Project Kickoff Checklist

- **Project Name:** Prediciting Life Expectancy Using Machine Learning
- **Kickoff Date:** 11 June 2020

- **Team Members:**

I am Amey Sawant, a Machine Learning and Deep Learning Learning enthusiast who is always eager to learn new things.

- **Project Background:**

We expect human lifespan to rise as there are lot of medical breakthroughs happening nowadays. We have lot of systems to predict disease, chronic conditions and other maladies to increase human lifespan, but prediciting it would be one of the bases of all the system.

- **Identifying stakeholders:**

Healthcare industries would be one of the biggest stakeholders who can sponsor and get benefited from such project. Predicting life expectancy and performaning operations and other things depending on that would give optimal results.

- **Review Project Objectives:**

1. Objectives:

To create a Regression Machine Learning model which leverages historical data to predict insights into the future. This problem statement is aimed at predicting Life Expectancy rate of a country given various features.

2. Deliverables:

This project delivers a cloud based Machine Learning solution for Life Expectancy Predition.

3. Assumptions:

Since we are using a Regression model, its assumed that the features affect the lifespan linearly.

- **Review team member roles & responsibilities:**

Having a single person team, all the project work will be done by me, advisory being the Hemant Kuma Gahlot sir.

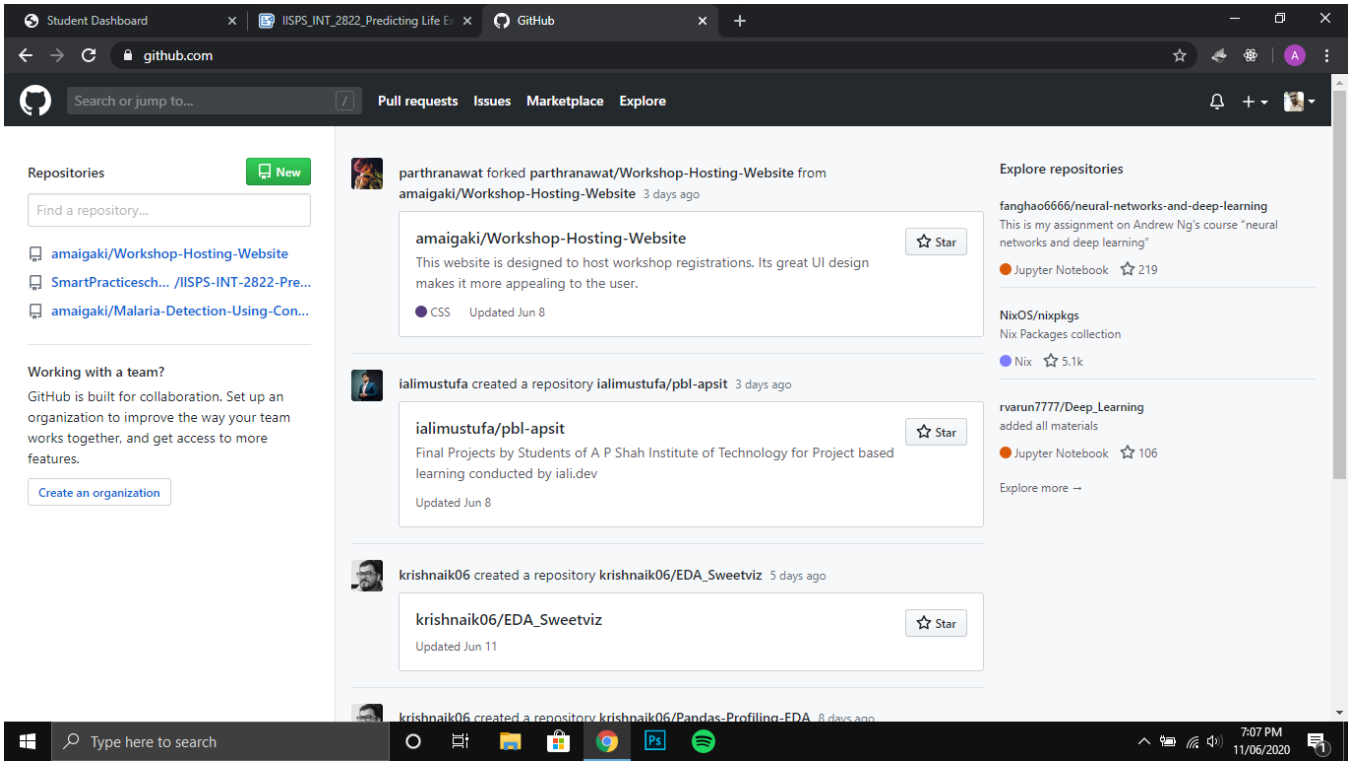
- **Review other potential issues, risks, questions and concerns:**

If not provided with ample amount of data, the model might not predict the life expectancy very accuractely. The cloud based model might add up so,e restrictions based on space and computing in case of larger data and usage.

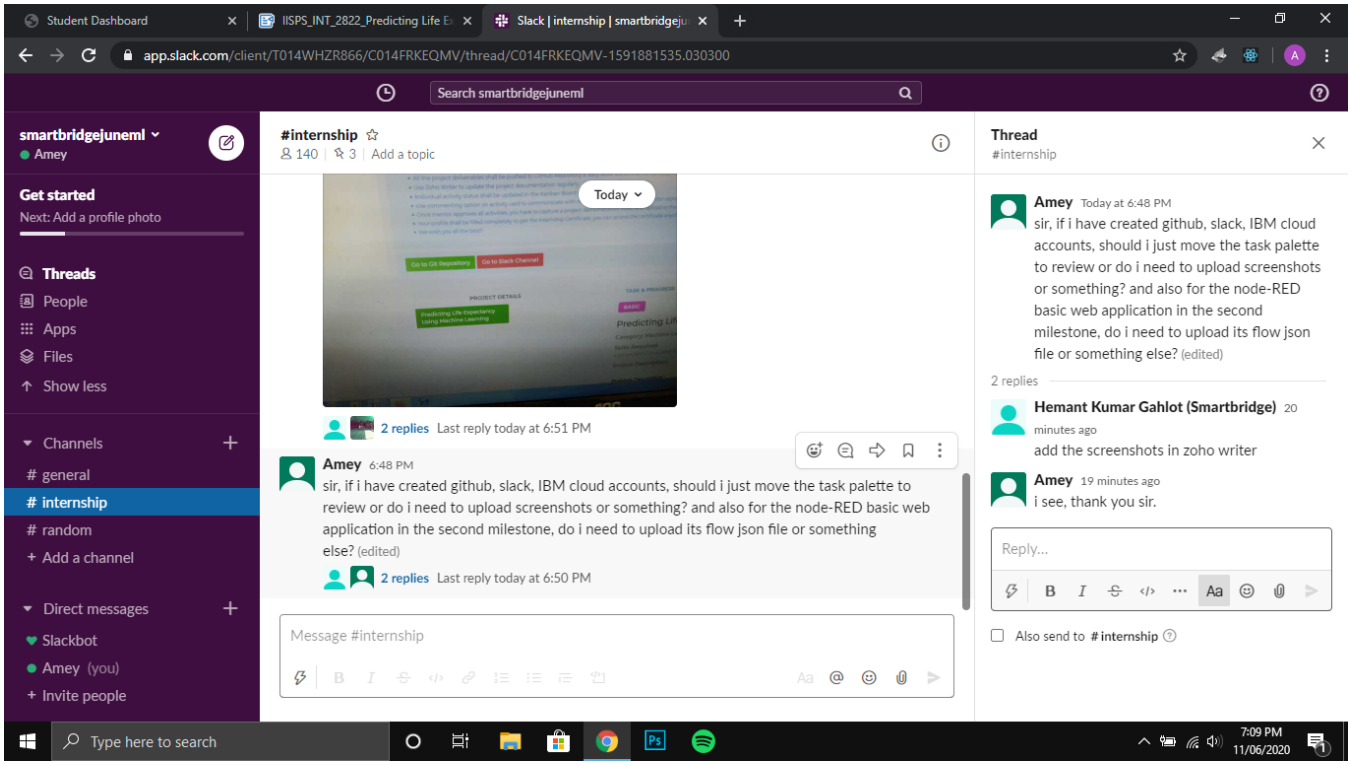
- **Identify next steps and timing:**

Each step of the project will be done under supervision of advisory. The results and task completions will be informed through kanban dashboard.

