview of the 'train-dataset.csv' file with 15 rows of data. To the right, the flow configuration is shown, including the data source, steps, and output details. The 'Specify data format' button at the bottom of the preview area is highlighted.

	damageDealt	headshotKills	heals	killPlace	killPoints
1	0	0	0	60	1241
2	91.47	0	0	57	0
3	68	0	0	47	0
4	32.9	0	0	75	0
5	100	0	0	45	0
6	100	1	0	44	0
7	0	0	0	96	1262
8	8.538	0	0	48	1000
9	51.6	0	0	64	0
10	37.27	0	0	74	0
11	28.38	0	0	75	0
12	137.9	0	0	64	0
13	0	0	0	37	0
14	324.2	1	5	5	986
15	122.8	0	2	25	1411

From the dropdown menu of Field delimiter select **tab (\t)** option and click on **Apply** as shown below.

The screenshot shows the IBM Watson Studio interface with the 'train-dataset.csv' file open. In the 'Format options' section, the 'Field delimiter' dropdown is set to 'Tab (\t)', which is highlighted with a red box. Below it, the 'Apply' button is also highlighted with a red box. The right panel displays the raw data with tabs separating the columns.

	damageDealt	headshotKills	heals	killPlace	killPoints
1	0	0	0	60	1241
2	91.47	0	0	57	0
3	68	0	0	47	0
4	32.9	0	0	75	0
5	100	0	0	45	0
6	100	1	0	44	0
7	0	0	0	96	1262
8	8.538	0	0	48	1000
9	51.6	0	0	64	0
10	37.27	0	0	74	0
11	28.38	0	0	75	0
12	137.9	0	0	64	0
13	0	0	0	37	0
14	324.2	1	5	5	986
15	122.8	0	2	25	1411

The data is formatted now, click on the highlighted symbol as shown in the below image to save the changes.

The screenshot shows the IBM Watson Studio interface with the 'train-dataset.csv' file open. The 'Data' tab is selected, displaying the formatted data. The right panel shows the 'DATA REFINERY FLOW DETAILS' and 'DATA REFINERY FLOW OUTPUT' sections. The 'Save' icon in the top right corner is highlighted with a red box.

	damageDealt	headshotKills	heals	killPlace	killPoints
1	0	0	0	60	1241
2	91.47	0	0	57	0
3	68	0	0	47	0
4	32.9	0	0	75	0
5	100	0	0	45	0
6	100	1	0	44	0
7	0	0	0	96	1262
8	8.538	0	0	48	1000
9	51.6	0	0	64	0
10	37.27	0	0	74	0
11	28.38	0	0	75	0
12	137.9	0	0	64	0
13	0	0	0	37	0
14	324.2	1	5	5	986
15	122.8	0	2	25	1411

Click on drop down and select **Save and create a job**.

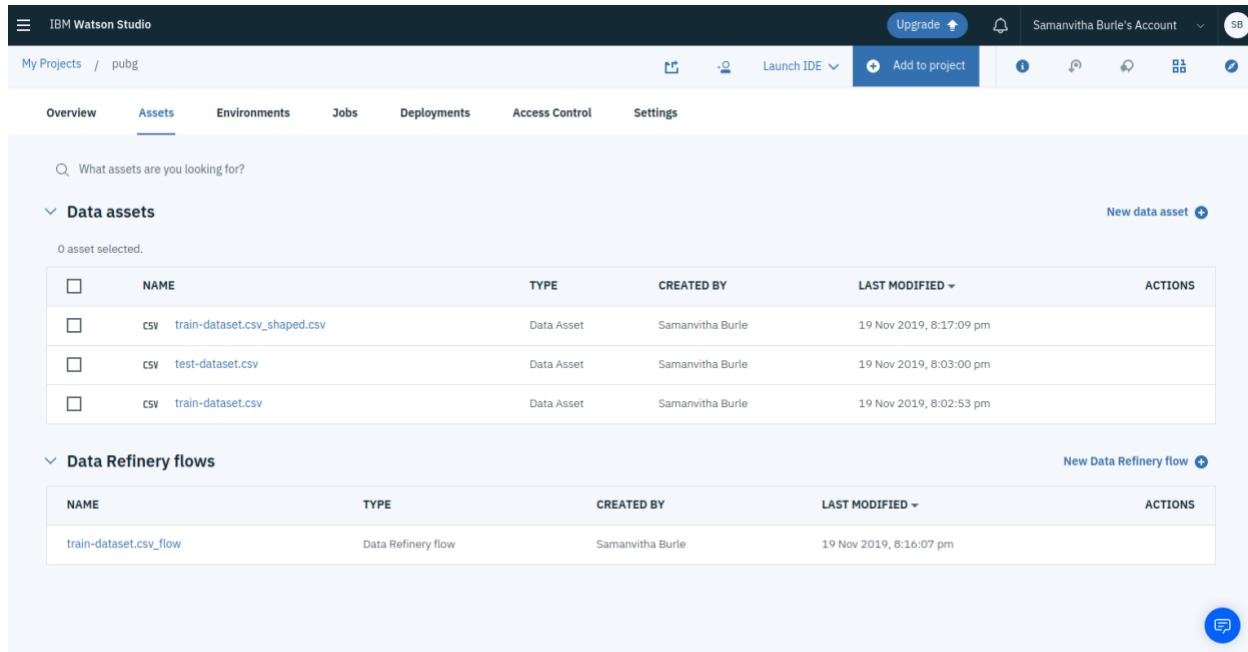
The screenshot shows the IBM Watson Studio interface. On the left, there's a data preview table for 'train-dataset.csv' with columns: damageDealt, headshotKills, heals, killPlace, and killPoints. The main area shows a 'DATA REFINERY FLOW DETAILS' section with a 'Data Source' set to 'train-dataset.csv' and a 'Convert column type' option set to 'AUTOMATIC'. A tooltip indicates it automatically converts one or more columns to inferred data types. On the right, there's a 'DATA REFINERY FLOW OUTPUT' section with a 'LOCATION' set to 'pubg/Data assets' and a 'DATA SET NAME' set to 'train-dataset.csv_shaped.csv'. At the bottom, there are buttons for 'Edit', 'Details', and 'Help'.

Give the job name and click on **Create and Run**.

The screenshot shows the 'Create a job' dialog. It has fields for 'Job Name' (with 'train' entered), 'Description (Optional)' (with 'Description of job'), 'Associated asset' (listing a 'DATA REFINERY FLOW' named 'train-dataset.csv_flow' with 1 Step), and 'Select runtime' (set to 'Default Data Refinery XS'). On the right, there's an 'INPUT' section for 'train-dataset.csv' (delimited) and an 'OUTPUT' section for 'train-dataset.csv_shaped.csv' (CSV). A 'Schedule to run' button is also present. At the bottom right of the dialog, there are 'Cancel', 'Create', and 'Create and Run' buttons, with 'Create and Run' highlighted by a red box.

The job will be created and will generate train.csv_shapes.csv file after the job is completed.

Here, we can see **train.csv_shaped.csv** file in the Data assets.

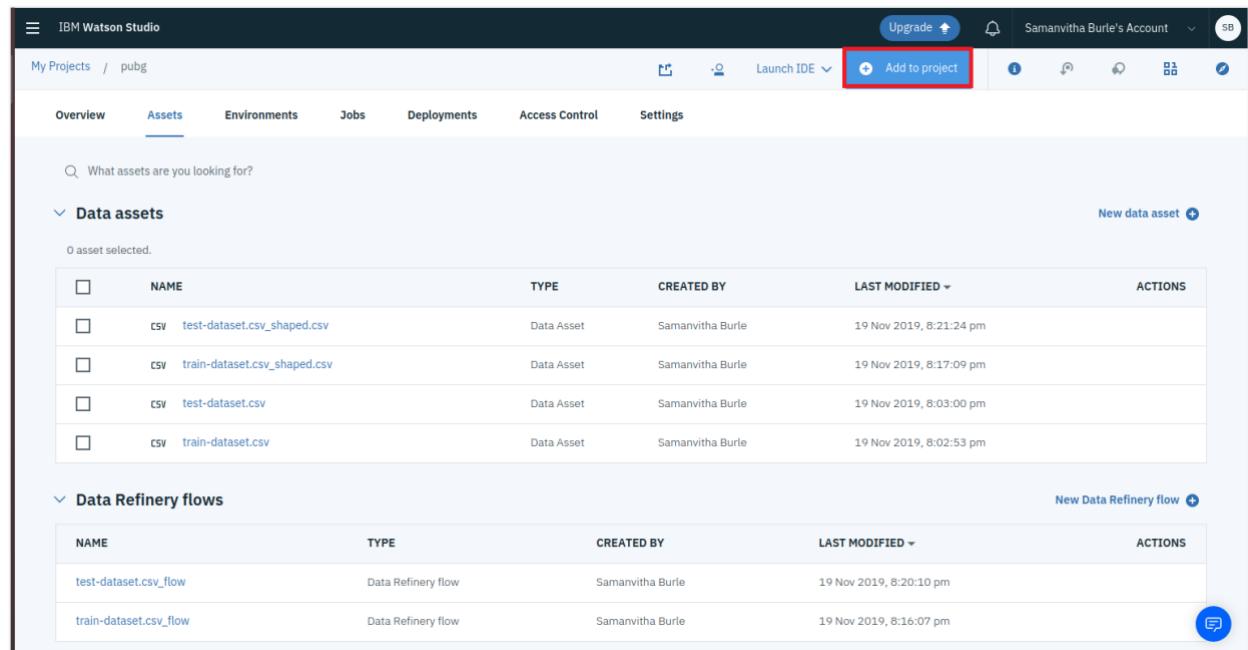


<input type="checkbox"/>	NAME	TYPE	CREATED BY	LAST MODIFIED	ACTIONS
<input type="checkbox"/>	CSV train-dataset.csv_shaped.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 8:17:09 pm	
<input type="checkbox"/>	CSV test-dataset.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 8:03:00 pm	
<input type="checkbox"/>	CSV train-dataset.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 8:02:53 pm	

NAME	TYPE	CREATED BY	LAST MODIFIED	ACTIONS
train-dataset.csv_flow	Data Refinery flow	Samanvitha Burle	19 Nov 2019, 8:16:07 pm	

Now click on the 3 vertical dots located under Actions and repeat the same process to refine the test.csv until we generate a **test.csv_shaped.csv** as shown below.

Once this is done, click on the **Add to Project**.

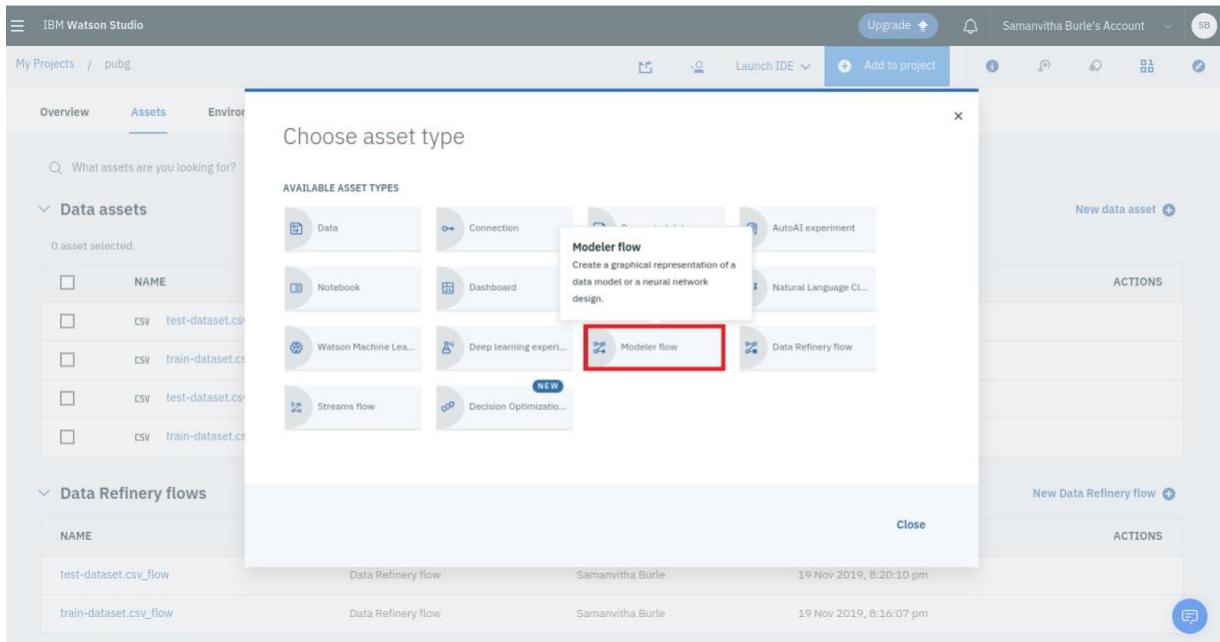


<input type="checkbox"/>	NAME	TYPE	CREATED BY	LAST MODIFIED	ACTIONS
<input type="checkbox"/>	CSV test-dataset.csv_shaped.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 8:21:24 pm	
<input type="checkbox"/>	CSV train-dataset.csv_shaped.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 8:17:09 pm	
<input type="checkbox"/>	CSV test-dataset.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 8:03:00 pm	
<input type="checkbox"/>	CSV train-dataset.csv	Data Asset	Samanvitha Burle	19 Nov 2019, 8:02:53 pm	

