

## Dataset:

autos - Excel

Manasa S

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Conditional Formatting

Normal

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Good

Neutral

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Editing

B1

name

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U		
	date	Crawled	name	seller	offerType	price	abtest	vehicleType	year	OFReg	gearbox	powerPS	model	kilometer	month	OFR	fuelType	brand	notRepair	dateCreated	nrOfPictur	postalCod	lastSeen
1	3/24/2016 11:52	Golf_3_14	privat	Angebot	480	test		1993	manuell		0	golf	150000	0	benzin	volkswagen		3/24/2016 0:00	0	70435	4/7/2016 3:16		
2	3/24/2016 10:58	A5_Sportb	privat	Angebot	18300	test	coupe	2011	manuell		190		125000	5	diesel	audi	ja	3/24/2016 0:00	0	66954	4/7/2016 1:46		
3	3/14/2016 12:52	Jeep_Gran	privat	Angebot	9800	test	suv	2004	automatik		163	grand	125000	8	diesel	jeep		3/14/2016 0:00	0	90480	4/5/2016 12:47		
4	3/17/2016 16:54	GOLF_4_1	privat	Angebot	1500	test	kleinwagen	2001	manuell		75	golf	150000	6	benzin	volkswagen	nein	3/17/2016 0:00	0	91074	3/17/2016 17:40		
5	3/31/2016 17:25	Skoda_Fat	privat	Angebot	3600	test	kleinwagen	2008	manuell		69	fabia	90000	7	diesel	skoda	nein	3/31/2016 0:00	0	60437	4/6/2016 10:17		
6	4/4/2016 17:36	BMW_316	privat	Angebot	650	test	limousine	1995	manuell		102	3er	150000	10	benzin	bmw	ja	4/4/2016 0:00	0	33775	4/6/2016 19:17		
7	4/1/2016 20:48	Peugeot_2	privat	Angebot	2200	test	cabrio	2004	manuell		109	2_reihe	150000	8	benzin	peugeot	nein	4/1/2016 0:00	0	67112	4/5/2016 18:18		
8	3/21/2016 18:54	VW_Derby	privat	Angebot	0	test	limousine	1980	manuell		50	andere	40000	7	benzin	volkswagen	nein	3/21/2016 0:00	0	19348	3/25/2016 16:47		
9	4/4/2016 23:42	Ford_C_m	privat	Angebot	14500	control	bus	2014	manuell		125	c_max	30000	8	benzin	ford		4/4/2016 0:00	0	94505	4/4/2016 23:42		
10	3/17/2016 10:53	VW_Golf_3	privat	Angebot	999	test	kleinwagen	1998	manuell		101	golf	150000	0		volkswagen		3/17/2016 0:00	0	27472	3/19/2016 17:17		
11	3/26/2016 19:54	Mazda_3	privat	Angebot	2000	control	limousine	2004	manuell		105	3_reihe	150000	12	benzin	mazda	nein	3/26/2016 0:00	0	96224	4/6/2016 10:45		
12	4/7/2016 10:06	Volkswagen	privat	Angebot	2799	control	kombi	2005	manuell		140	passat	150000	12	diesel	volkswagen	ja	4/7/2016 0:00	0	57290	4/7/2016 10:25		