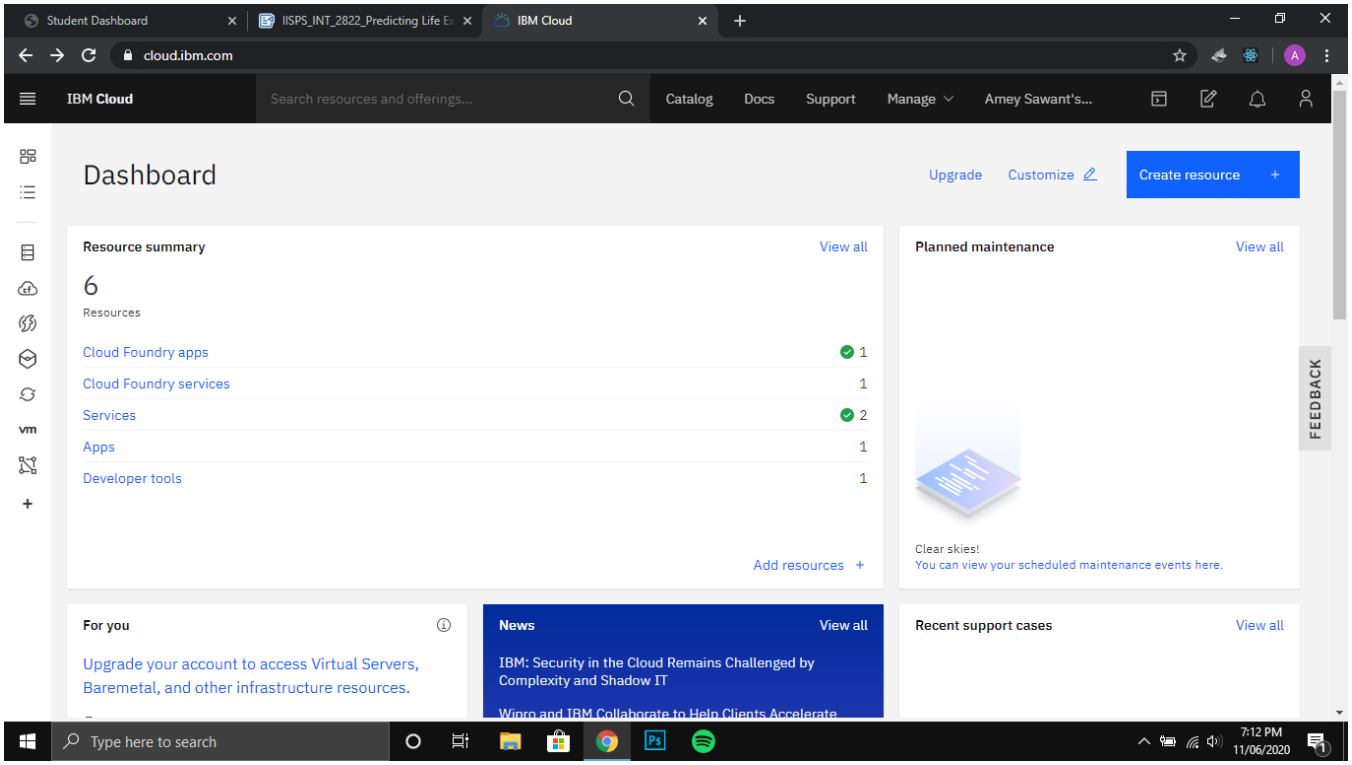
- **Created Github Account:**



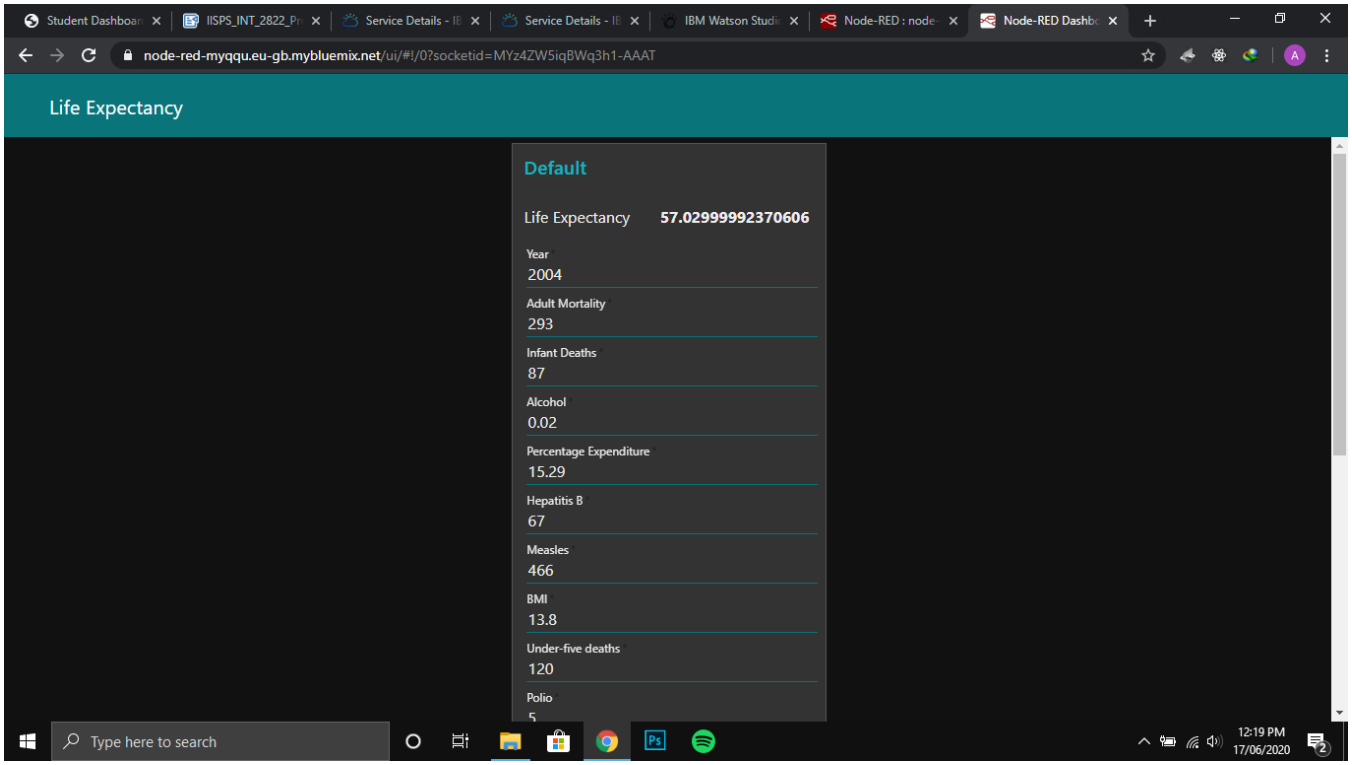
- **Joined Slack Channel:**



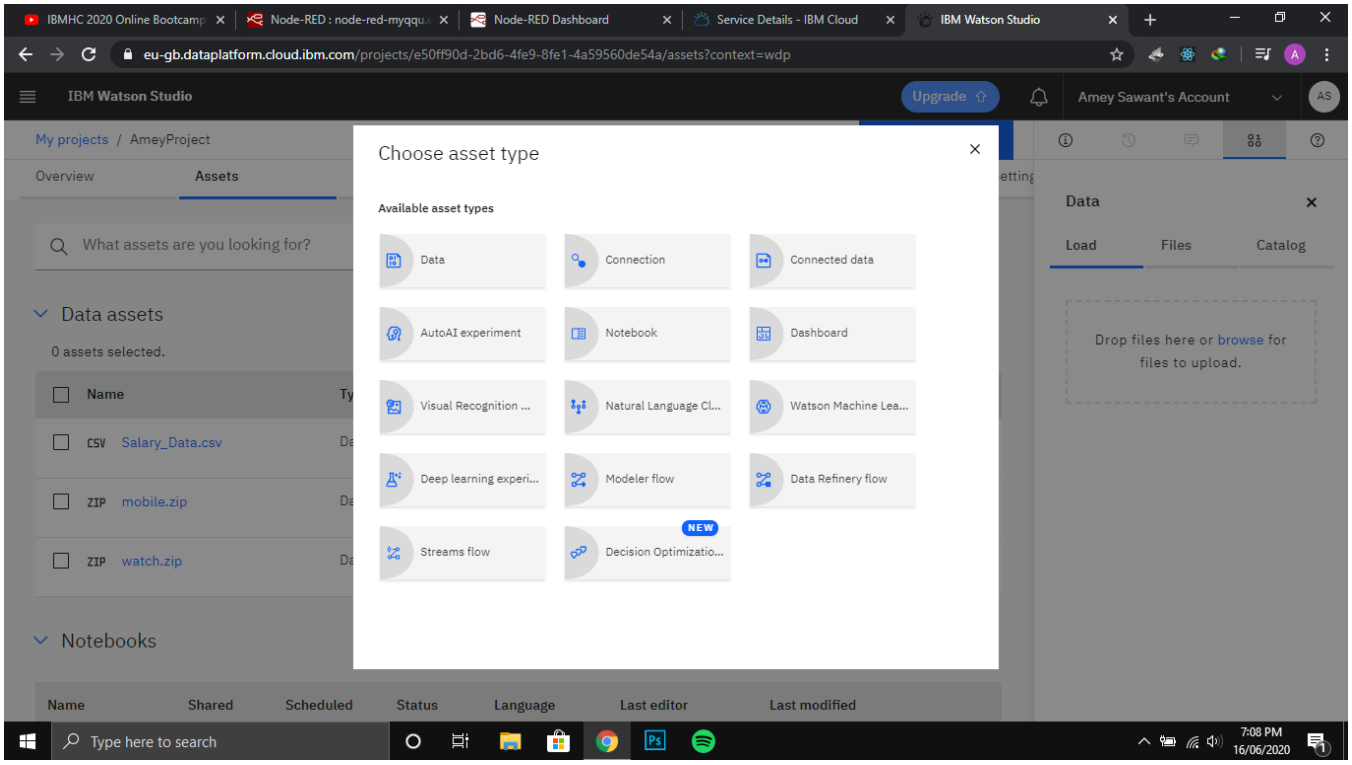
- **Created & got started with IBM cloud:**



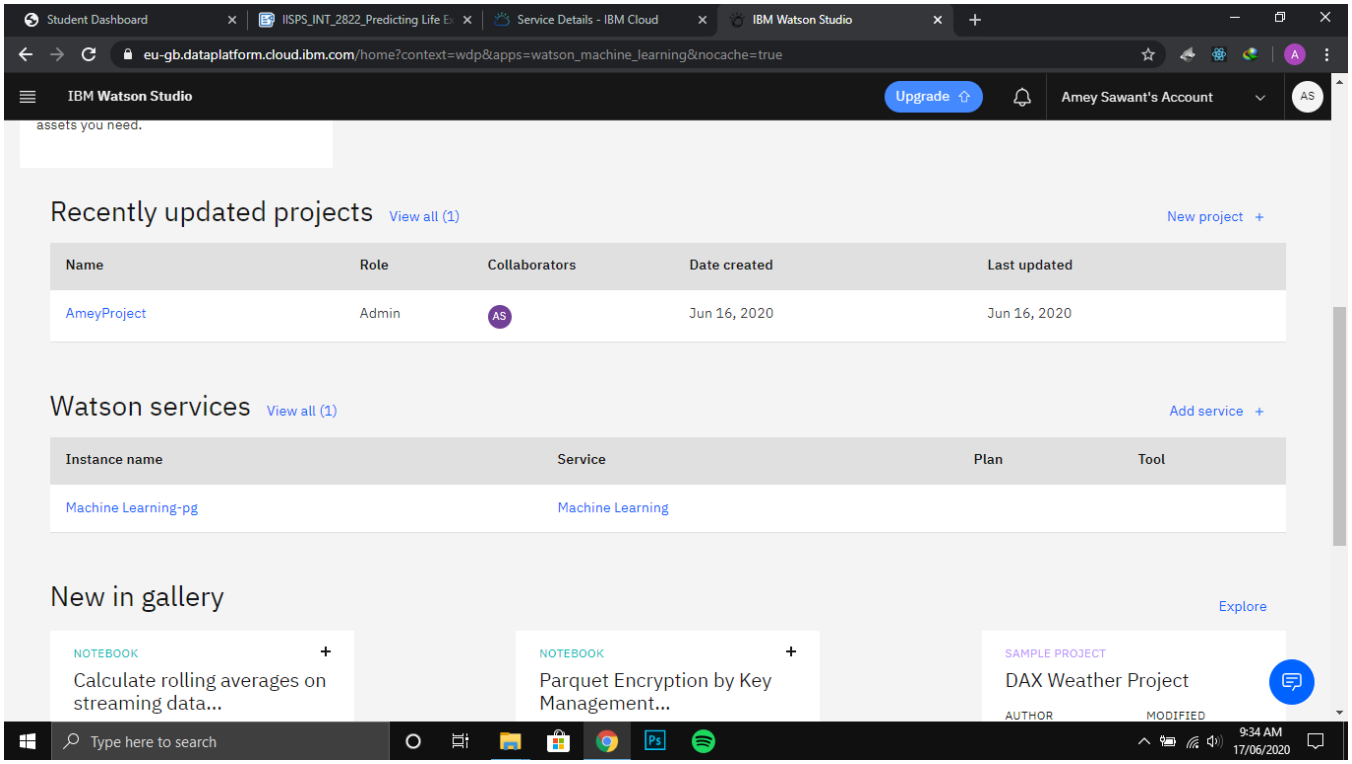
- **Created a Starter webpage with node-RED:**