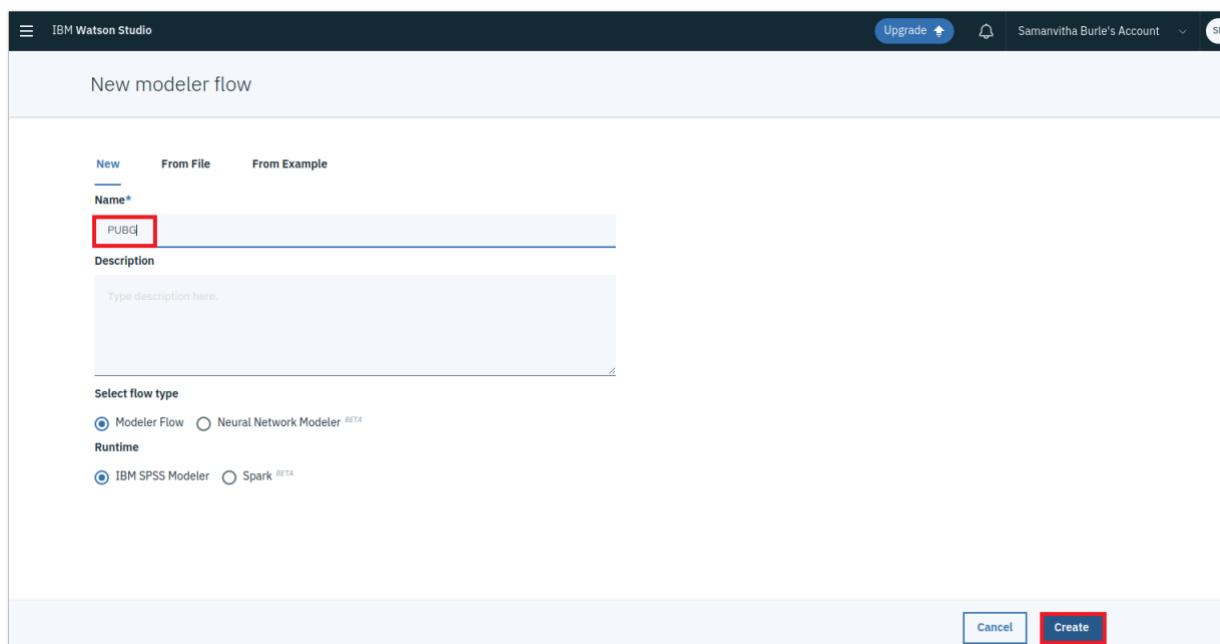
NAME	TYPE	CREATED BY	LAST MODIFIED	ACTIONS
test-dataset.csv_flow	Data Refinery flow	Samanvitha Burle	19 Nov 2019, 8:20:10 pm	
train-dataset.csv_flow	Data Refinery flow	Samanvitha Burle	19 Nov 2019, 8:16:07 pm	

Step #4 | Creating MODELER FLOW and Preparing the Data for Model Building

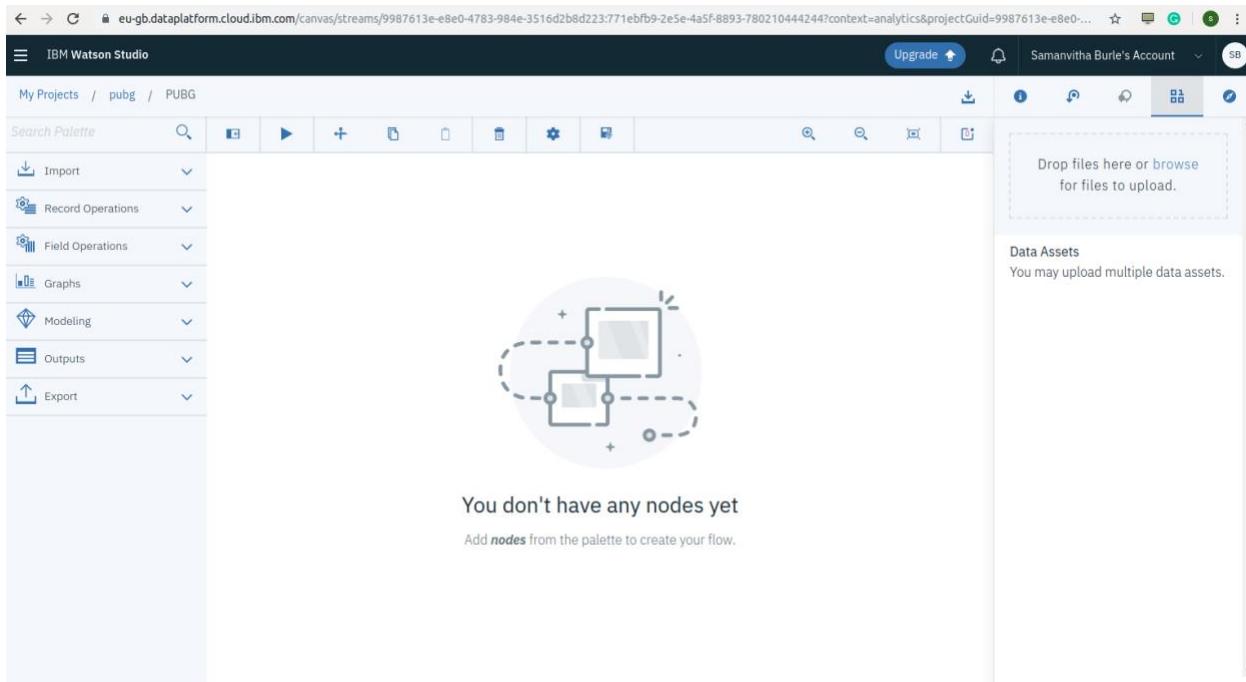
Select **MODELER FLOW** option here, in order to create a Machine Learning model.



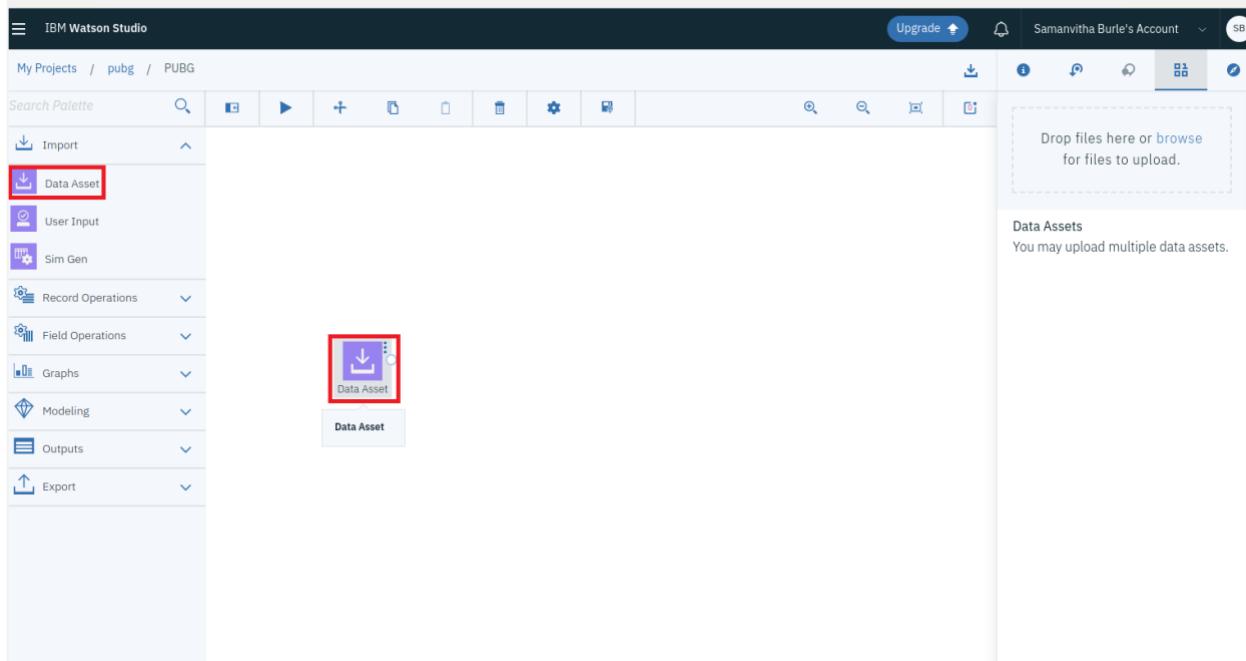
Provide a **Name** to the modeler flow such as, PUBG which we are going to build and click on **Create**.



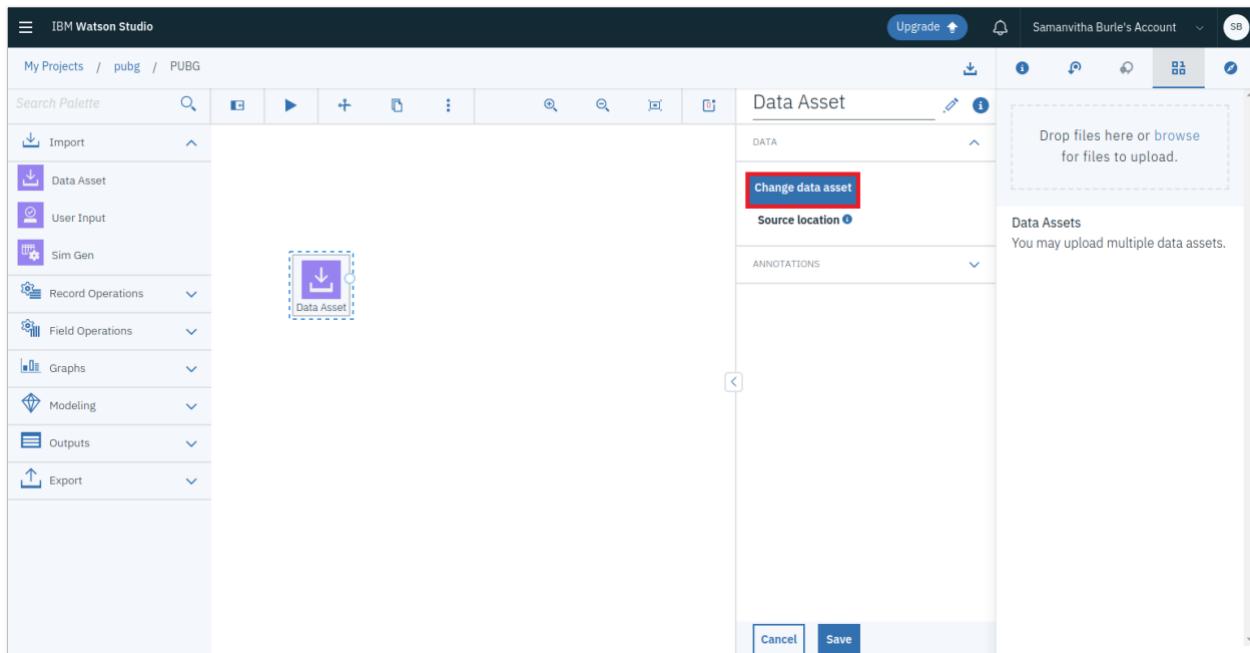
This is the **IBM SPSS MODELER** workplace where we will build the ML model.



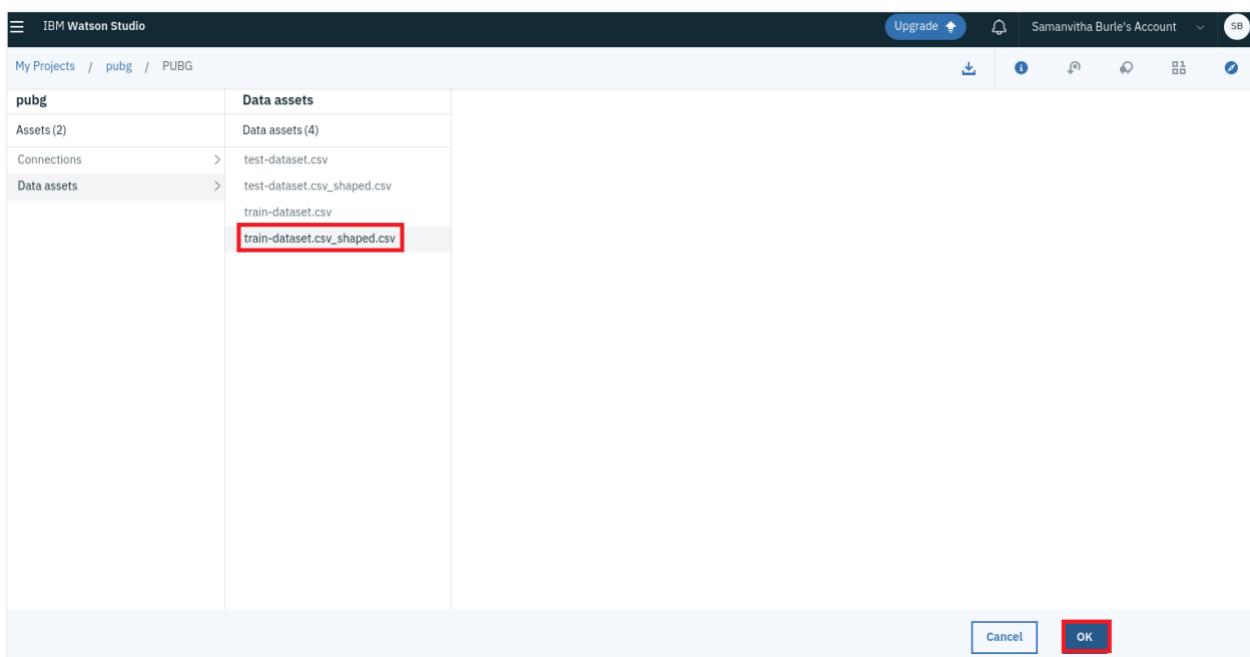
From the **Import** palette (on left side) select **Data Asset** node, Drag and Drop it into the white space (Canvas).