13	3/15/2016 22:49	VW_Passa	privat	Angebot	999	control	kombi	1995	manuell		115	passat	150000	11	benzin	volkswagen		3/15/2016 0:00	0	37269	4/1/2016 13:16		
14	3/21/2016 21:37	VW_PASSat	privat	Angebot	2500	control	kombi	2004	manuell		131	passat	150000	2		volkswagen	nein	3/21/2016 0:00	0	90762	3/23/2016 2:50		
15	3/21/2016 12:57	Nissan_Na	privat	Angebot	17999	control	suv	2011	manuell		190	navara	70000	3	diesel	nissan	nein	3/21/2016 0:00	0	4177	4/6/2016 7:45		
16	3/11/2016 21:39	KA_Luftha	privat	Angebot	450	test	kleinwagen	1910			0	ka	5000	0	benzin	ford		3/11/2016 0:00	0	24148	3/19/2016 8:46		
17	4/1/2016 12:46	Polo_6n_1	privat	Angebot	300	test		2016			60	polo	150000	0	benzin	volkswagen		4/1/2016 0:00	0	38871	4/1/2016 12:46		
18	3/20/2016 10:25	Renault_T1	privat	Angebot	1750	control	kleinwagen	2004	automatik		75	twingo	150000	2	benzin	renault	nein	3/20/2016 0:00	0	65599	4/6/2016 13:16		
19	3/23/2016 15:48	Ford_C_M	privat	Angebot	7550	test	bus	2007	manuell		136	c_max	150000	6	diesel	ford	nein	3/23/2016 0:00	0	88361	4/5/2016 18:45		
20	4/1/2016 22:55	Mercedes	privat	Angebot	1850	test	bus	2004	manuell		102	a_klasse	150000	1	benzin	mercedes	nein	4/1/2016 0:00	0	49565	4/5/2016 22:46		
21	4/1/2016 19:56	Volkswagen	privat	Angebot	10400	control	coupe	2009	manuell		160	scirocco	100000	4	benzin	volkswagen	nein	4/1/2016 0:00	0	75365	4/5/2016 16:45		
22	3/27/2016 11:38	BMW_530i	privat	Angebot	3699	test	limousine	2002	automatik		231	5er	150000	7	benzin	bmw	nein	3/27/2016 0:00	0	68309	4/7/2016 6:44		
23	3/23/2016 14:52	Opel_Meriv	privat	Angebot	2900	test		2018	manuell		90	meriva	150000	5	benzin	opel	nein	3/23/2016 0:00	0	49716	3/31/2016 1:16		
24	3/13/2016 19:43	Stadtfilzte	privat	Angebot	450	test	kleinwagen	1997	manuell		50	aros	150000	5	benzin	seat	nein	3/13/2016 0:00	0	9526	3/21/2016 1:46		
25	3/13/2016 20:40	MERCEDE	privat	Angebot	500	test	limousine	1990	manuell		118	andere	150000	10	benzin	mercedes	ja	3/13/2016 0:00	0	35390	3/13/2016 20:40		
26	3/18/2016 21:44	BMW_530	privat	Angebot	2500	control	kombi	2002	automatik		193	5er	150000	9	diesel	bmw	ja	3/18/2016 0:00	0	73765	3/18/2016 21:44		
27	3/10/2016 19:38	Citroen_C	privat	Angebot	5555	control		2017	manuell		125	c4	125000	4		citroen	nein	3/10/2016 0:00	0	31139	3/16/2016 9:16		
28	3/7/2016 12:51	Honda_Ck	privat	Angebot	6900	test	limousine	2008	manuell		99	civic	60000	11	benzin	honda	nein	3/7/2016 0:00	0	12621	3/26/2016 9:44		
29																							