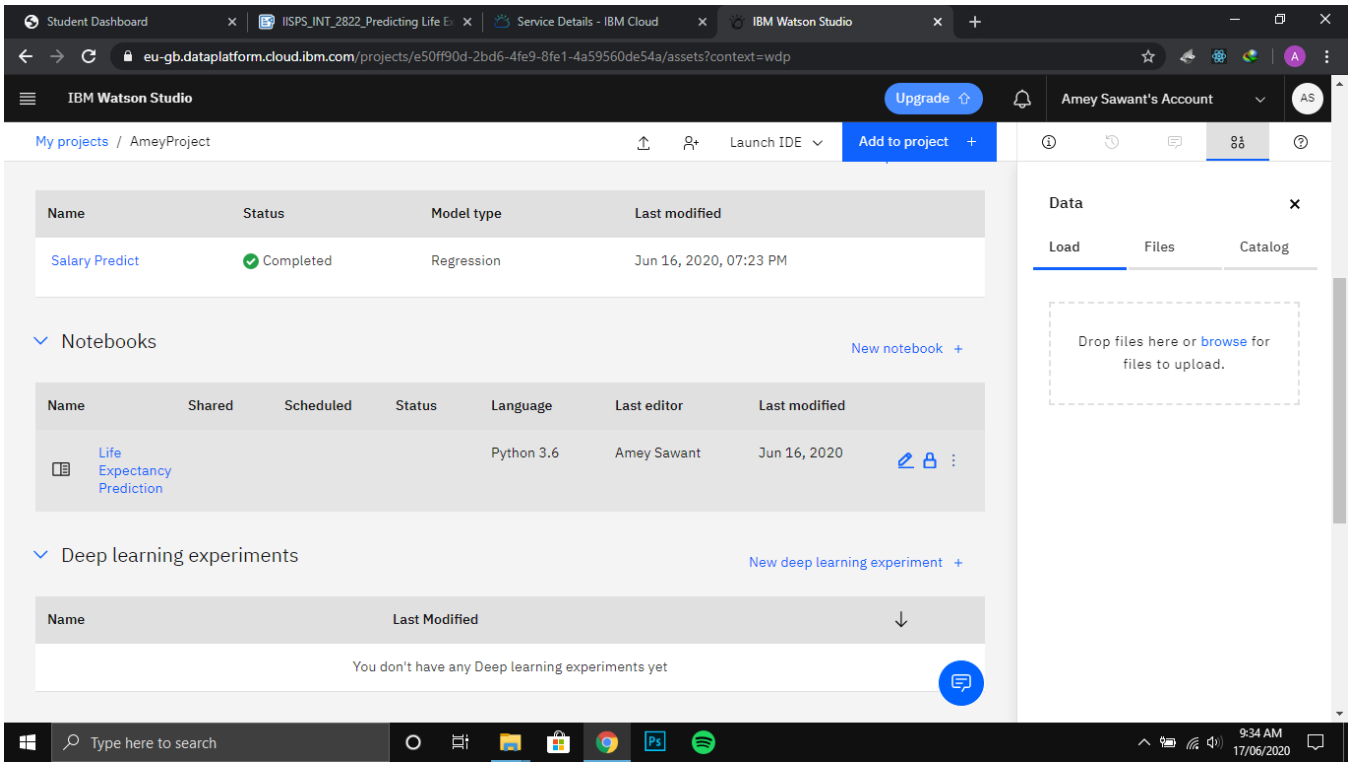


- **Explored Watson use cases and services:**

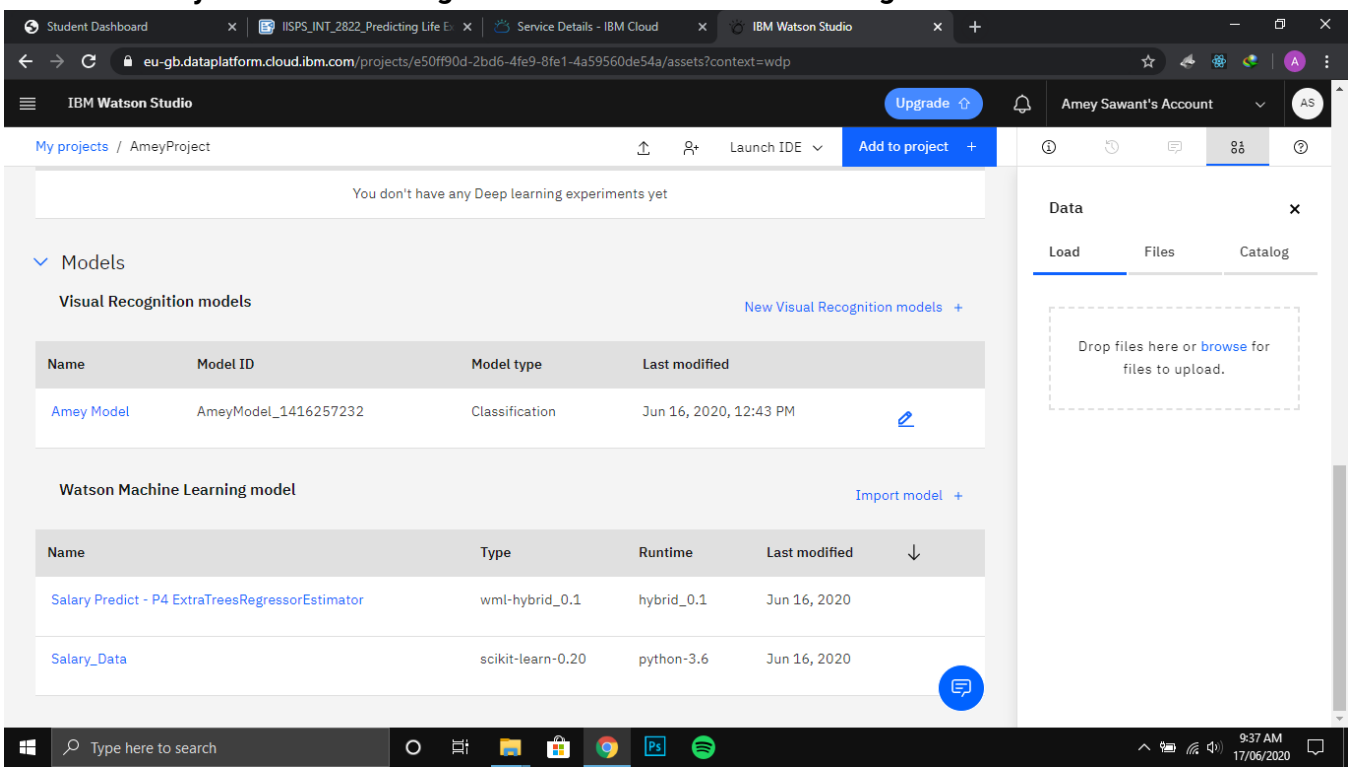


- **Explored IBM watson Machine Learning:**