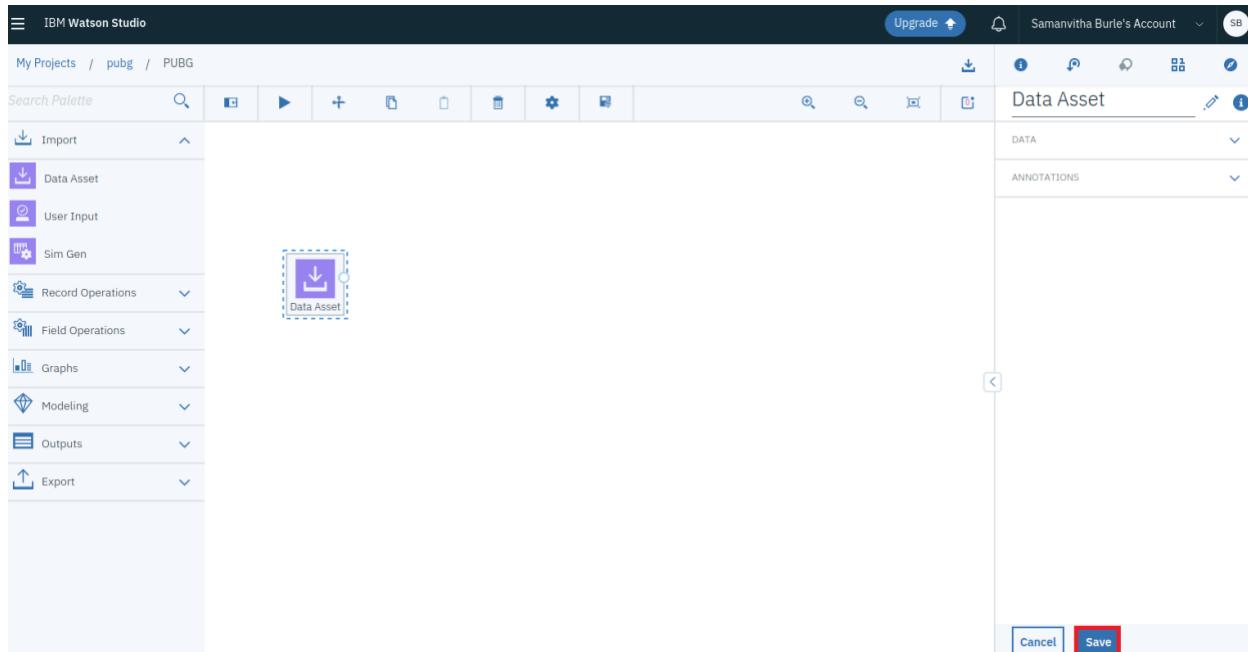
Double-click on the **Data Asset** node and click on **Change data asset** option shown below.



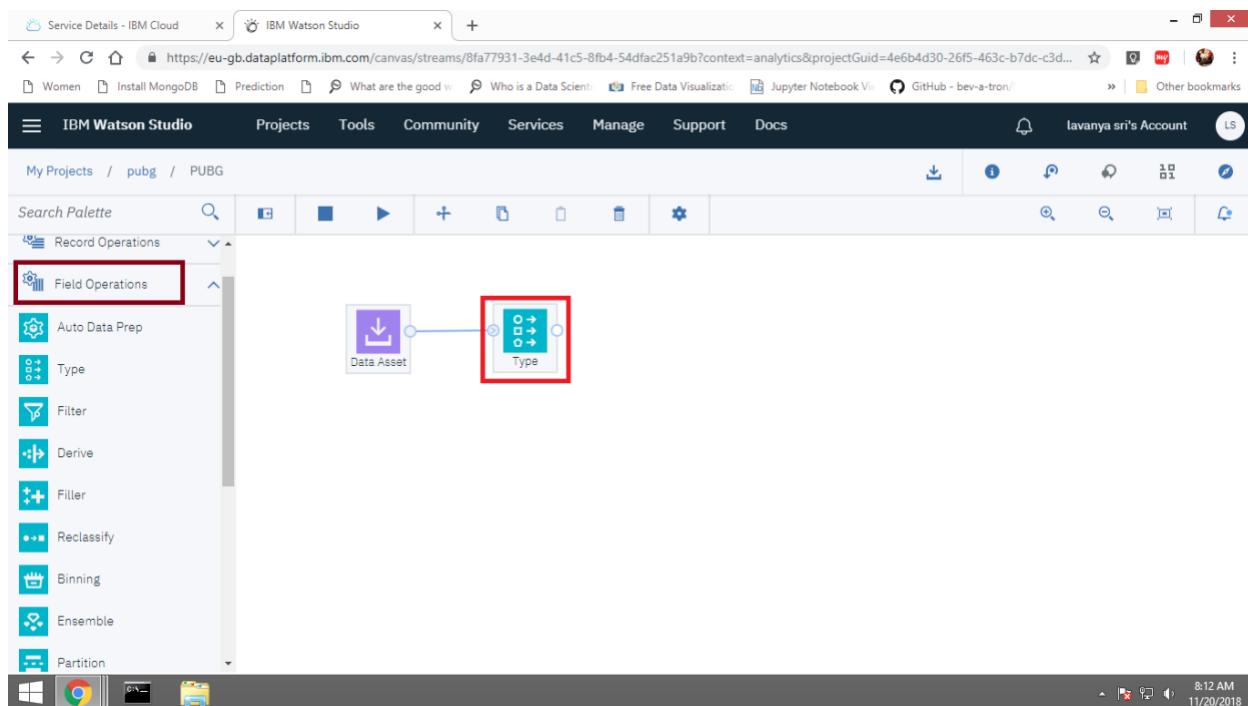
Select **train.csv_shaped.csv** and click on **Ok**.



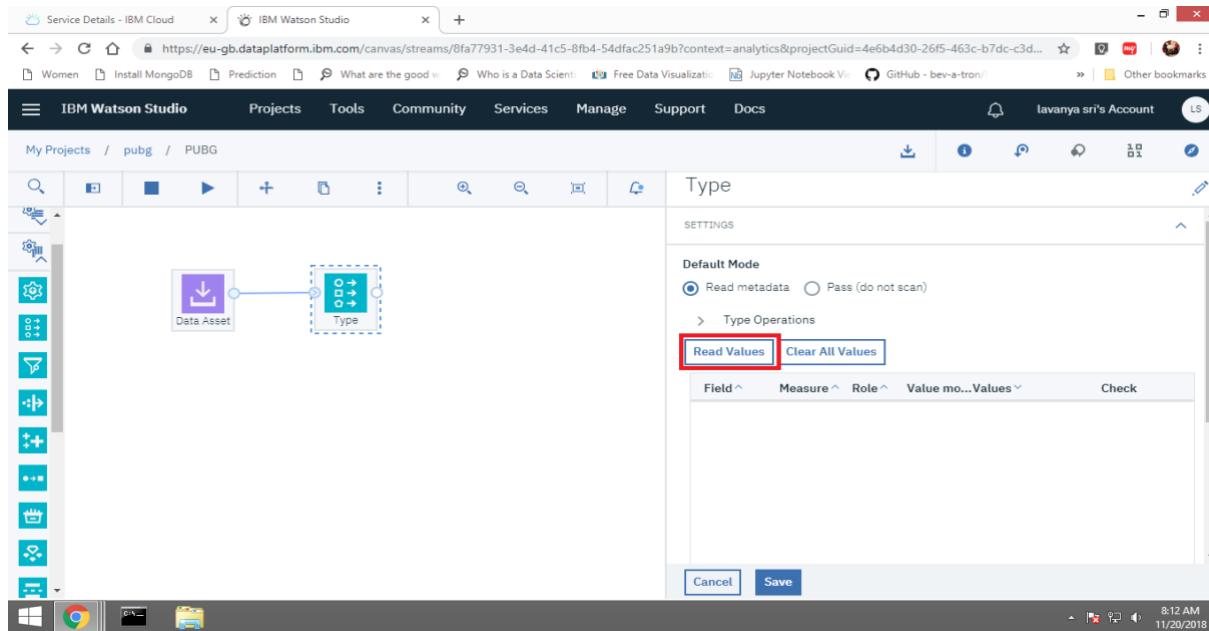
Click on **Save** to add our dataset successfully to the data asset node.



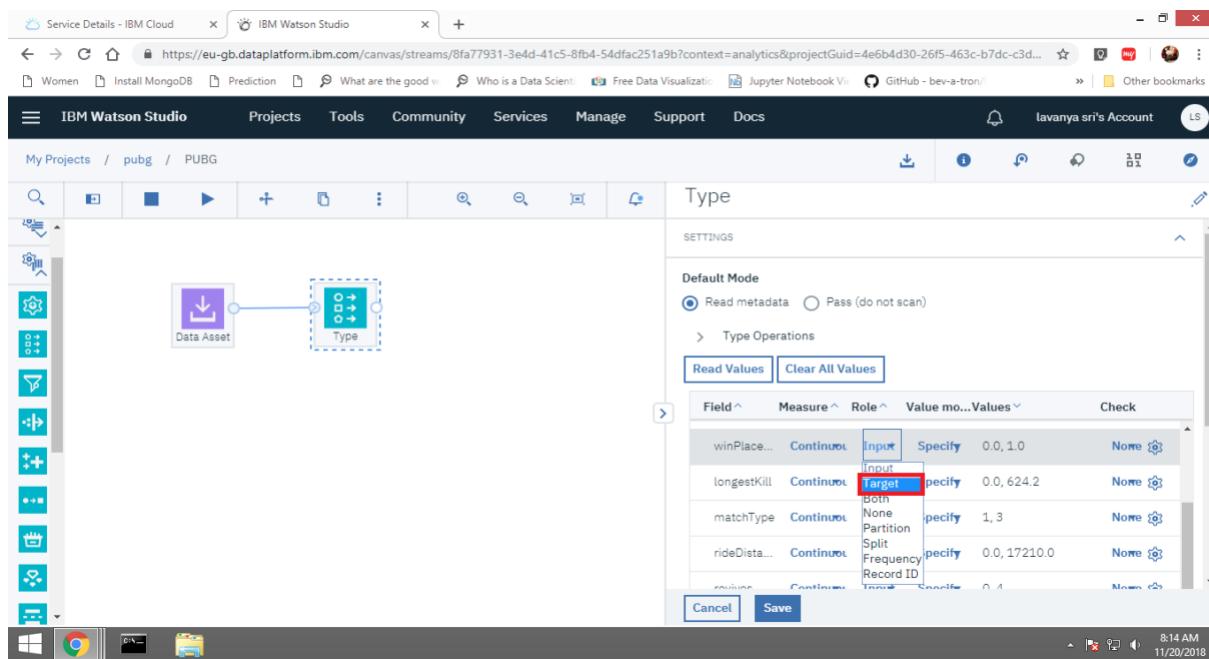
Now, click on the **Field Operations** palette, drag and drop the **Type** node to the canvas. Join the Data Asset node to Type node through the small rounds which are adjacent to each other.