autos

Ready

Search

## Login to IBM cloud:

IBM Cloud

Log in to IBM Cloud

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IBMID  
manasa7919@gmail.com

[Continue](#)

☐ Remember ID

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## IBM cloud services:

Resource list

Create resource +

Name	Group	Location	Offering	Status	Tags
Filter by name or IP address...	Filter by group or org...	Filter...	Filter...	Filter...	Filter...
Clusters (0)					
Cloud Foundry apps (1)					
Cloud Foundry services (1)					
Services (4)					
Continuous Delivery	Default	Dallas	Continuous Delivery	Active	-
Watson Studio-hl	Default	Dallas	Watson Studio	Active	-
node-red-pqins-cloudant-1592538967...	Default	Chennai 01	Cloudant	Active	-
pm-20-fi	Default	Dallas	Machine Learning	Active	cpda...
Storage (1)					
cloud-object-storage-qc	Default	Global	Cloud Object Storage	Active	cpda...
Network (0)					
Cloud Foundry enterprise environments (0)					
Functions namespaces (0)					

### Project in IBM studio:

The screenshot displays the IBM Watson Studio web interface. At the top, a browser address bar shows the URL: `dataplatform.cloud.ibm.com/projects/cdce7cc3-8530-419a-95bf-a651225cb02b?context=wdp`. The main header includes the 'IBM Watson Studio' logo, an 'Upgrade' button, and a user profile for 'Manasa S's Account'.