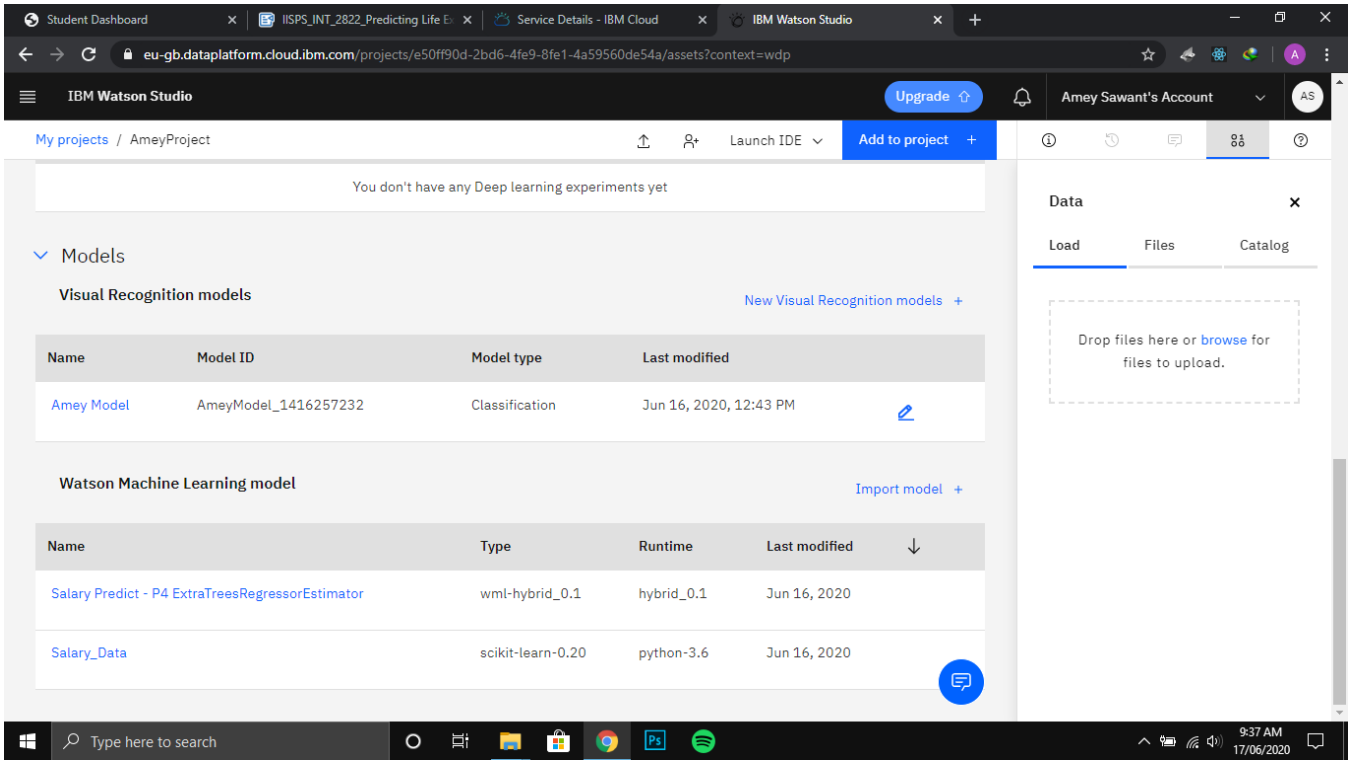


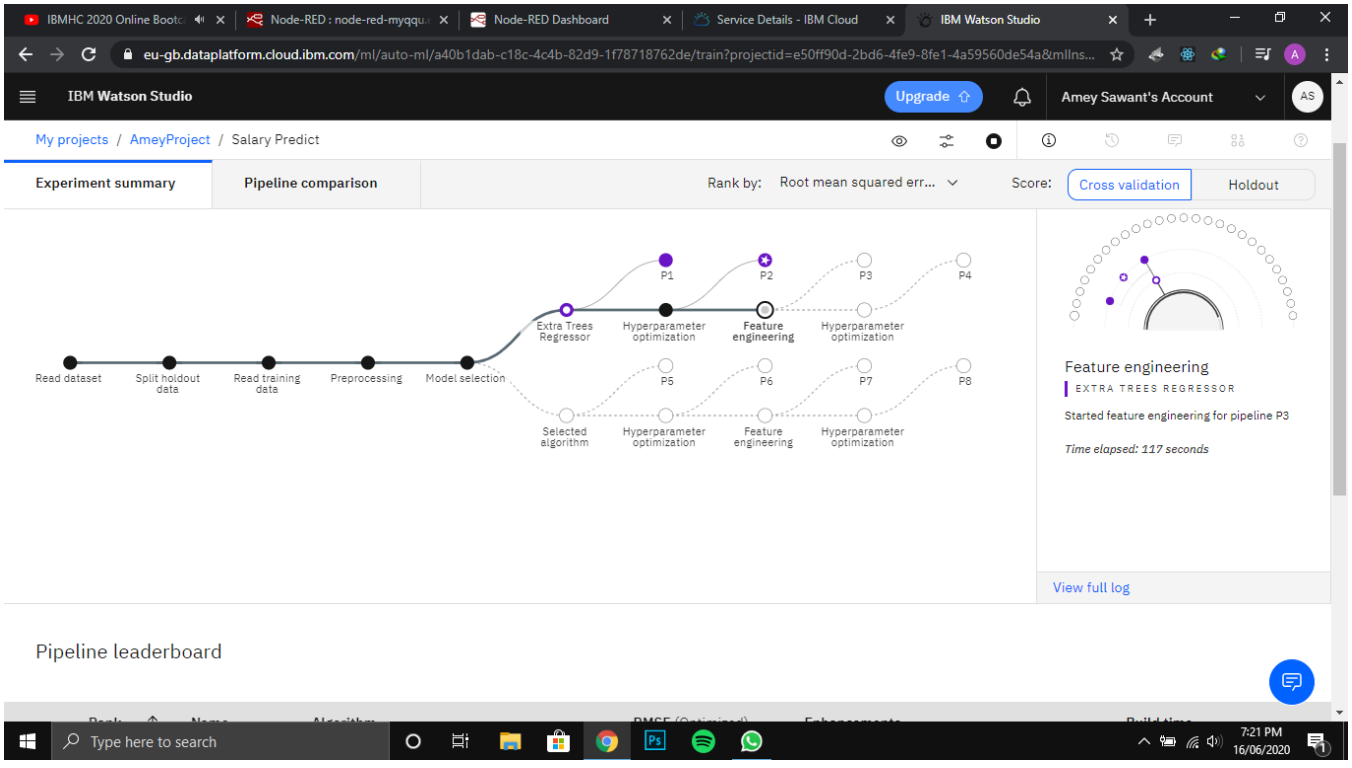


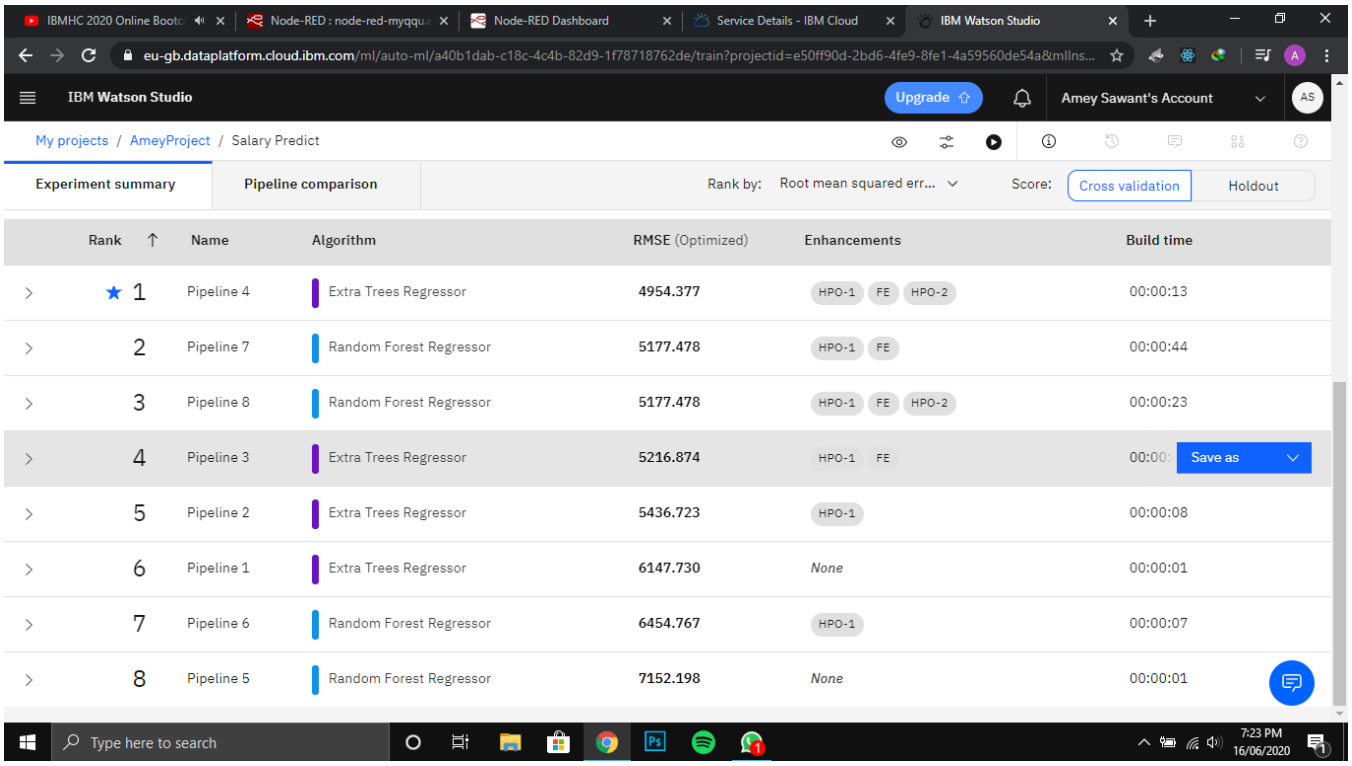
- **Built my own models using Watson Studio Machine Learning Services:**