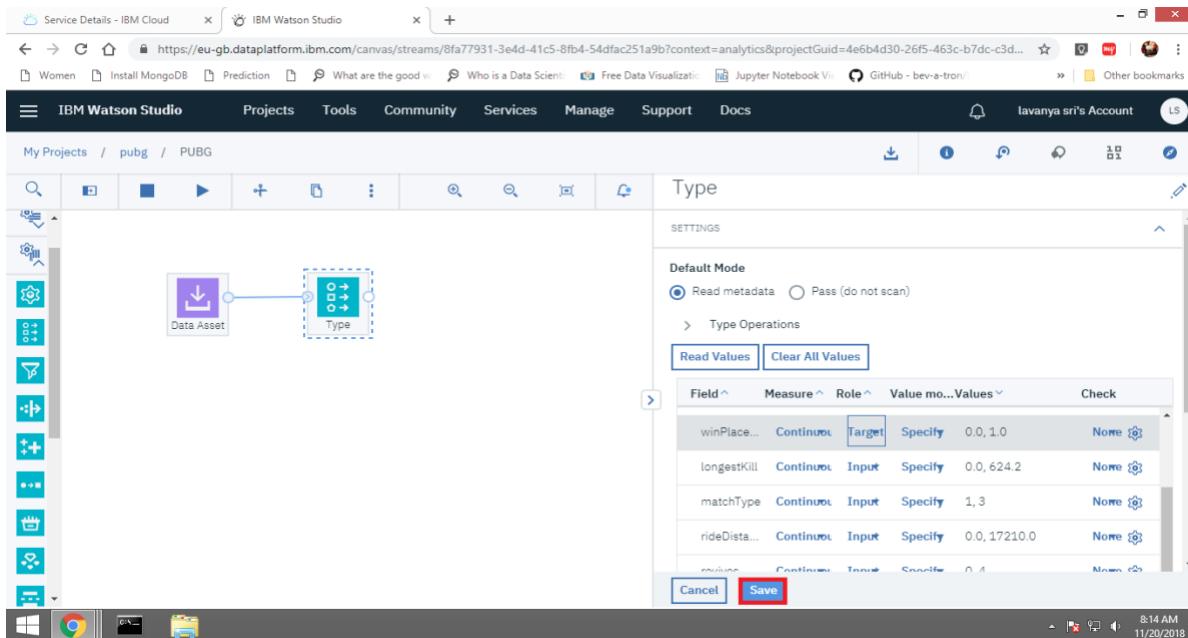
Double click on the **Type node** and choose **Read Values** in order to read all the values from our train data. This will take a while to process.



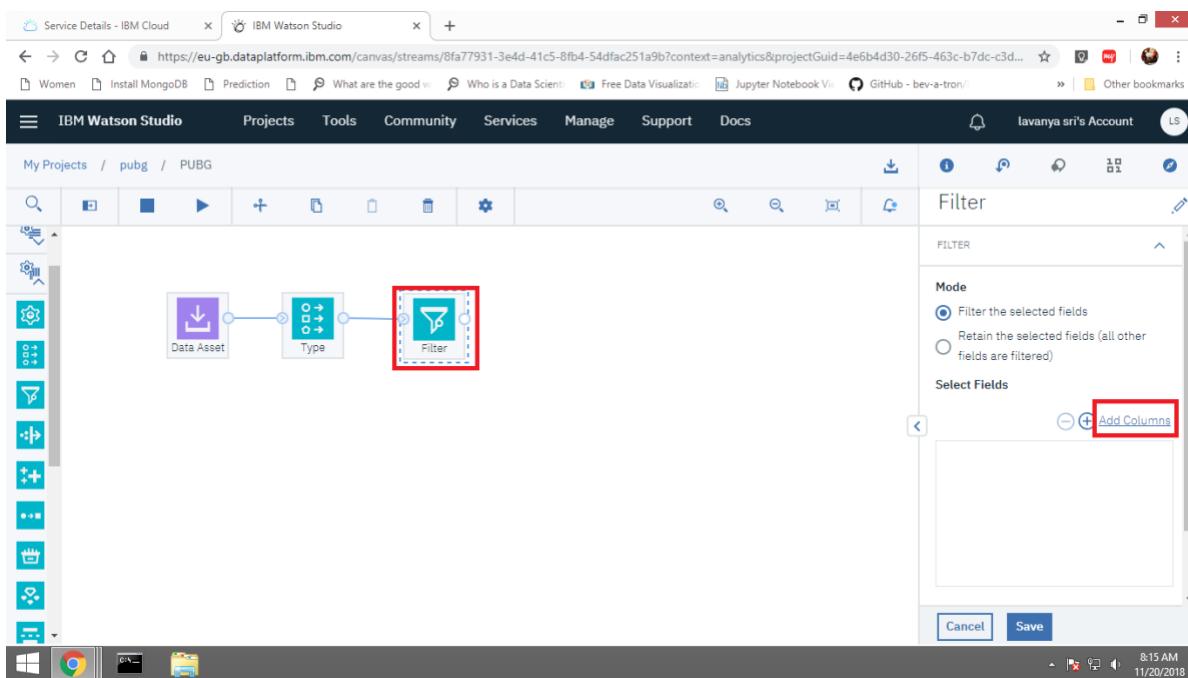
As we have to predict the WinPlace Percentage, we need to make the role of it as a **Target** variable from **Input** variable. This can be done by just opting the **Target** option from the drop down list.



Click on **Save**.



Now add a **Filter node** from the **Field Operations** palette and join it to the **Type node**. Also, click on **Add Columns**, in order to filter out all the unnecessary fields from our dataset.



Filter out **numGroups**, **rideDistance**, **roadKills**, **swimDistance** from our dataset by selecting them. Click on **Ok** after selection.

Select Fields for Filter

Field name	Data type
matchDuration	integer
matchType	integer
<input checked="" type="checkbox"/> numGroups	integer
rankPoints	integer
revives	integer
<input checked="" type="checkbox"/> rideDistance	double
<input checked="" type="checkbox"/> roadKills	integer
<input checked="" type="checkbox"/> swimDistance	double
winPoints	integer
winPlacePerc	double

Cancel **OK**

Click on **Save** to make the changes.

Filter

FILTER

Mode

Filter the selected fields
 Retain the selected fields (all other fields are filtered)

Select Fields

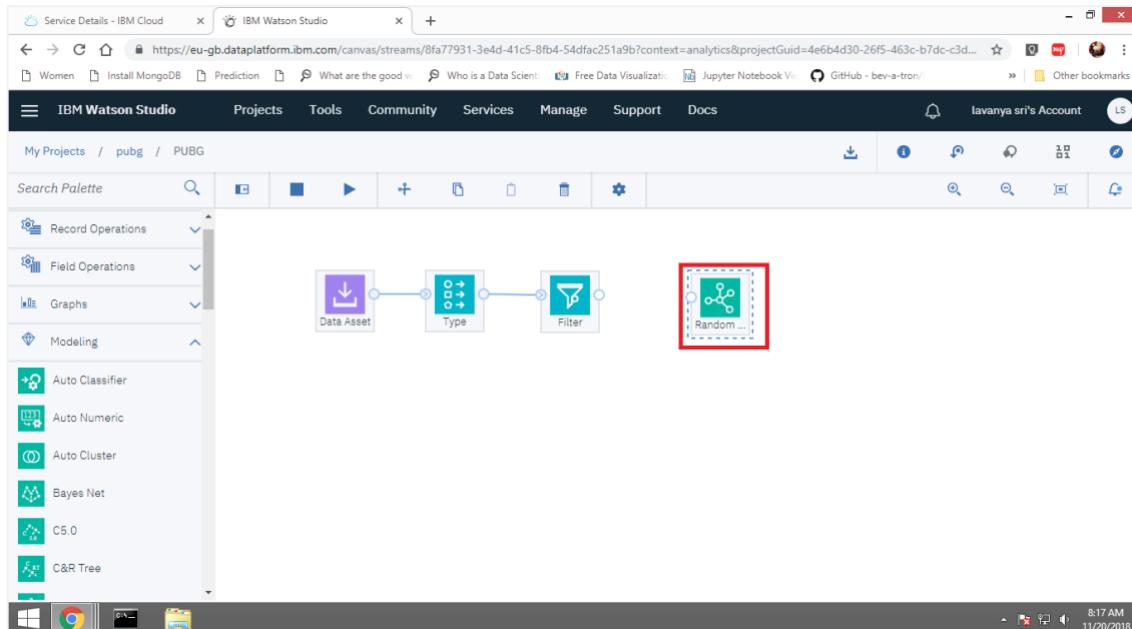
Add Columns

numGroups
roadKills
swimDistance
rideDistance

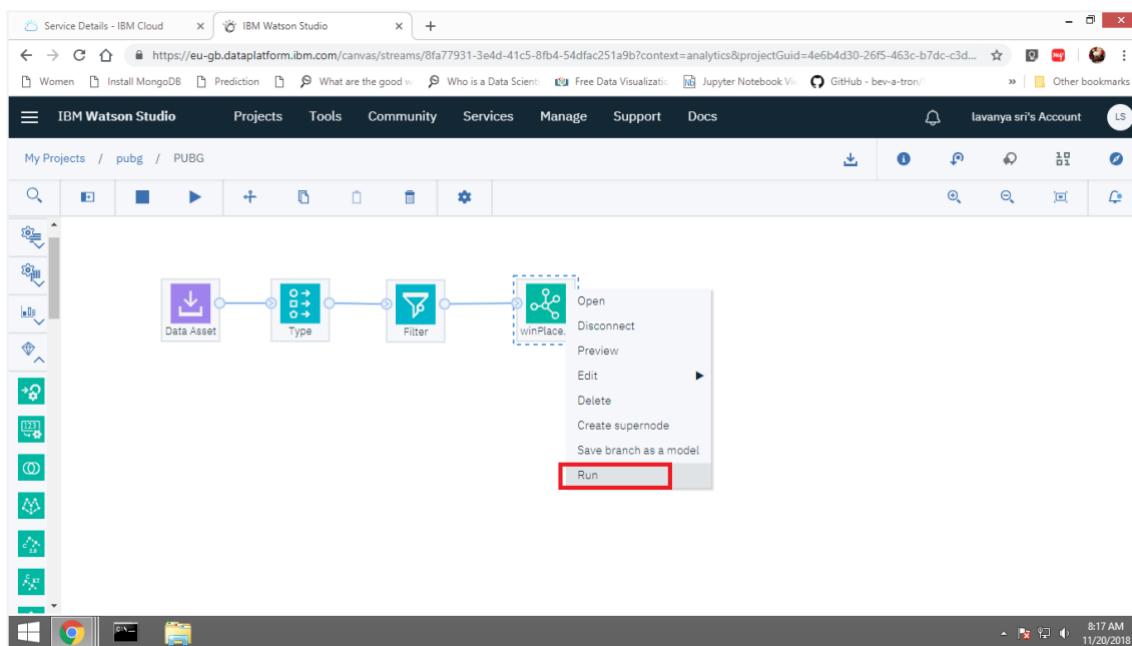
Cancel **Save**

Step #5 | Model Building

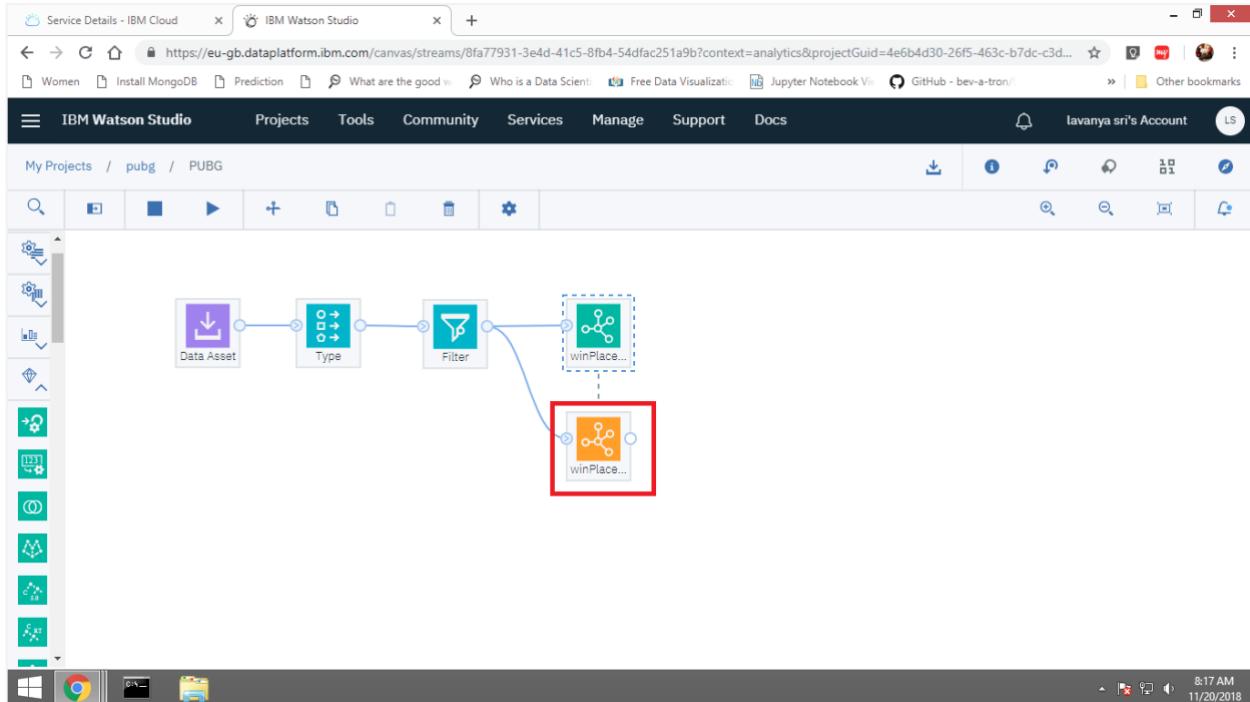
Choose an algorithm from the **Modeling** palette. Drag and drop **Random Forest** model which is an apt model for our dataset and combine it to the Filter node.