The interface is divided into a top navigation bar with tabs: 'My projects / Resale\_value\_pred', 'Launch IDE', and 'Add to project'. Below this is a secondary navigation bar with tabs: 'Overview', 'Assets', 'Environments', 'Jobs', 'Deployments', 'Access Control', and 'Settings'. The 'Overview' tab is currently selected.

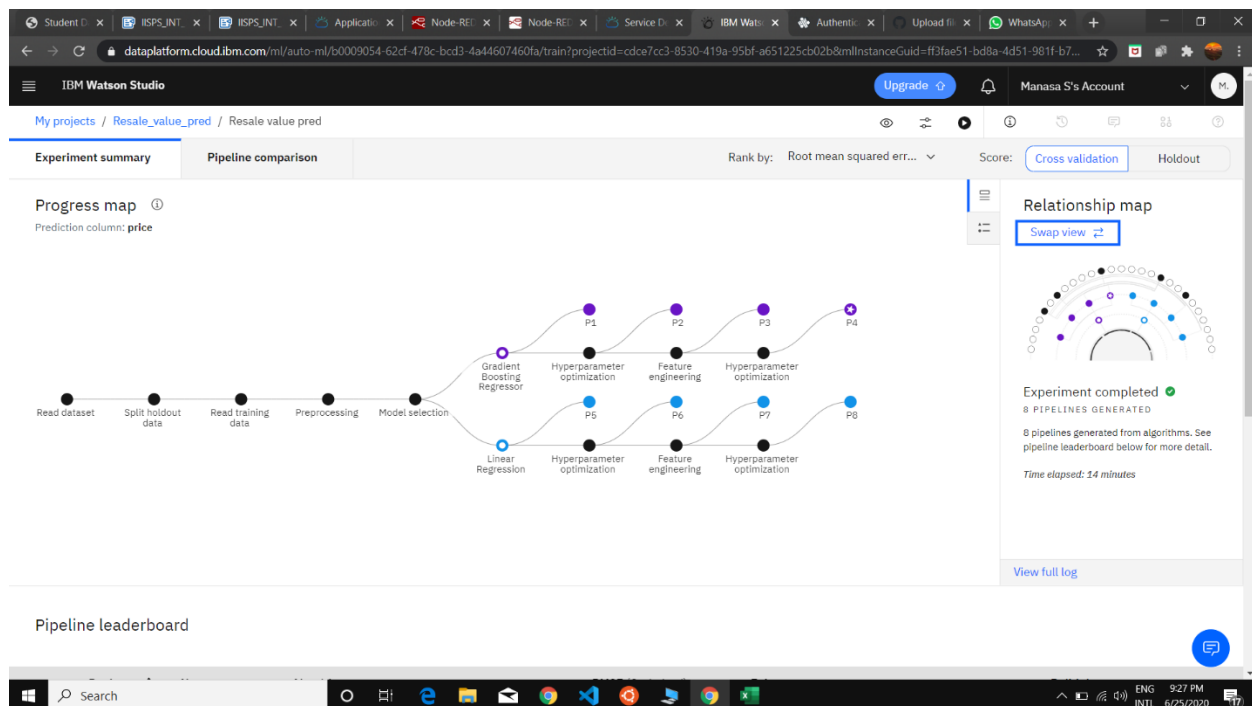
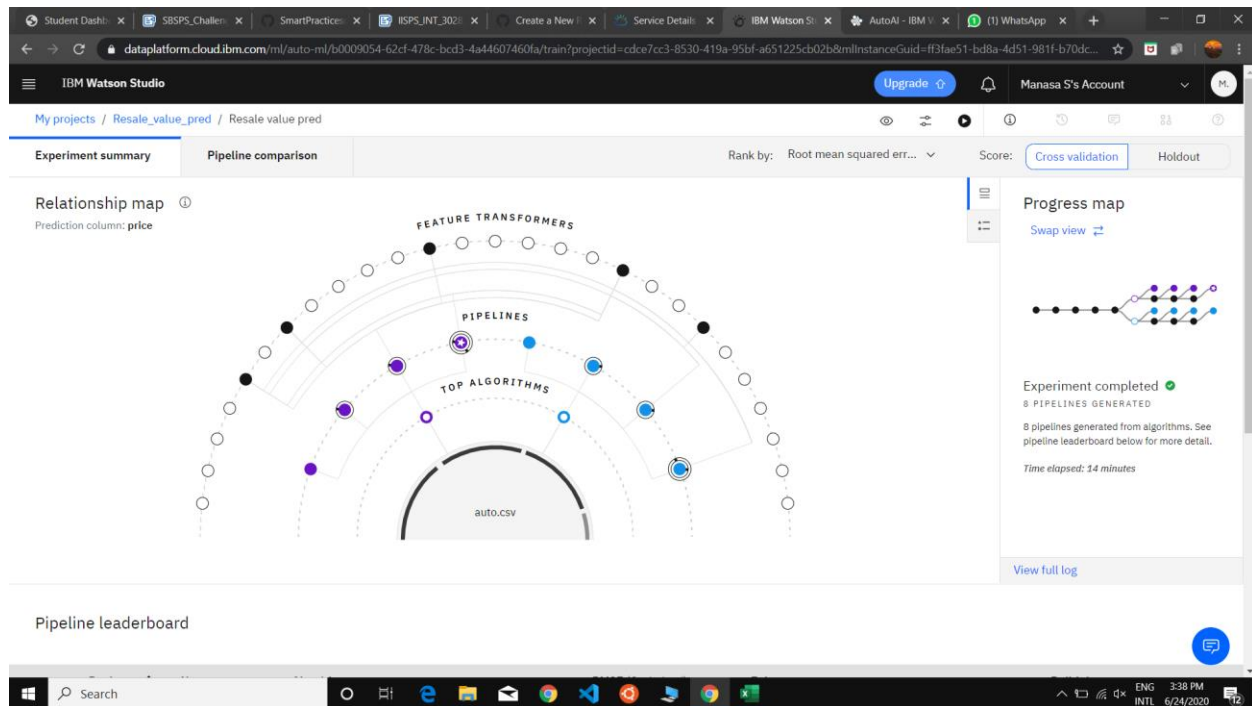
The main content area for the 'Overview' tab shows the project name 'Resale\_value\_pred' with a 'Last Updated' timestamp of 'Jun 24, 2020'. To the right, two large numbers are displayed: '2' for 'Assets' and '1' for 'Collaborators'. A 'Readme' link is visible on the left.