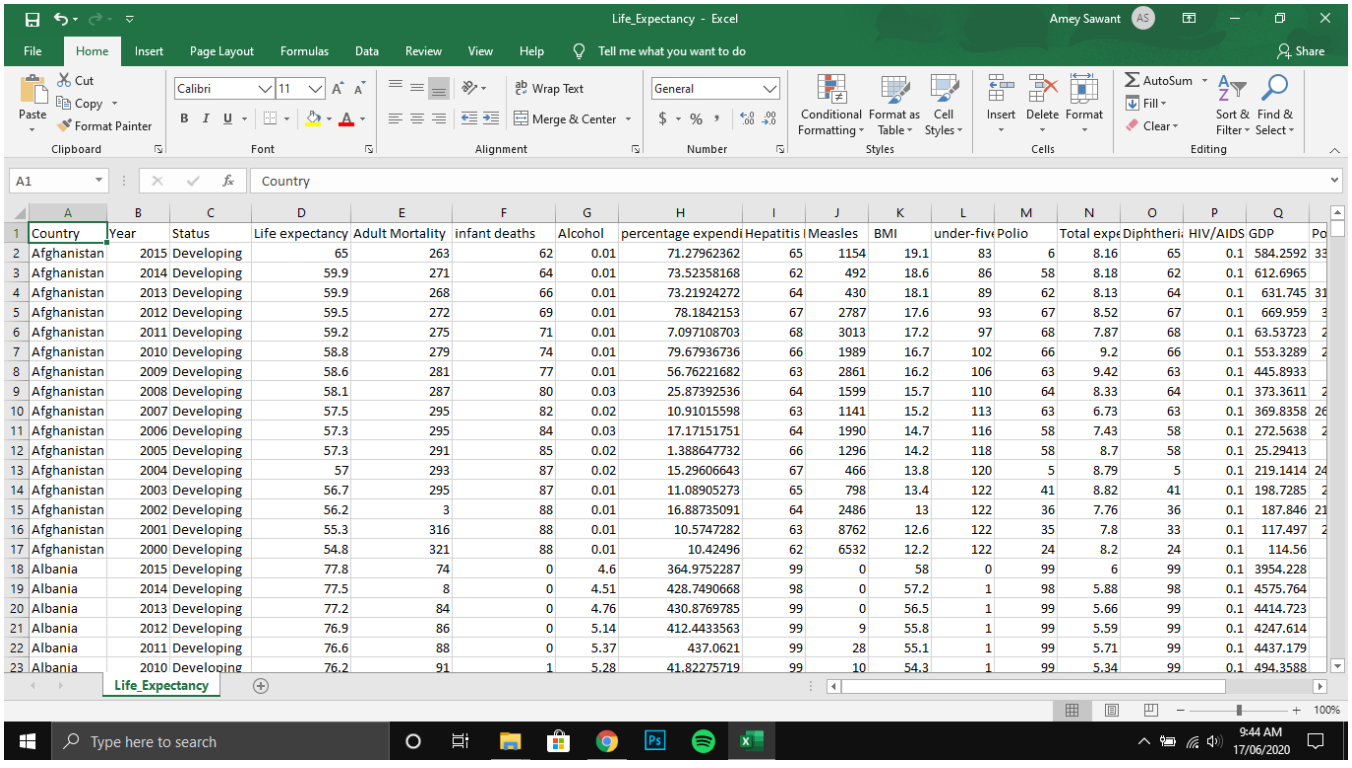
- **Automated ML model using AutoAI:**



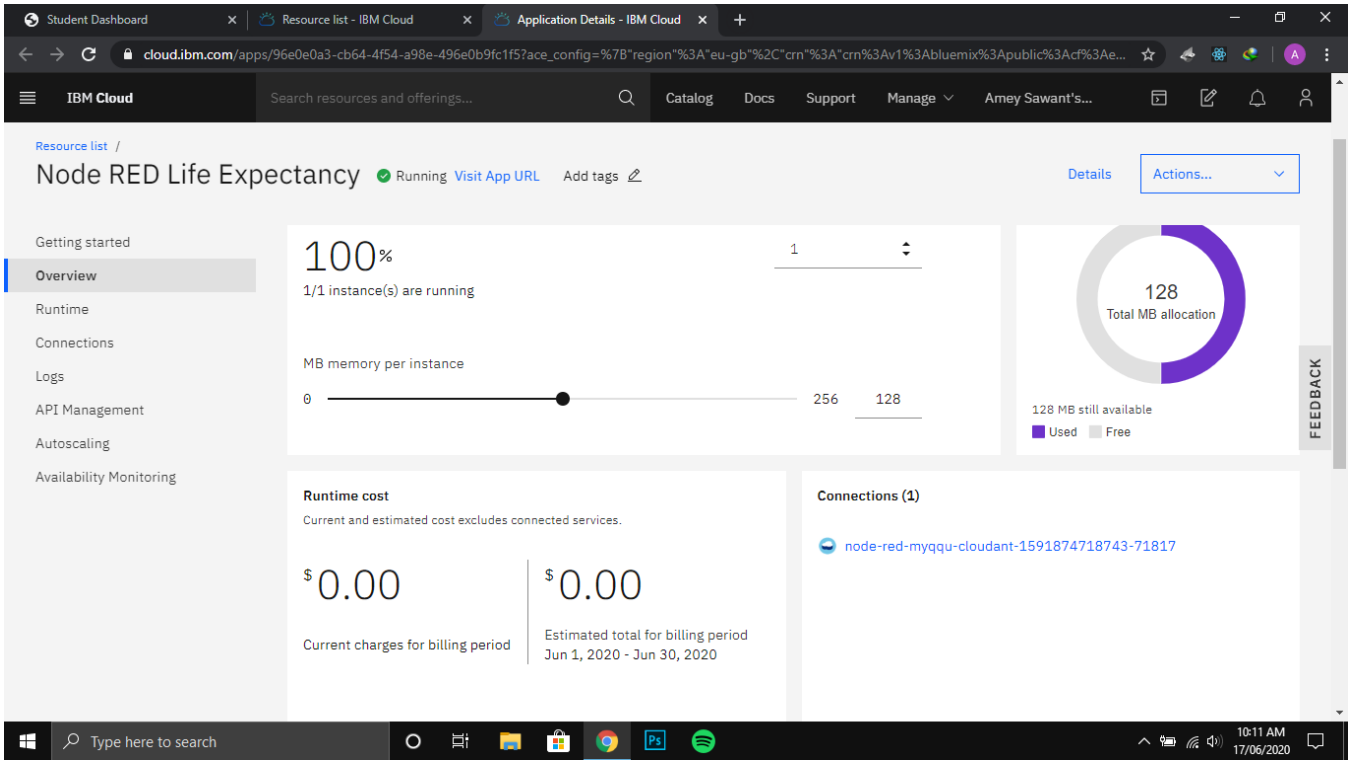




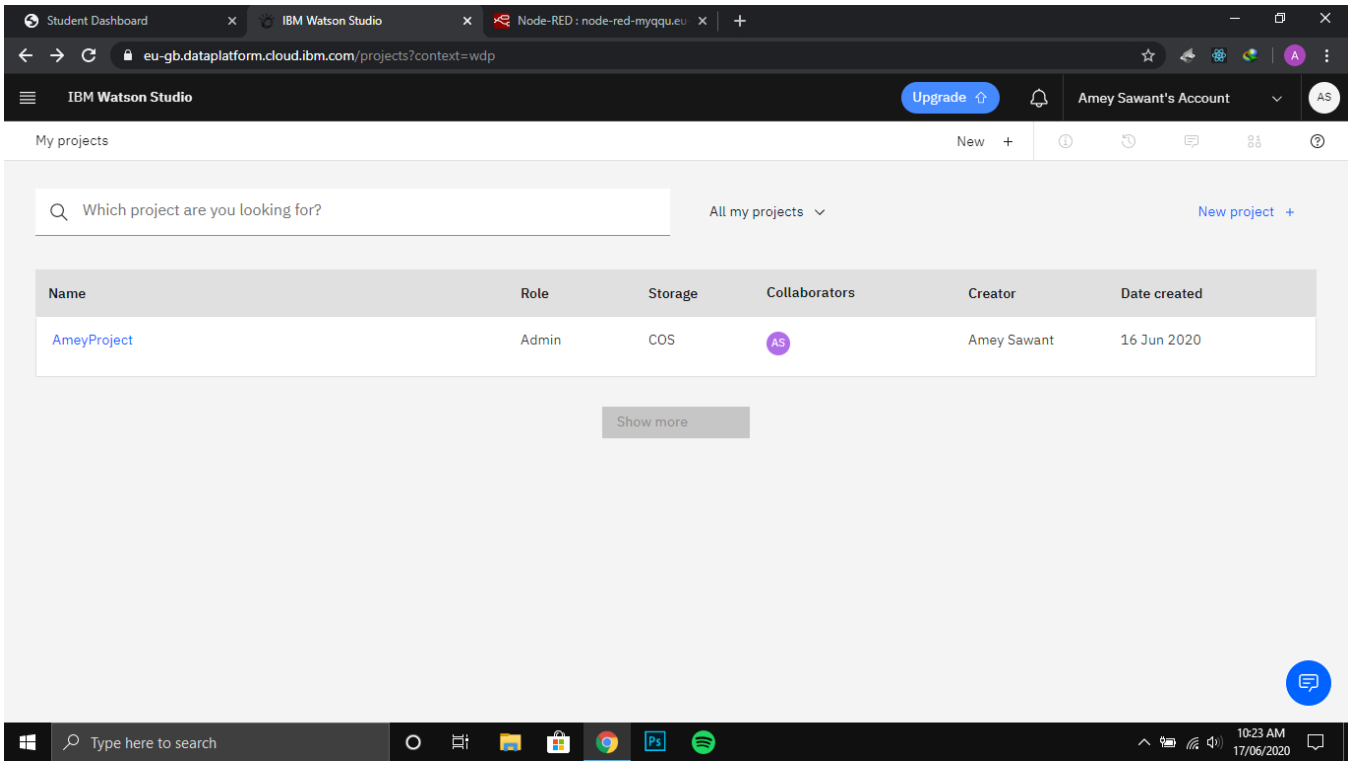
- **Collected Dataset for the project:**



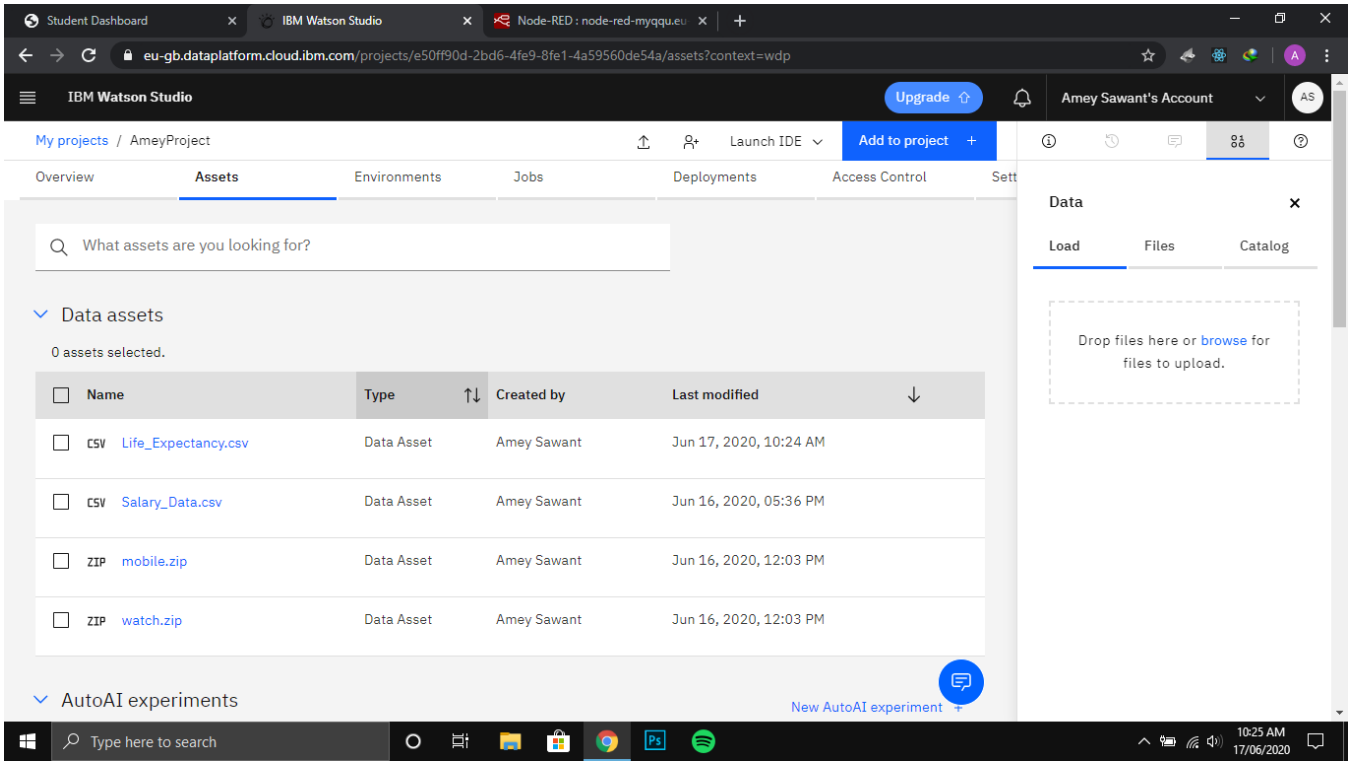
- **Created necessary IBM cloud service:**