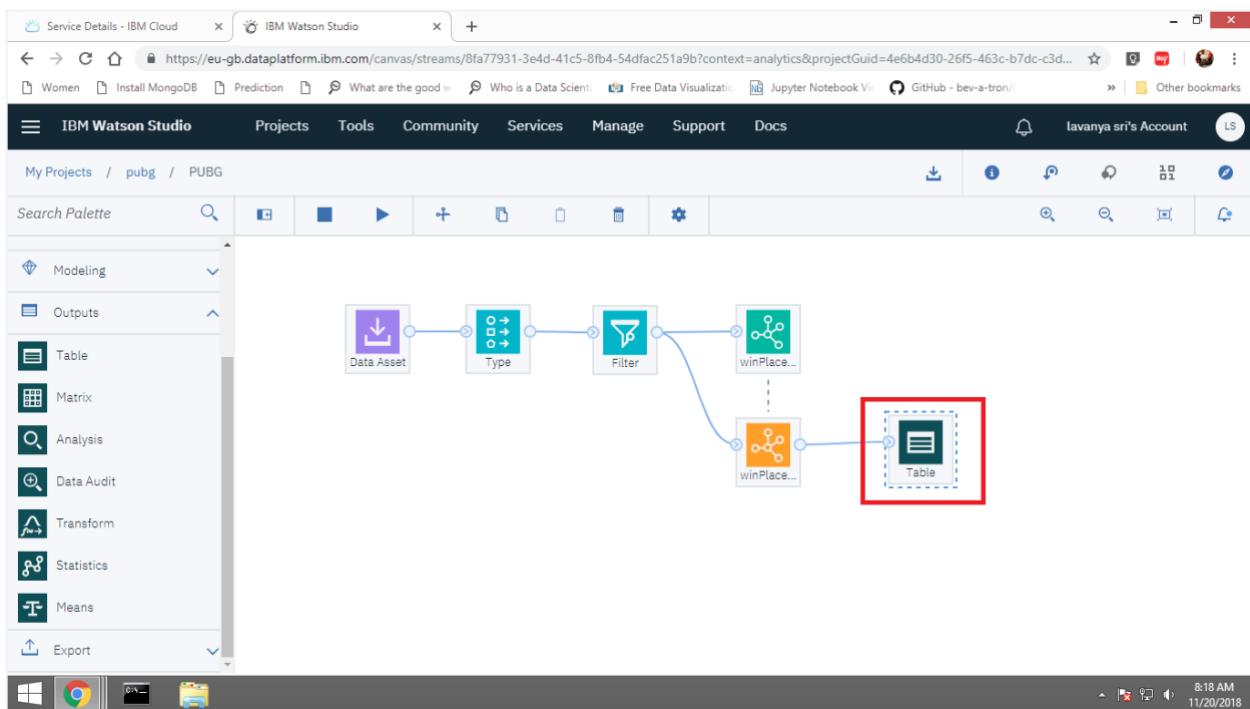
Name of Random forest will be changed to the Target variable name which is WinPlacePerc. Click on the three vertical dots on the node and click on **Run** to generate a machine learning model as shown below.



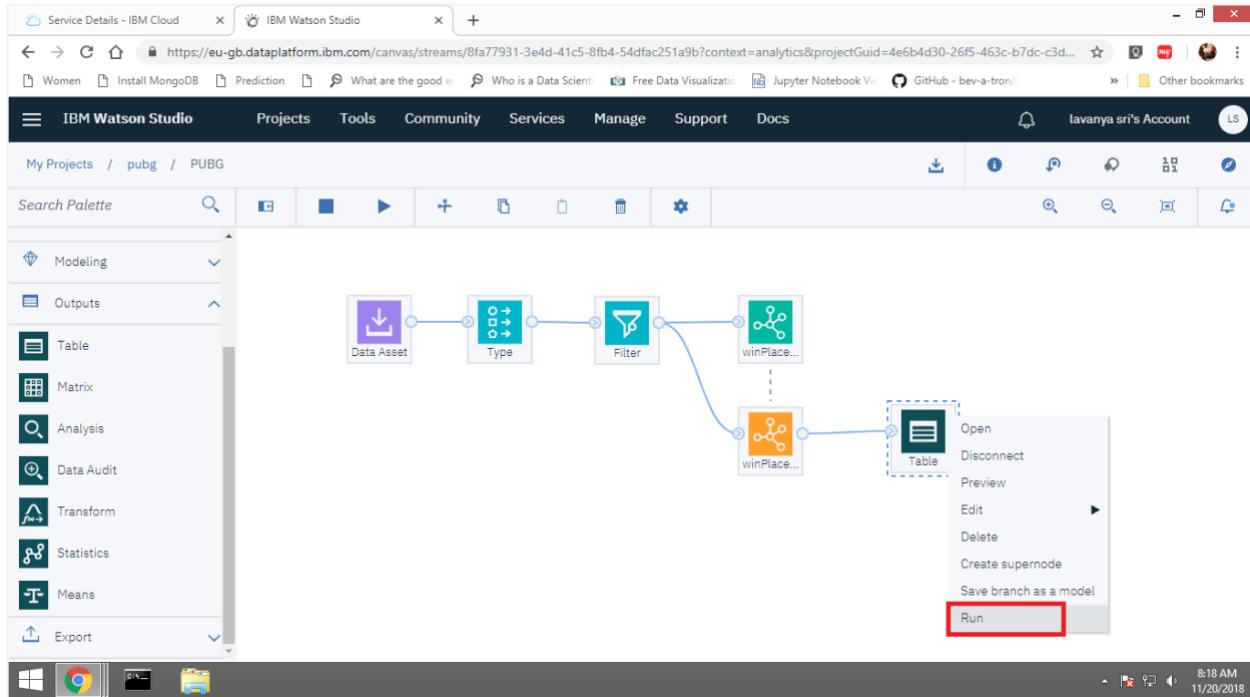
The node in orange color is the generated model for our dataset, with which we can predict the WinPlacePerc for new data.



We can view the predicted values by using a **Table** node from **Output palette**.



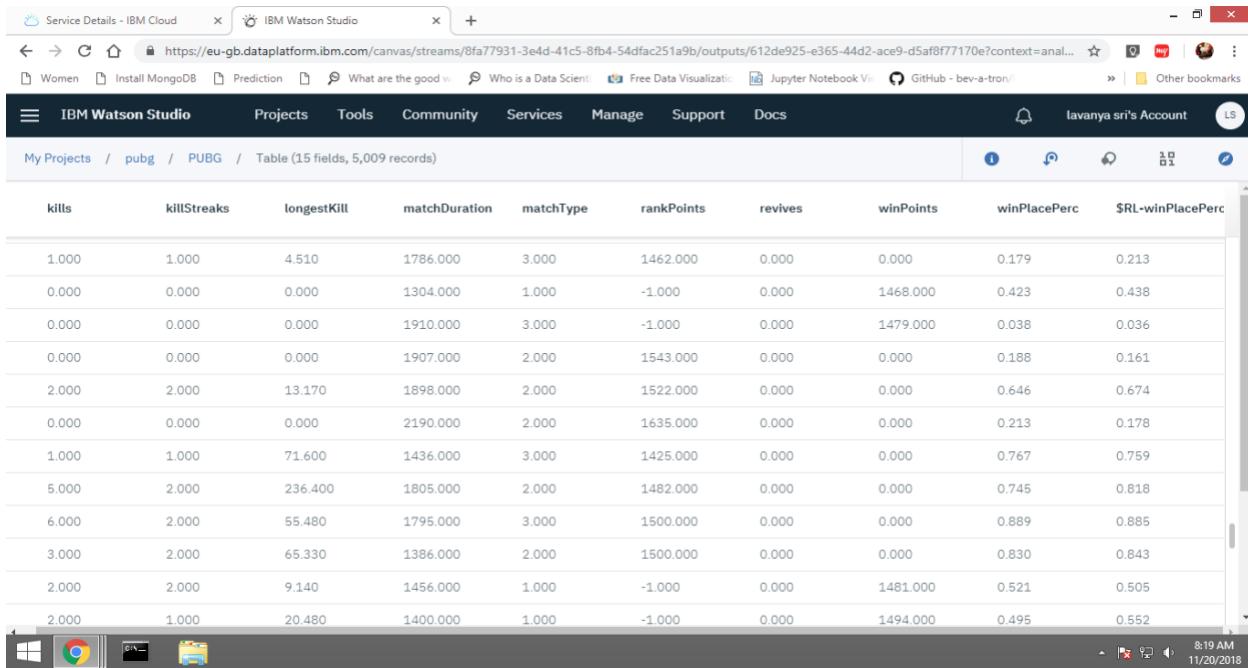
Click on **Run**, to view the newly generated values as well.



We will feed the Test dataset to the generated model above by creating the stream again as shown below.

The screenshot shows a table view in IBM Watson Studio. The title is 'Table (14 fields, 2,006 records)'. The table has 14 columns and 2,006 rows. The data includes various numerical values such as 0.000, 1.000, 2.164, etc. At the bottom, it says 'Page 2 / 11' and has a navigation bar with page numbers 1 through 11. The status bar at the bottom right shows the time as 8:33 AM and the date as 11/20/2018.

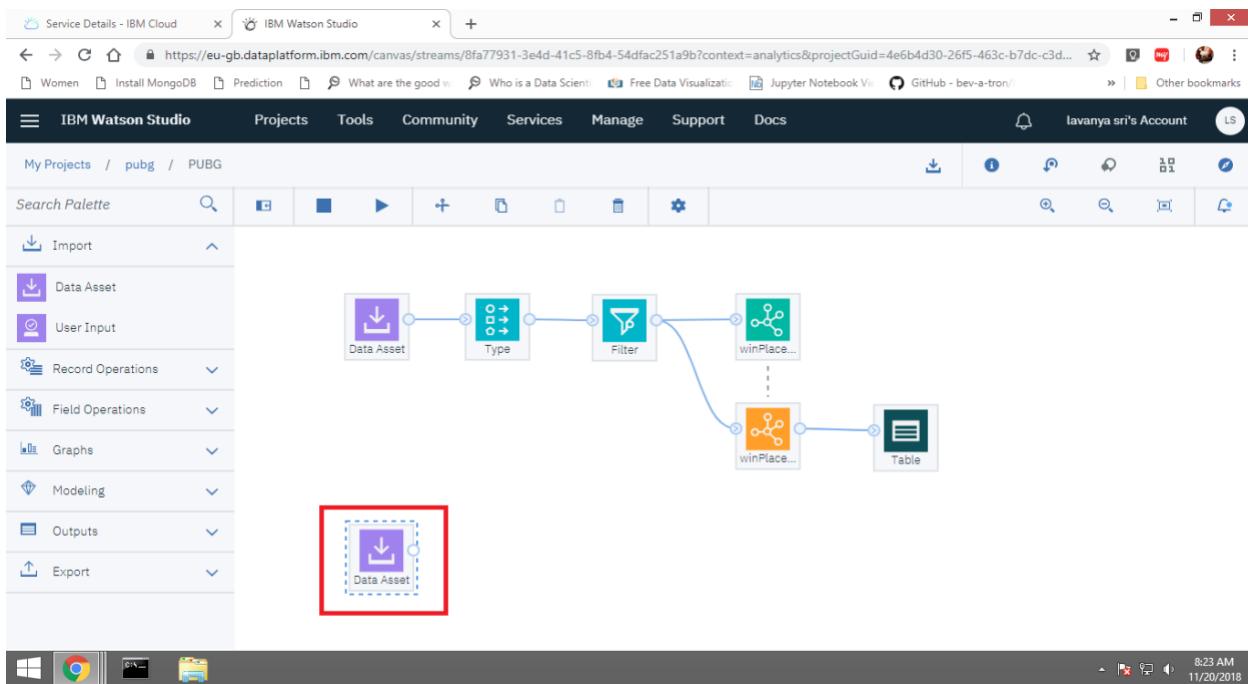
Scroll till the end, the last column values are the newly generated values for the given input data by the model.