Below the project name, there are two columns: 'Overview' and 'Recent activity'. The 'Overview' column contains details such as 'Date created: Jun 24, 2020', 'Description: No description available', and 'Storage: 108.15 MB used Cloud Object Storage'. The 'Recent activity' column is currently empty, showing a placeholder for alerts.

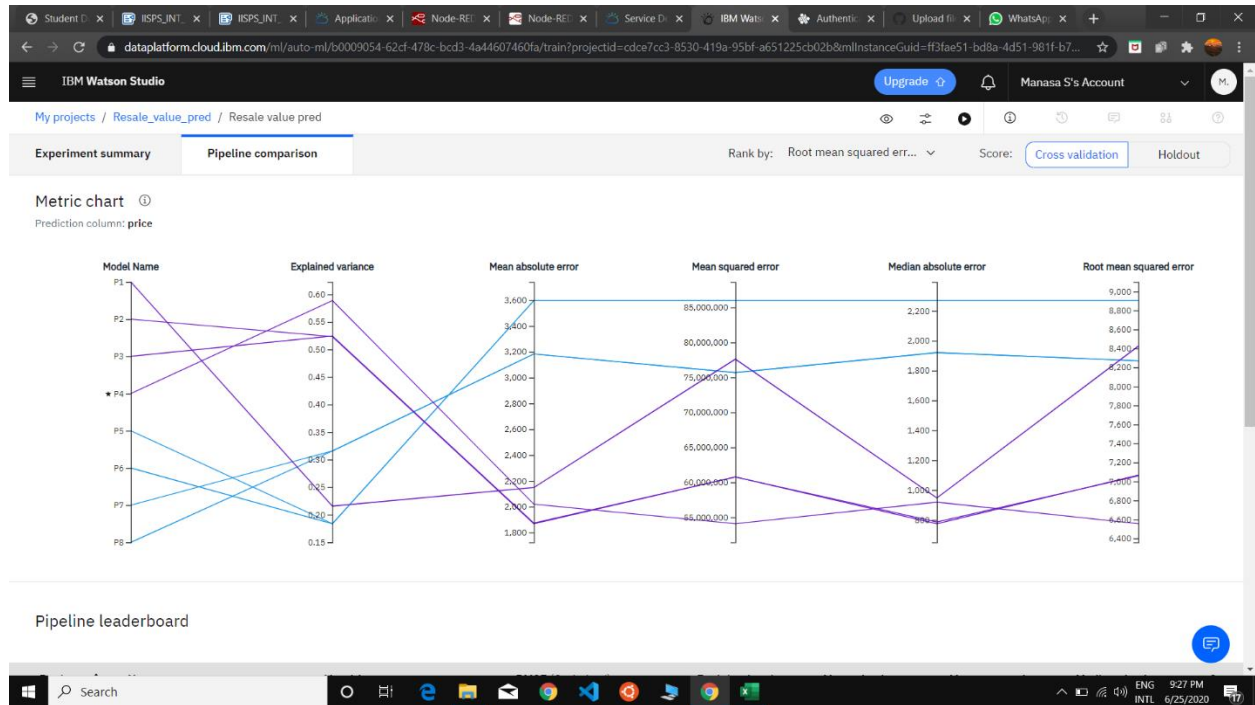
On the right side of the interface, there is an 'Information' sidebar. It lists the project name 'Resale\_value\_pred', the 'PROJECT CREATOR' 'Manasa . (Jun 24, 2020)', and 'COLLABORATORS' including 'Manasa . Admin'. It also shows 'STORAGE' usage of '108.15 MB used Cloud Object Storage' and 'SPARK SERVICES'.

At the bottom of the interface, there is a 'Back to top' link and a chat icon.

## Run the model:



# Pipeline comparison:



Student | ISPS\_INT | ISPS\_INT | Application | Node-RE | Node-RE | Service D | IBM Wat | Authenti | Upload fi | WhatsApp |

dataplatfom.cloud.ibm.com/ml/auto-ml/b0009054-62cf-478c-bcd3-4a44607460fa/train?projectId=cde7cc3-8530-419a-95bf-a651225cb02b&mlInstanceGuid=ff3fae51-bd8a-4d51-981f-b7...

IBM Watson Studio Upgrade | Manasa S's Account

My projects / Resale\_value\_pred / Resale value pred

Experiment summary Pipeline comparison Rank by: Root mean squared err... Score: Cross validation Holdout

Pipeline leaderboard

Rank	↑	Name	Algorithm	RMSE (Optimized)	Explained variance	Mean absolute err...	Mean squared err...	Median absolute e...	R <sup>2</sup>
★ 1		Pipeline 4	Gradient Boosting Regressor	6555.011	0.589	2018.544	54084376.842	918.939	0.589
2		Pipeline 3	Gradient Boosting Regressor	7059.044	0.524	1872.049	60757832.112	786.350	0.521
3		Pipeline 2	Gradient Boosting Regressor	7067.296	0.523	1867.176	60778098.611	774.366	0.520
4		Pipeline 7	Linear Regression	8269.780	0.316	3183.745	75681616.000	1920.797	0.316
5		Pipeline 8	Linear Regression	8269.780	0.316	3183.745	75681616.000	1920.797	0.316
6		Pipeline 1	Gradient Boosting Regressor	8424.763	0.215	2147.793	77610261.696	946.902	0.215
7		Pipeline 6	Linear Regression	8903.797	0.183	3597.652	85981757.333	2269.222	0.183
8		Pipeline 5	Linear Regression	8903.797	0.183	3597.651	85981764.000	2269.230	0.183