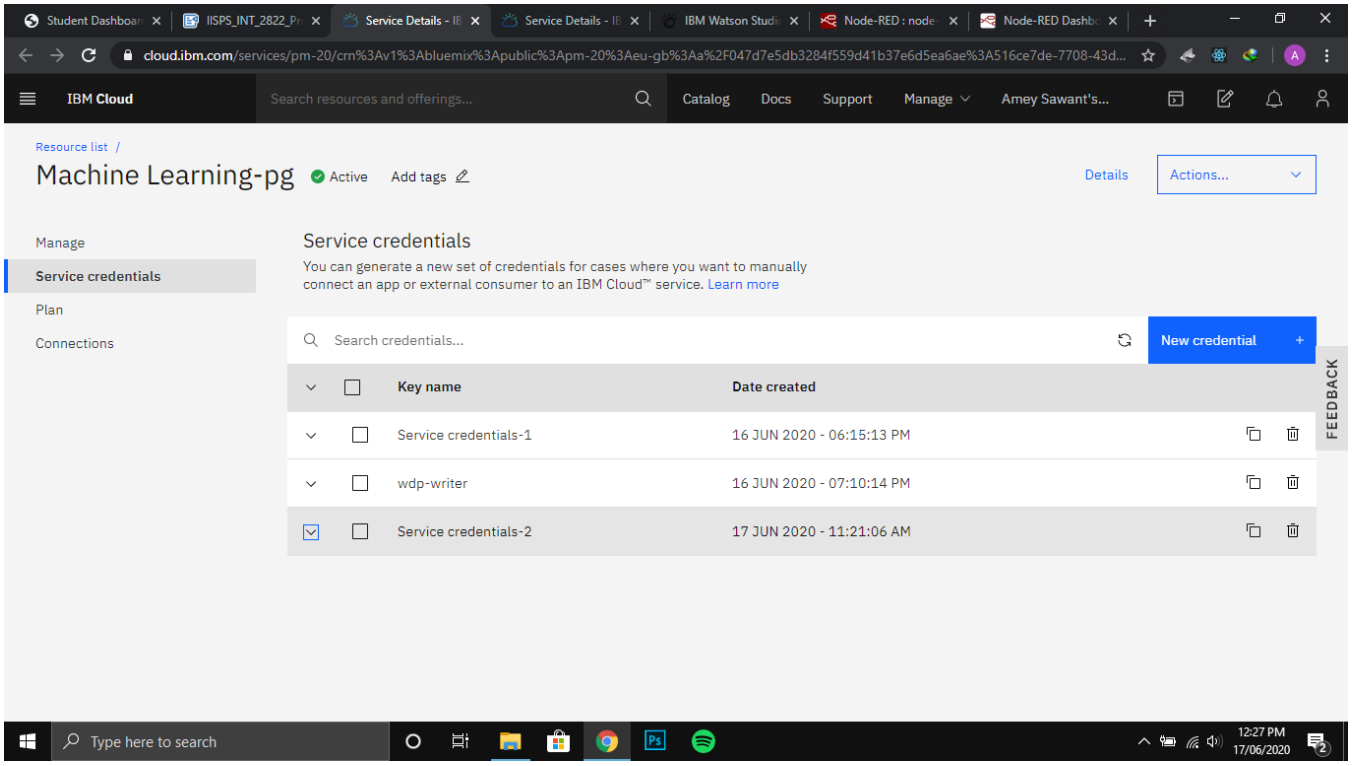
- **Created Watson Studio Project:**



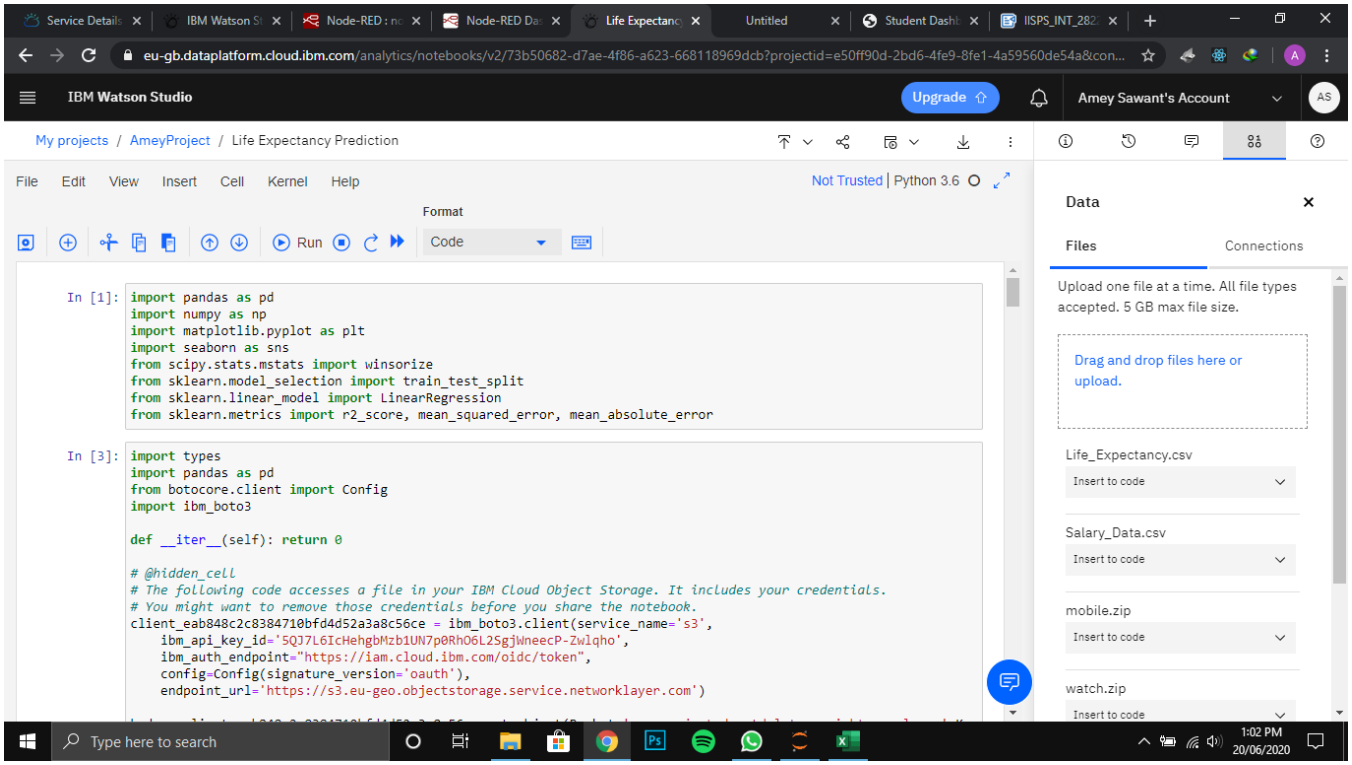
- **Configured Watson Studio:**



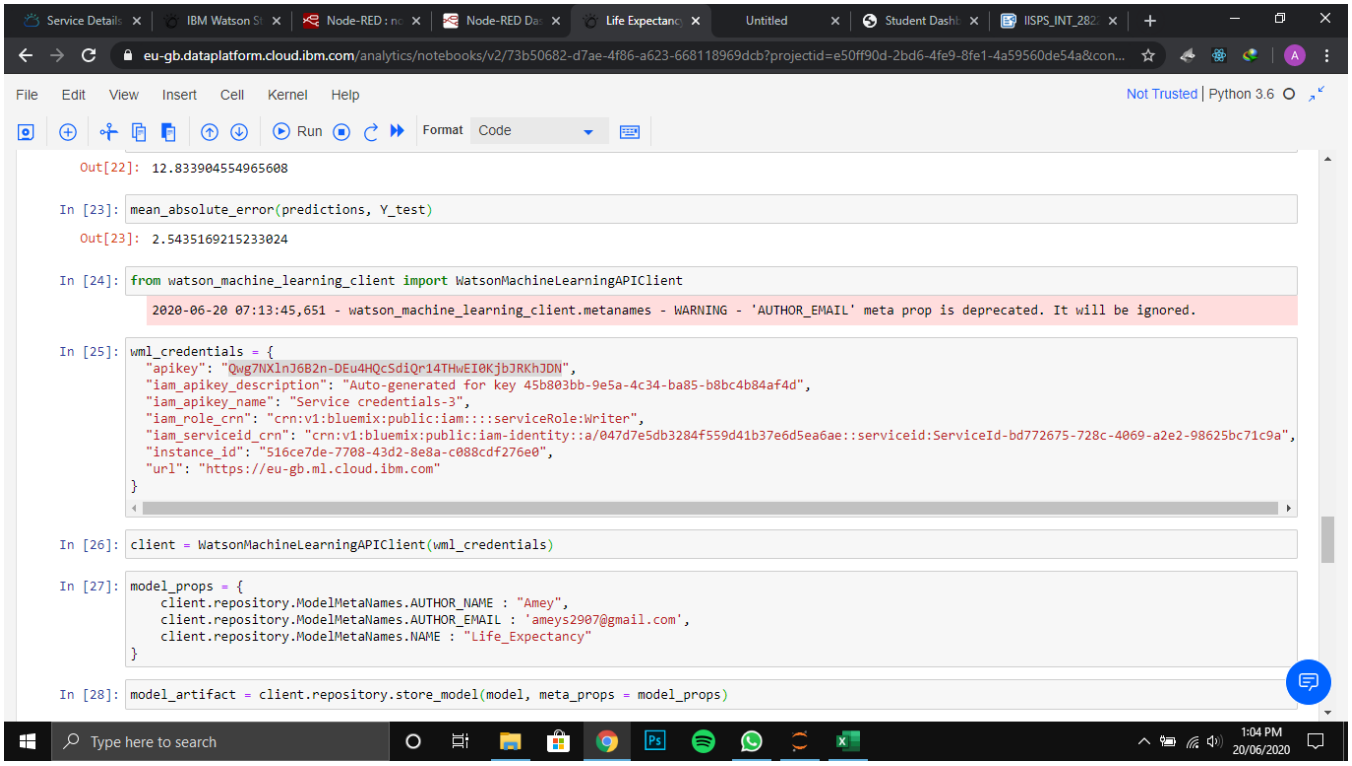
- **Created Machine Learning Services:**