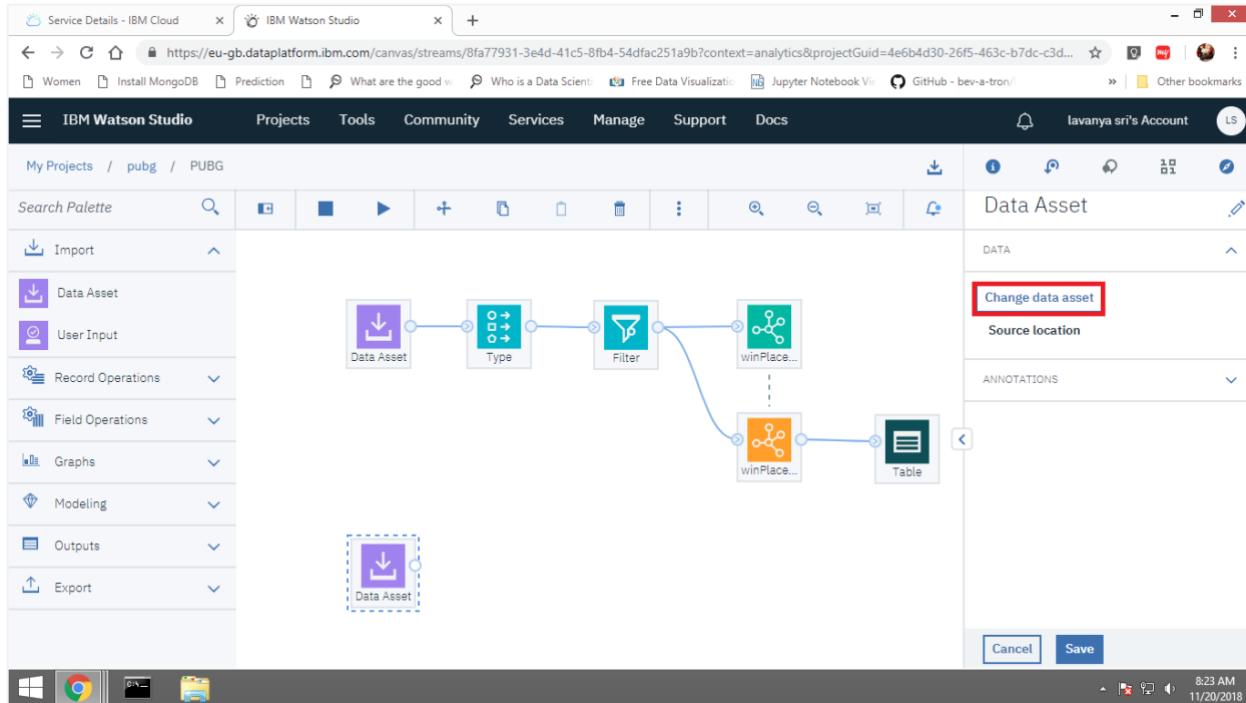
The screenshot shows a browser window for IBM Watson Studio. The URL is https://eu-gb.dataplatform.ibm.com/canvasstreams/8fa77931-3e4d-41c5-8fb4-54dfac251a9b/outputs/612de925-e365-44d2-ace9-d5af8f7710e?context=analytics&projectGuid=4e6b4d30-26f5-463c-b7dc-c3d... . The page displays a table titled "Table (15 fields, 5,009 records)" under the "My Projects / pubg / PUBG" section. The table has 10 columns: kills, killStreaks, longestKill, matchDuration, matchType, rankPoints, revives, winPoints, winPlacePerc, and \$RL-winPlacePerc. The data consists of 15 rows of PUBG statistics. The bottom right corner of the window shows the date and time: 8:19 AM 11/20/2018.

kills	killStreaks	longestKill	matchDuration	matchType	rankPoints	revives	winPoints	winPlacePerc	\$RL-winPlacePerc
1.000	1.000	4.510	1786.000	3.000	1462.000	0.000	0.000	0.179	0.213
0.000	0.000	0.000	1304.000	1.000	-1.000	0.000	1468.000	0.423	0.438
0.000	0.000	0.000	1910.000	3.000	-1.000	0.000	1479.000	0.038	0.036
0.000	0.000	0.000	1907.000	2.000	1543.000	0.000	0.000	0.188	0.161
2.000	2.000	13.170	1898.000	2.000	1522.000	0.000	0.000	0.646	0.674
0.000	0.000	0.000	2190.000	2.000	1635.000	0.000	0.000	0.213	0.178
1.000	1.000	71.600	1436.000	3.000	1425.000	0.000	0.000	0.767	0.759
5.000	2.000	236.400	1805.000	2.000	1482.000	0.000	0.000	0.745	0.818
6.000	2.000	55.480	1795.000	3.000	1500.000	0.000	0.000	0.889	0.885
3.000	2.000	65.330	1386.000	2.000	1500.000	0.000	0.000	0.830	0.843
2.000	2.000	9.140	1456.000	1.000	-1.000	0.000	1481.000	0.521	0.505
2.000	1.000	20.480	1400.000	1.000	-1.000	0.000	1494.000	0.495	0.552

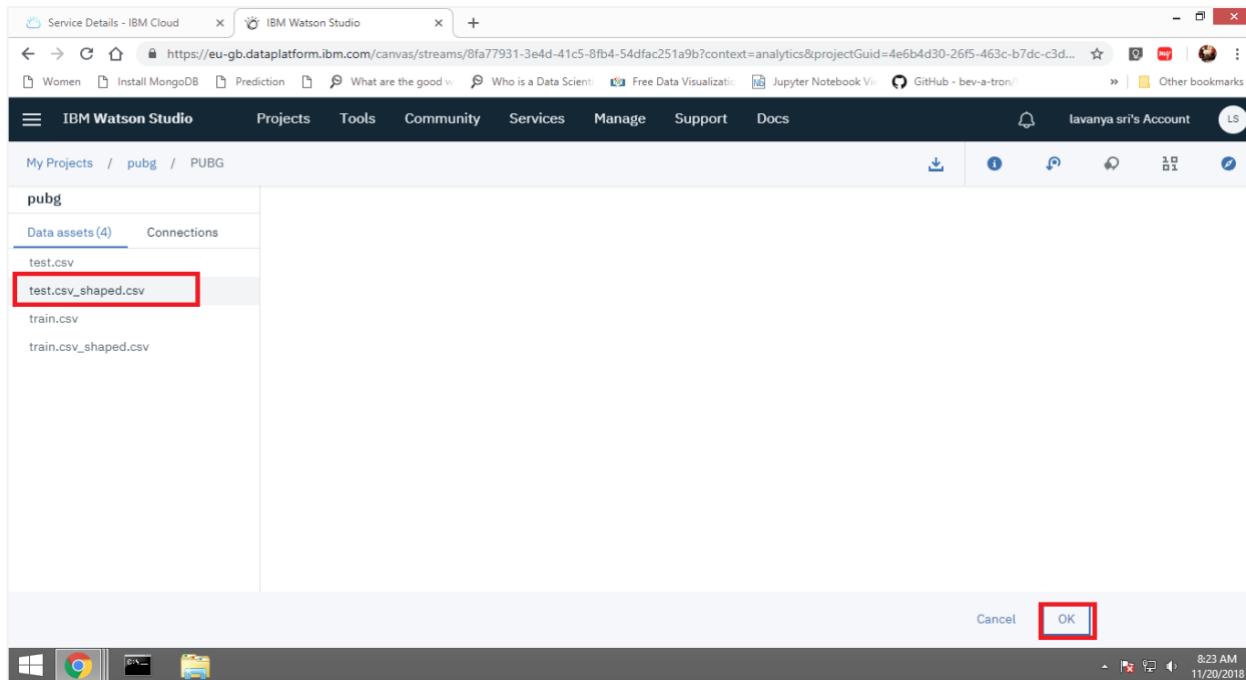
From the Import palette select Data Asset node, drag and drop it into the white space (Canvas).



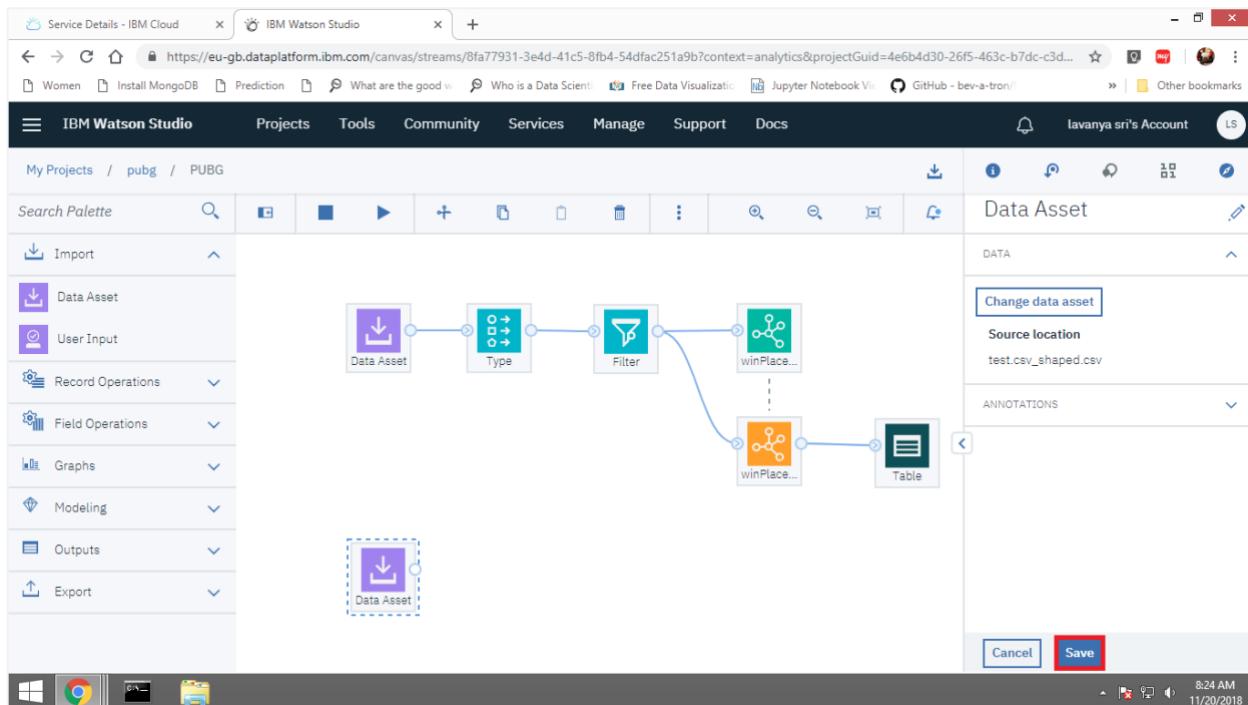
Double-click on the **Data Asset** node and click on **Change data asset** option.



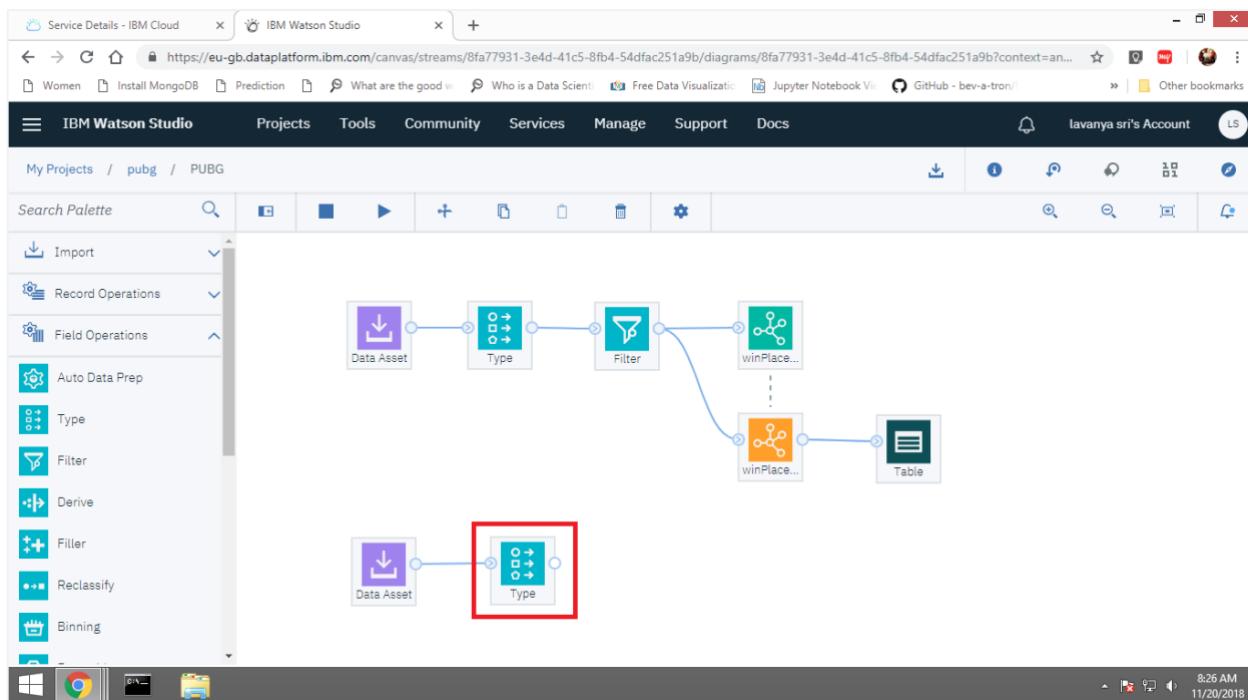
Select **test.csv_shaped.csv** and click on **Ok**.