## Deploy the model:

The screenshot shows the IBM Watson Studio web interface. The browser address bar displays `datapatform.cloud.ibm.com/ml/deployments/2047c932-0fde-4ad7-af12-06708cd5141a/test?projectId=cdce7cc3-8530-419a-95bf-a651225cb02b&mlInstanceGuid=ff3fae51-bd8a-4d51-981f-b...`. The page title is "Resale value pred". The "Test" tab is selected, showing a form to "Enter input data". The form contains the following fields:

- offerType: Angebot
- abtest: control
- vehicleType: kombi
- yearOfRegistration: 2016

A "Predict" button is located below the form. To the right of the form, the JSON output of the prediction is displayed:

```
{
  "predictions": [
    {
      "fields": [
        "prediction"
      ],
      "values": [
        3245.4795320390494
      ]
    }
  ]
}
```

The Windows taskbar at the bottom shows the time as 4:41 PM on 6/24/2020.

## Node-RED is created:

The screenshot shows the "Node-RED on IBM Cloud" landing page. The browser address bar displays `node-red-pqins.eu-gb.mybluemix.net`. The page features a large red banner with the text "Node-RED" and "Flow-based programming for the Internet of Things". Below the banner, there is a section with the following text:

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.

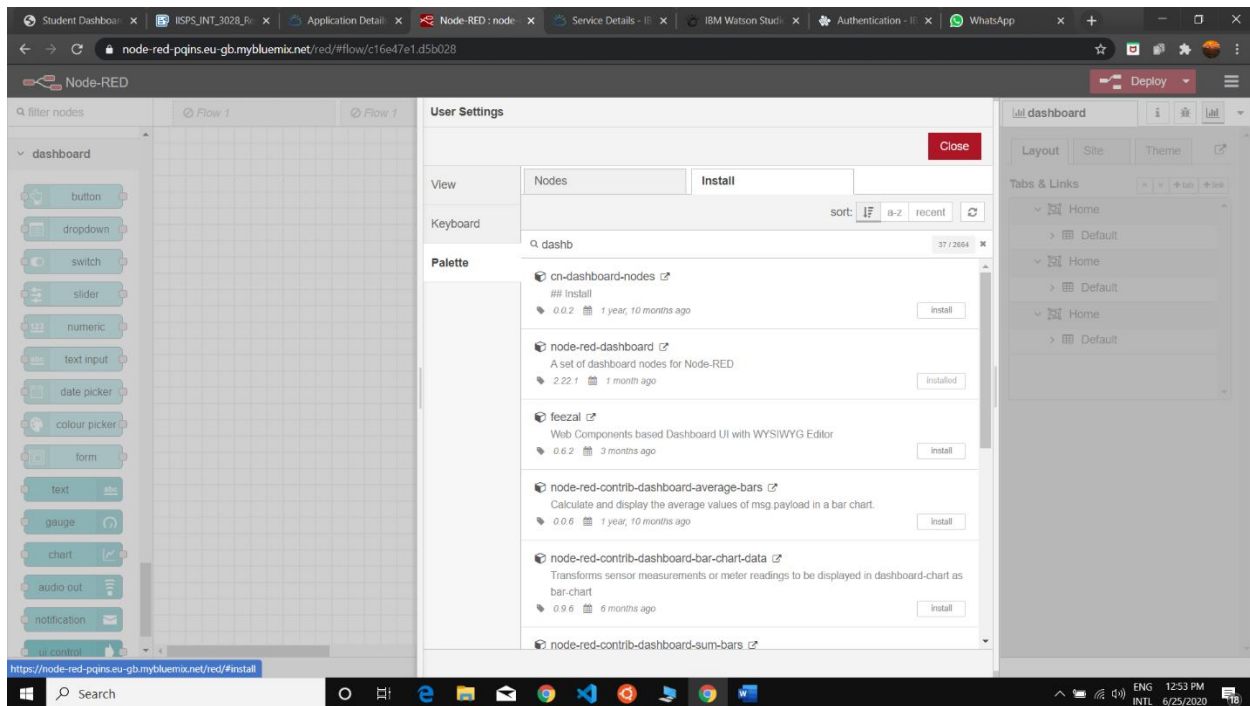
This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.

More information about Node-RED, including documentation, can be found at [nodered.org](https://nodered.org).