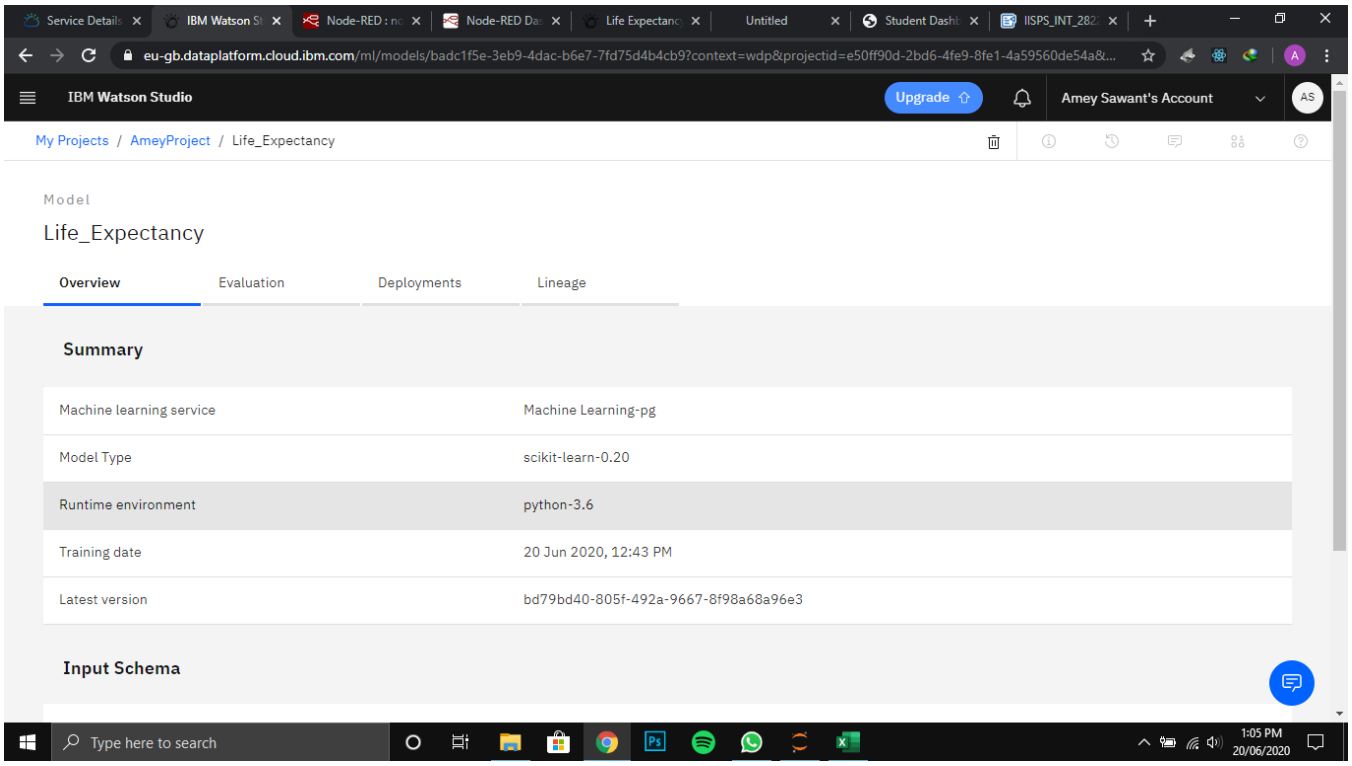


- **Created Jupyter Notebook in IBM Watson and import Data:**

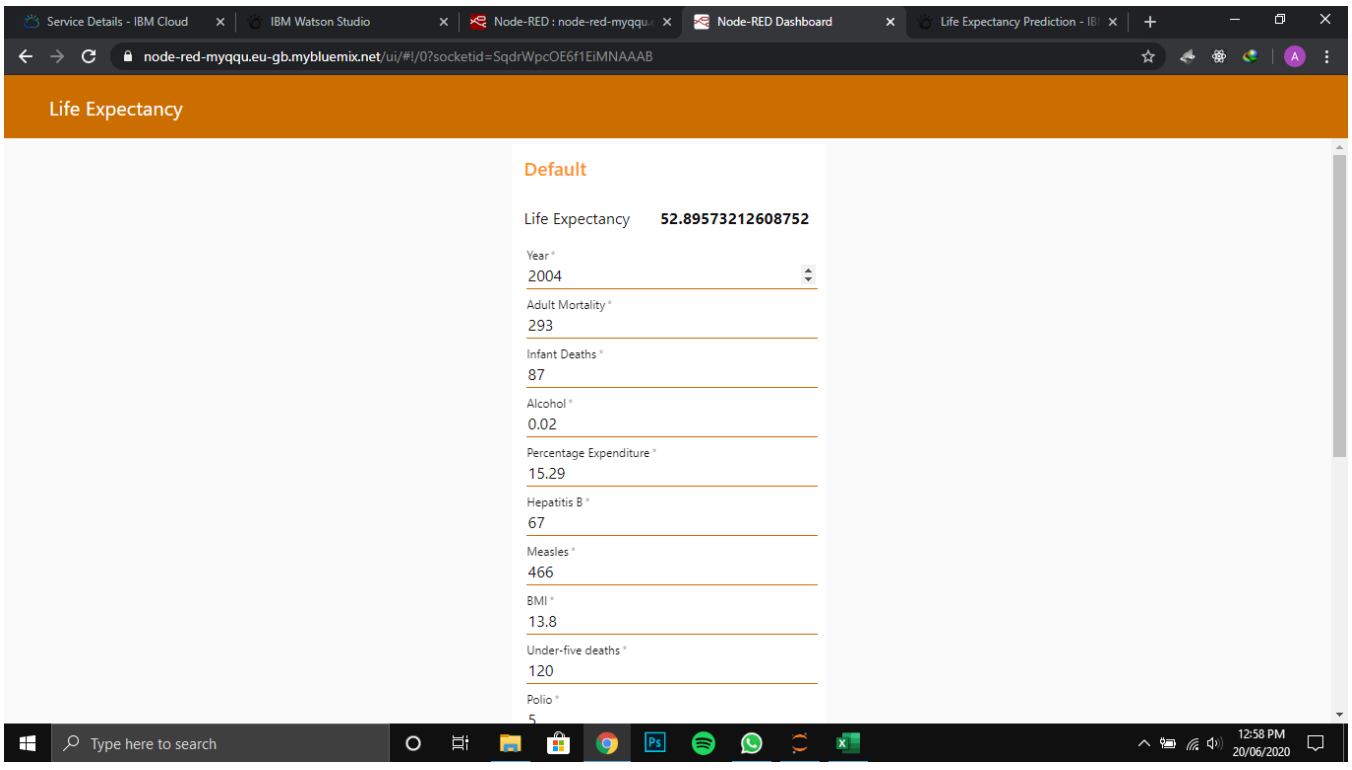


- **Built an ML model and Created Endpoints:**

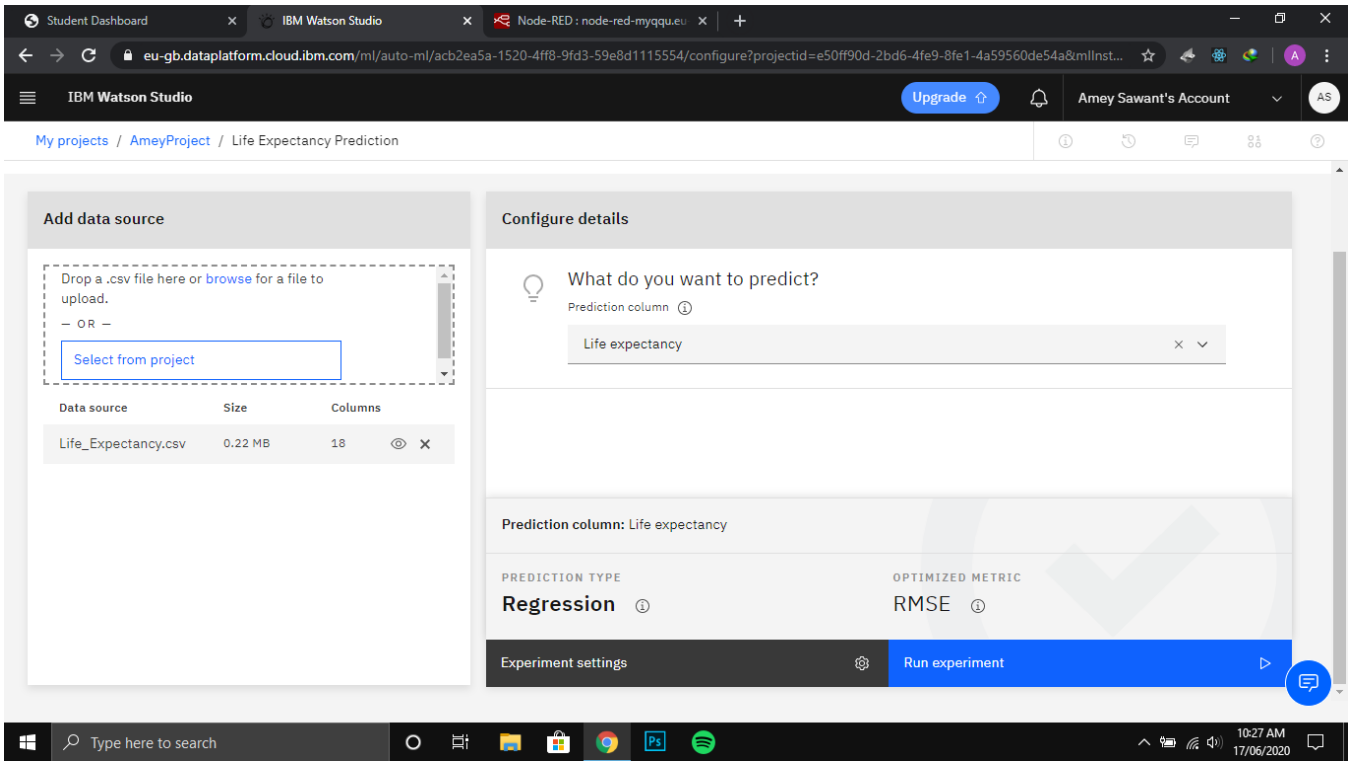




- **node-Red UI for ML:**



- **Imported Dataset and Created AutoAI experiment:**


Student Dashboard
IBM Watson Studio
Node-RED : node-red-myqqu.eu
eu-gb.dataplatform.cloud.ibm.com/ml/auto-ml/acb2ea5a-1520-4ff8-9fd3-59e8d1115554/configure?projectid=e50ff90d-2bd6-4fe9-8fe1-4a59560de54a&mlInst...
IBM Watson Studio
Upgrade
Amey Sawant's Account
My projects / AmeyProject / Life Expectancy Prediction
Add data source
Drop a .csv file here or browse for a file to upload.
— OR —
Select from project
Data source
Size
Columns
Life_Expectancy.csv
0.22 MB
18
Configure details
What do you want to predict?
Prediction column
Life expectancy
Prediction column: Life expectancy
PREDICTION TYPE
Regression
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Experiment settings