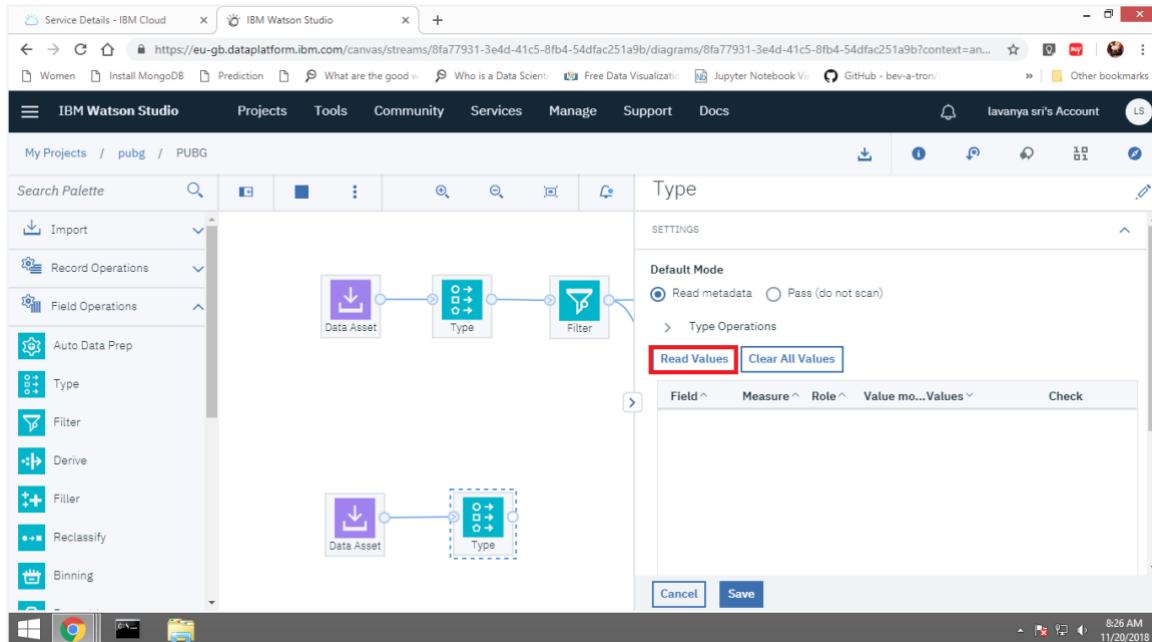
Now click on the **Save** to successfully add our dataset to the data asset node.



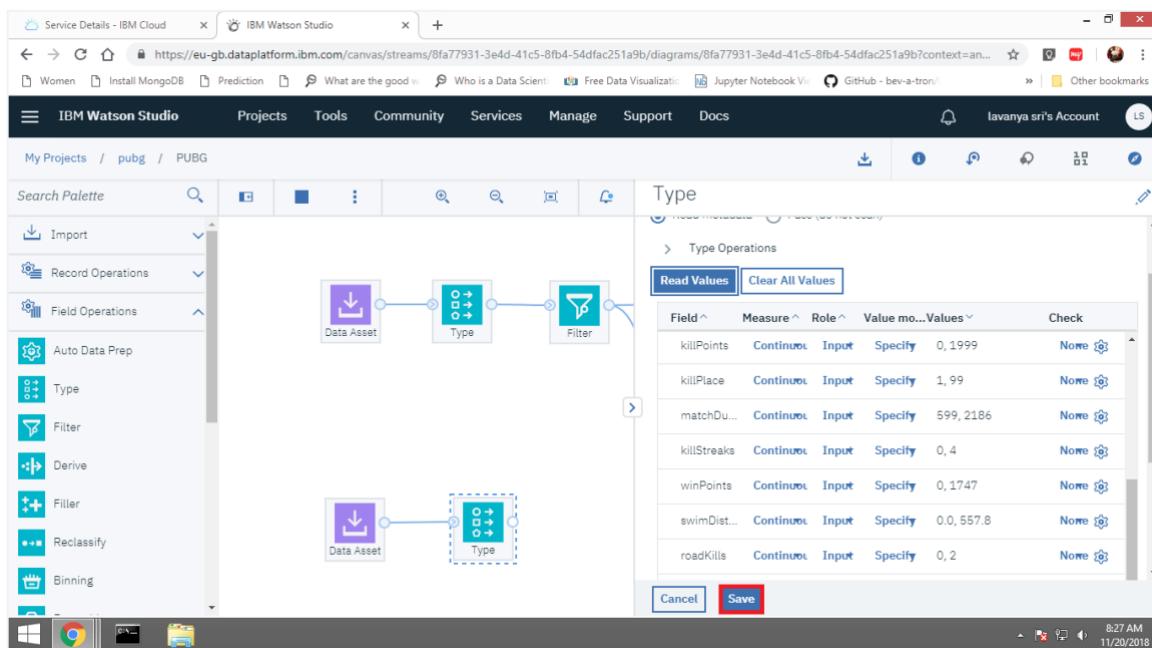
Select the **Field Operations** palette, drag and drop the **Type** node to the canvas. Join the Data Asset node to Type node through the small rounds which are adjacent to each other.



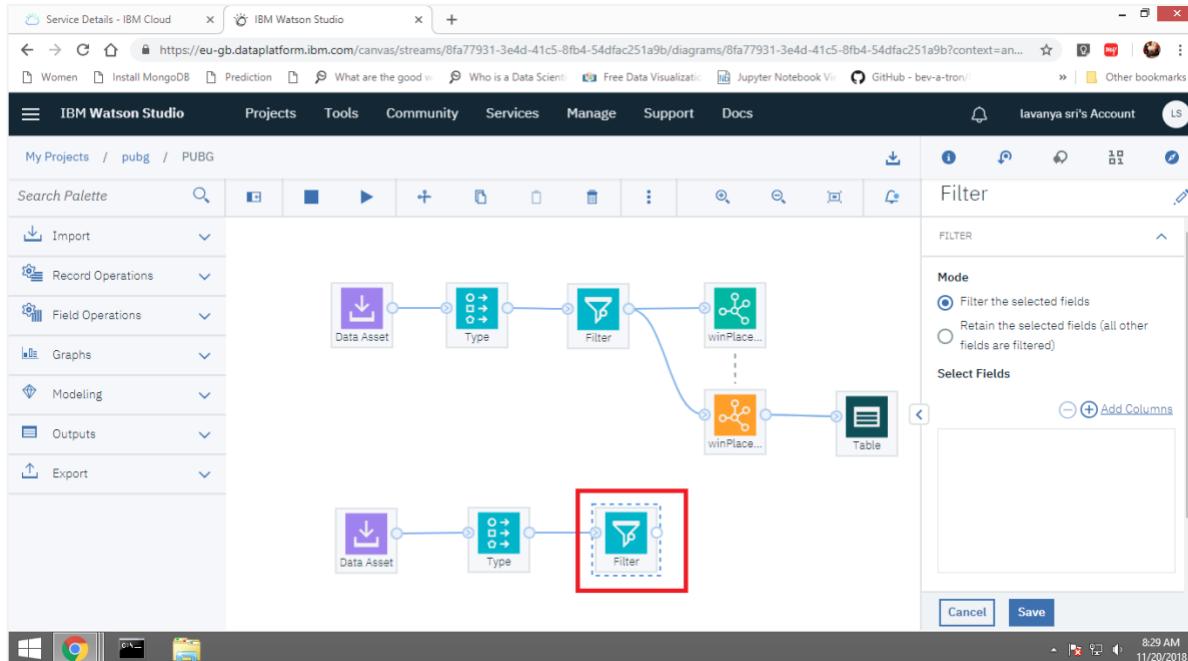
Double click on the **Type node** and choose **Read Values** in order to read all the values from our train data. This will take a while to process.



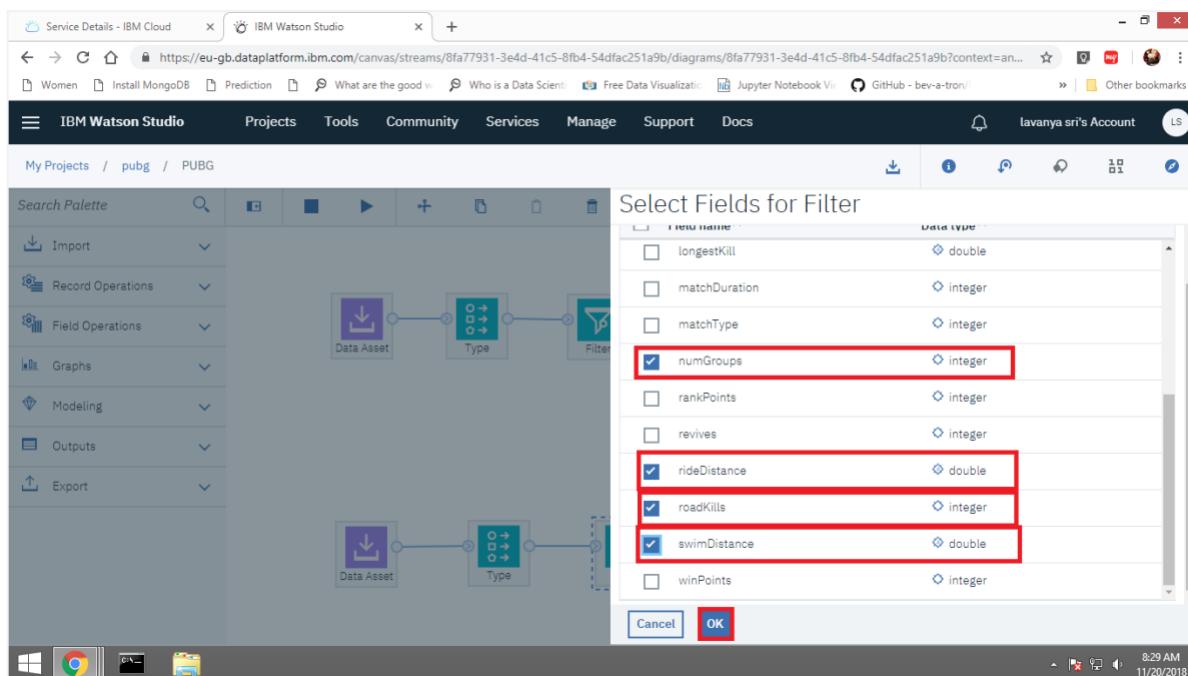
No more changes are needed here as no need of target variable with testing data as we will predict the given test input with the prebuilt model built using the training data. Click on **Save**.



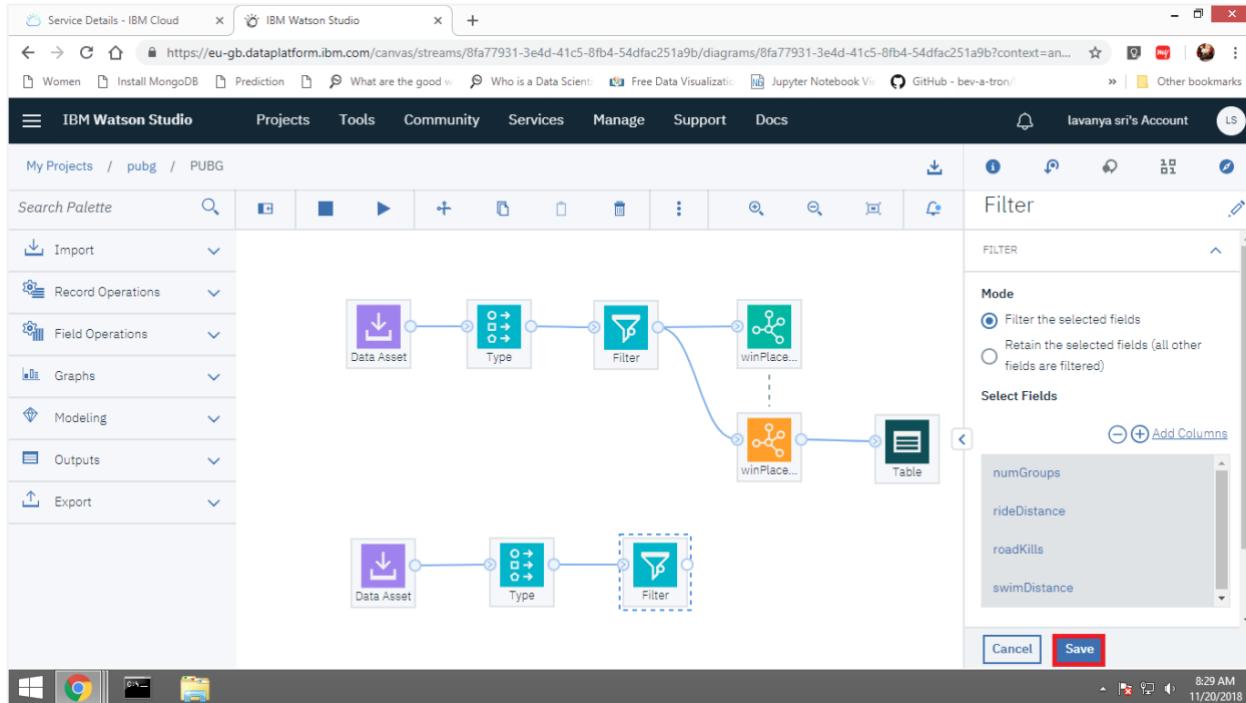
Add a **Filter node** from the **Field Operations** palette. Join it to the **Type node**. Also, click on **Add Columns**, in order to filter out all the unnecessary fields from our dataset.