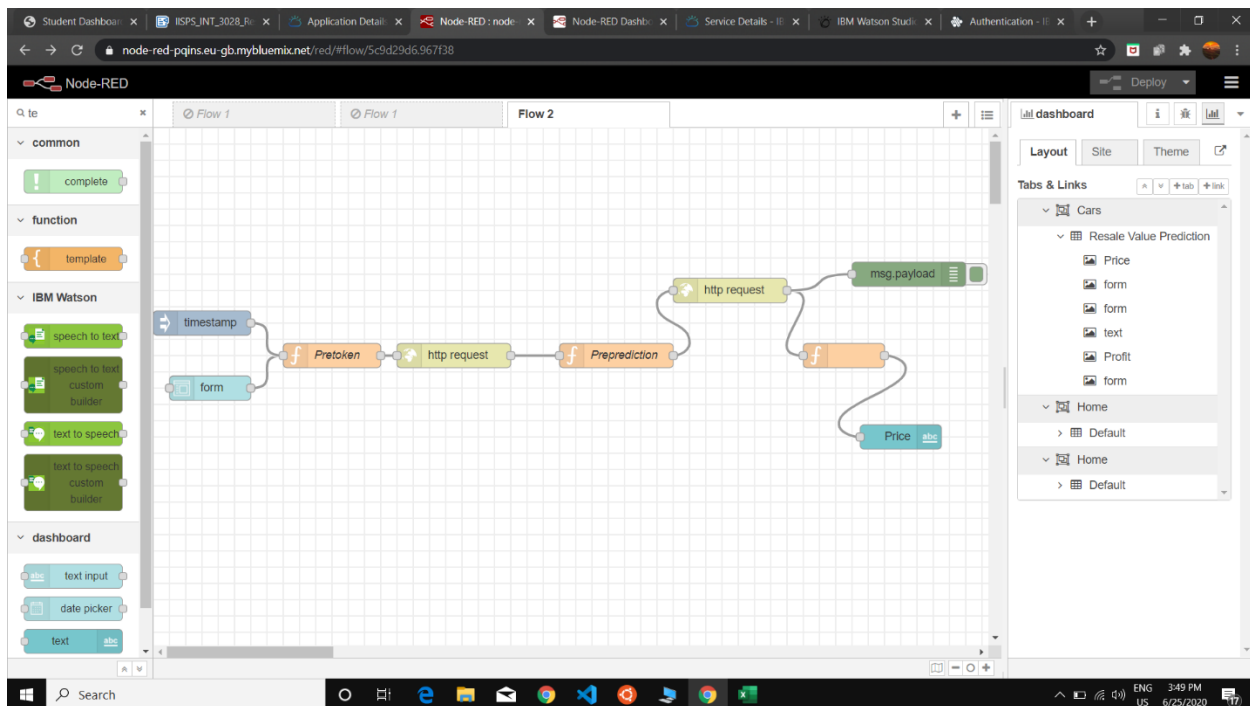
A button labeled "Go to your Node-RED flow editor" is visible. Below the main text, there is a link: [Learn how to customise Node-RED](#).

The Windows taskbar at the bottom shows the time as 12:51 PM on 6/25/2020.

## Installed Dashboard Nodes:



## Node-Red UI:



## Result:

node-red-pqins.eu-gb.mybluemix.net/ui/#/I/O?socketid=WjY3cuM6dyk0JsRAAAA

### Cars

#### Resale Value Prediction

dateCrawled	2016-03-23 11:45
name	BMW_323i
seller	privat
offerType	Angelbot
abtest	control
vehicle	limousine
yearOfRegistration	1999
gearBox	manuell
powerPS	170
model	3er
kilometer	150000
monthOfRegistration	2
fuelType	benzin

node-red-pqins.eu-gb.mybluemix.net/ui/#/I/O?socketid=WjY3cuM6dyk0JsRAAAA

### Cars

model	3er
kilometer	150000
monthOfRegistration	2
fuelType	benzin
brand	audi
notRepairedDamage	nein
dateCreated	2016-03-26 12:10
nrOfPictures	0
postalCode	65343
lastSeen	2016-03-10 9:15

Price **3077.687066244619**