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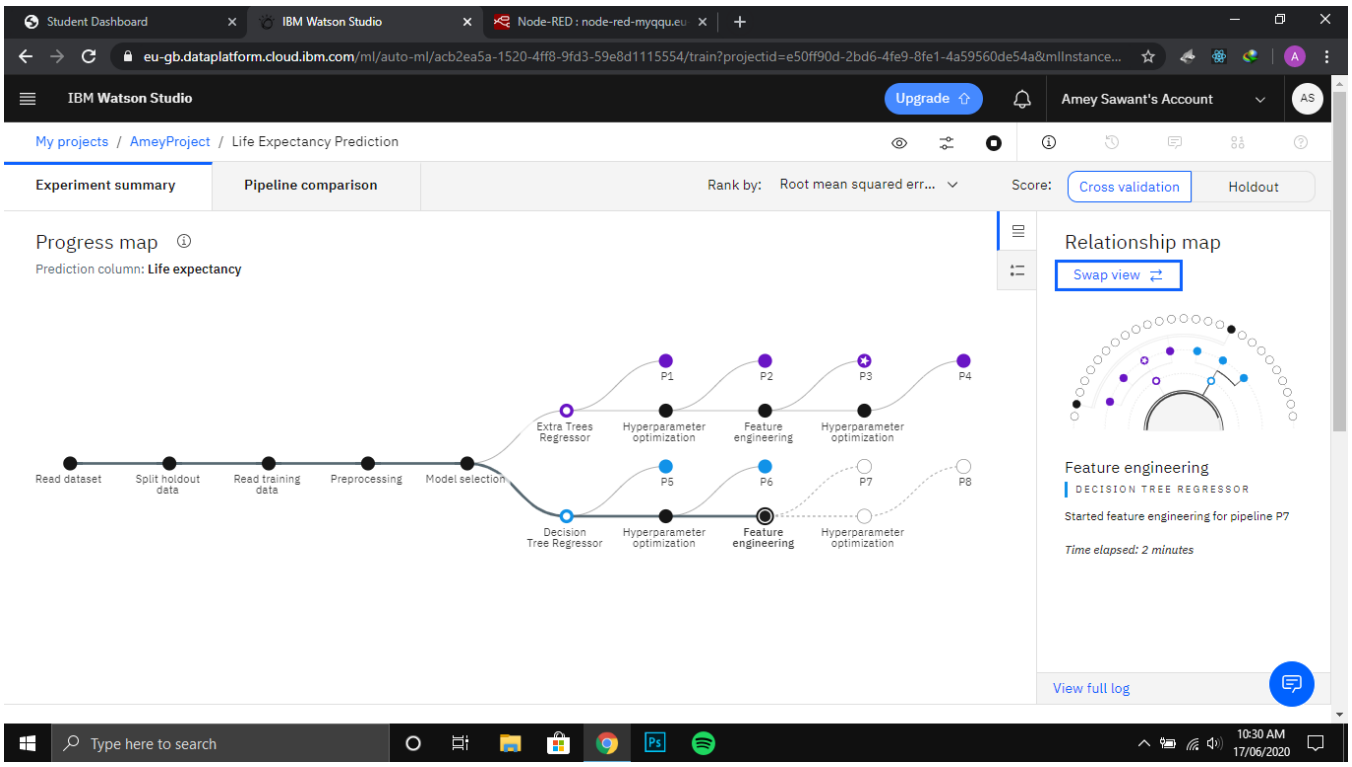
Student Dashboard
IBM Watson Studio
Node-RED : node-red-myqqu.eu
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IBM Watson Studio
Upgrade
Amey Sawant's Account
My projects / AmeyProject / Life Expectancy Prediction
Experiment summary
Pipeline comparison
Rank by: Root mean squared err...
Score: Cross validation Holdout
Progress map
Prediction column: Life expectancy
Read dataset
Split holdout data
Read training data
Preprocessing
Model selection
Extra Trees Regressor
Decision Tree Regressor
Hyperparameter optimization
Feature engineering
P1
P2
P3
P4
P5
P6
P7
P8
Relationship map
Swap view
Feature engineering
DECISION TREE REGRESSOR
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Time elapsed: 2 minutes
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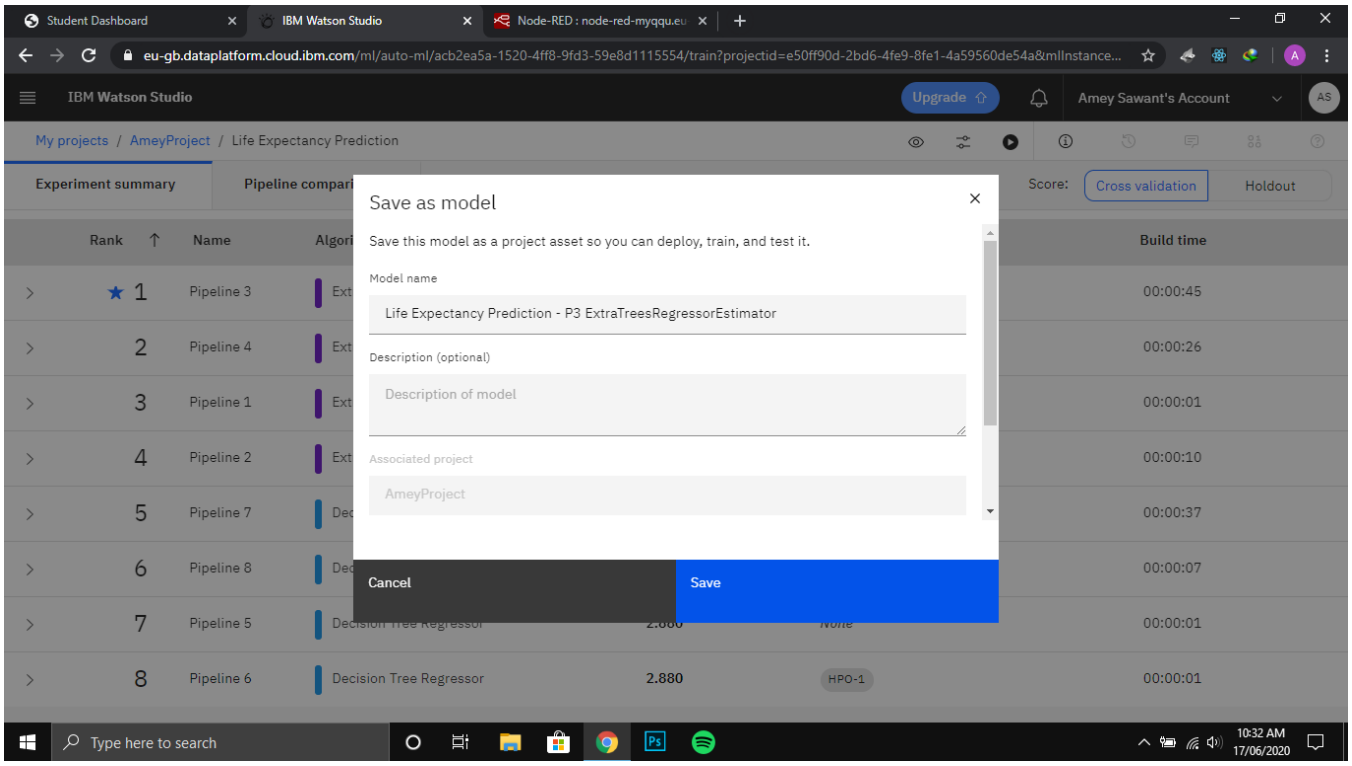

- **Built node-RED flow to integrate AutoAI:**