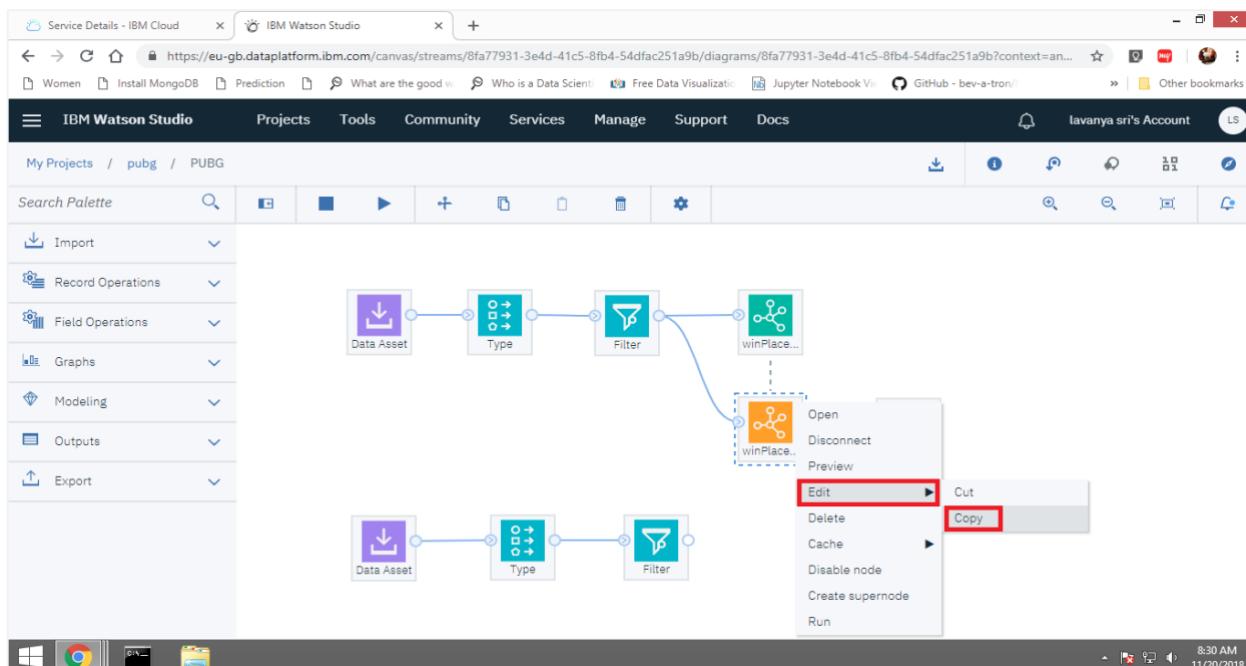
Filter out **numGroups**, **rideDistance**, **roadKills**, and **swimDistance** from our dataset by selecting them. Click on **Ok** after selection.



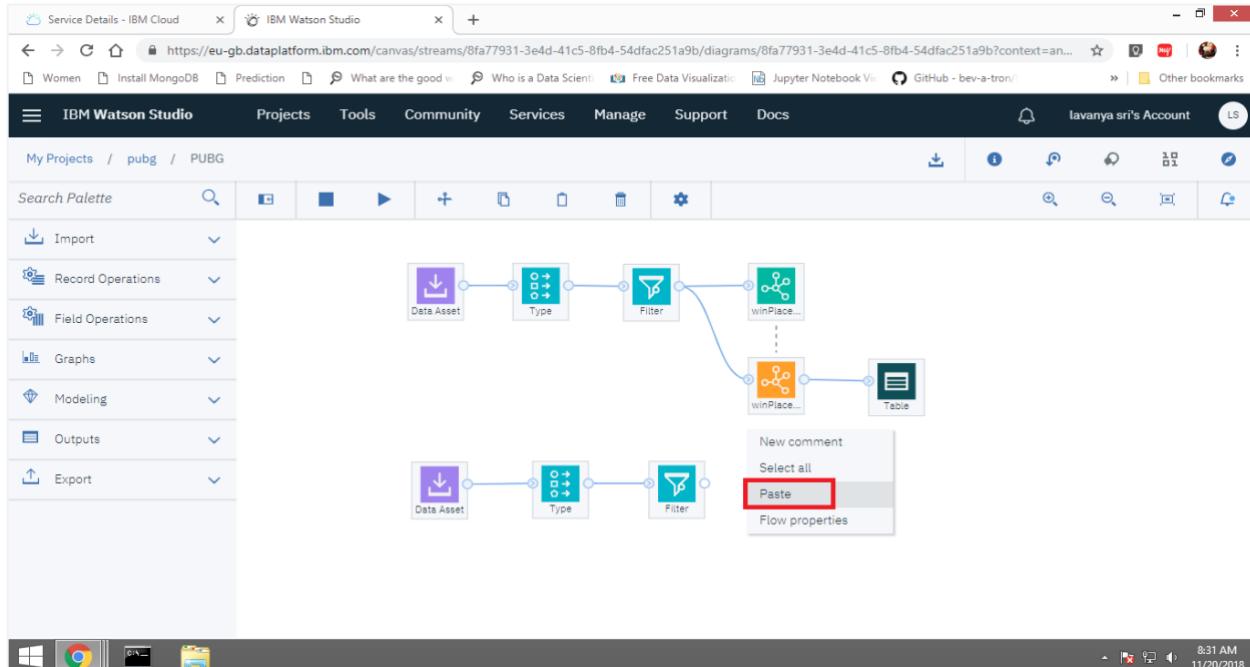
Click on **Save** to make the changes.



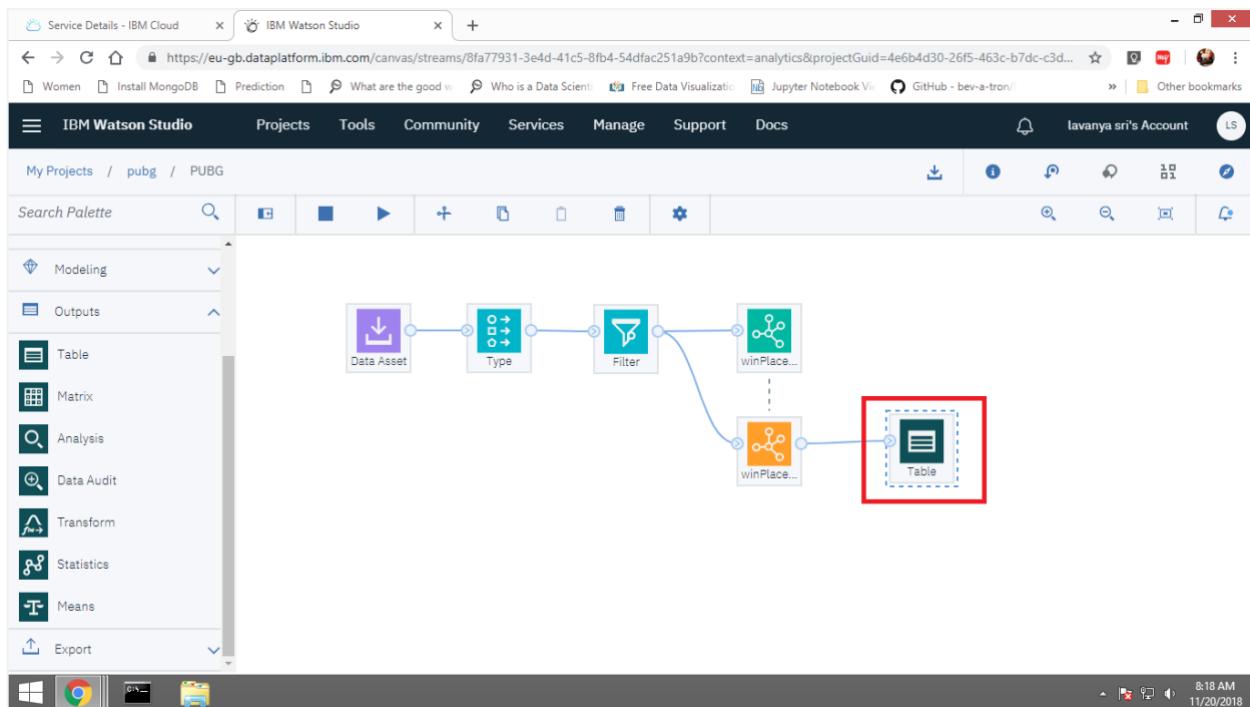
To test the created model, we will give the test data as input to the pre-built model. Hover on the generated model (orange color) then you will be able to see three dots, click on it. Choose **Edit** and select **Copy**.



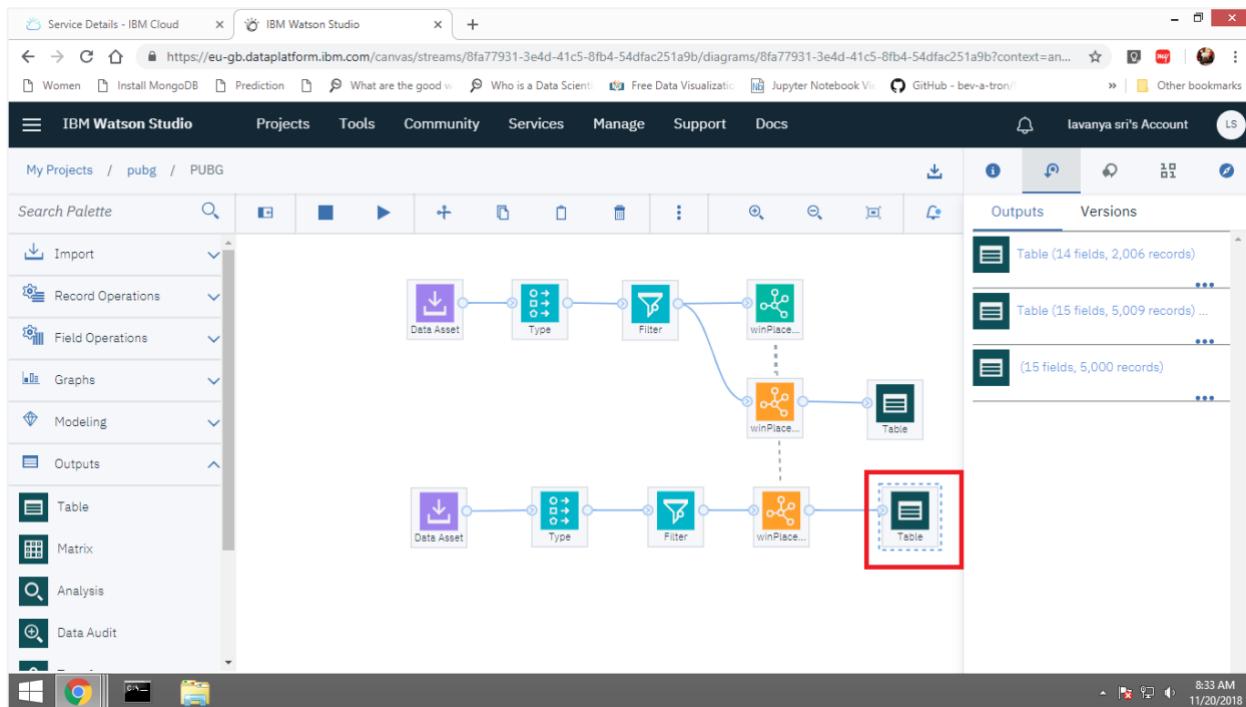
Paste the model next to the filter node and combine them.



We can view the predicted values by using a **Table** node from Output palette.



Using the three dots select the **Run** option to view the newly generated values.



The last column values are the newly predicted winplaceperc values for the given input data from the model.

The screenshot shows a table of PUBG data in IBM Watson Studio. The table has 11 columns: killPoints, kills, killStreaks, longestKill, matchDuration, matchType, rankPoints, revives, winPoints, and \$RL-winPlacePerc. The last column, \$RL-winPlacePerc, is highlighted with a red box.

killPoints	kills	killStreaks	longestKill	matchDuration	matchType	rankPoints	revives	winPoints	\$RL-winPlacePerc
1025.000	0.000	0.000	0.000	1320.000	3.000	-1.000	0.000	1488.000	0.103
1036.000	0.000	0.000	0.000	1378.000	3.000	-1.000	0.000	1511.000	0.024
0.000	1.000	1.000	2.164	699.000	2.000	1500.000	0.000	0.000	0.206
0.000	1.000	1.000	8.631	1419.000	1.000	1577.000	0.000	0.000	0.318
0.000	0.000	0.000	0.000	1285.000	3.000	1395.000	0.000	0.000	0.126
1440.000	3.000	2.000	80.390	1375.000	3.000	-1.000	0.000	1523.000	0.675
0.000	4.000	1.000	193.500	1858.000	3.000	1502.000	1.000	0.000	0.942
0.000	1.000	1.000	3.813	1368.000	3.000	1500.000	1.000	0.000	0.217
0.000	1.000	1.000	7.369	1377.000	3.000	1487.000	0.000	0.000	0.203
997.000	0.000	0.000	0.000	1864.000	2.000	-1.000	0.000	1387.000	0.175
0.000	1.000	1.000	139.400	1855.000	3.000	1429.000	0.000	0.000	0.677
0.000	0.000	0.000	0.000	1202.000	2.000	1210.000	0.000	0.000	0.100

Hurrah!! With this lab you were able to create a modeler flow using IBM Watson Studio for PUBG dataset.

For any questions regarding the lab please feel free to reach out to
innovation@miraclesoft.com. We hope you enjoyed creating Machine Learning
models with us 😊