

WORKSHOP 4:

Location:
WesterLiefde

Start time:
15:20

End time:
16:50

Limited places Apply to attend

Speakers



Willem Hendriks
Data Scientist
IBM



Hans Boef
Developer Advocate,
IBM



Edward Ciggaar
Developer Advocate,
IBM



Henk Waanders
Technical Enablement Specialist
IBM

Deploy your models to gain value from insight

Model deployment is an often overlooked but essential part of your success as a data scientist. In this lab, you will use **IBM's Data Science Experience** to develop a predictive model in a **Jupyter notebook**. You will then deploy the resulting Spark pipeline as a cloud service where access is demonstrated through a simple web interface. Some knowledge of **Python** and **modelling** will help.

***Your have a
beautiful healthy
heart!***



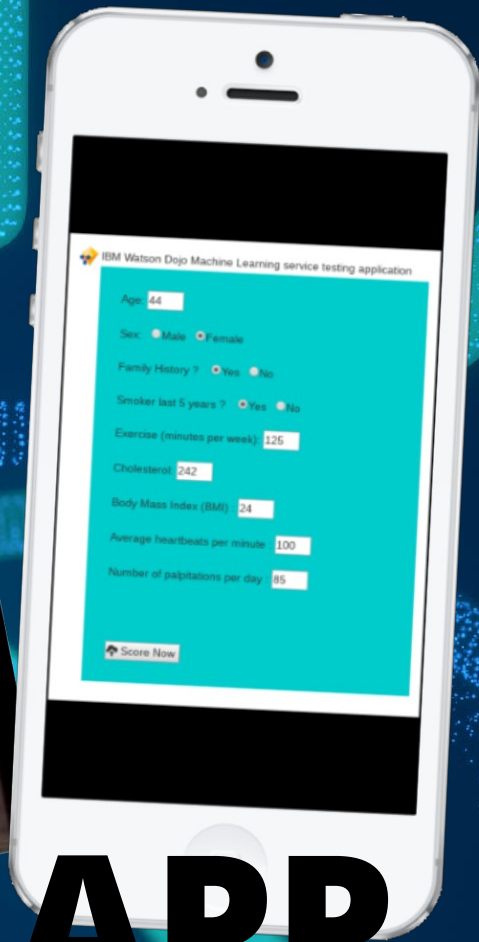
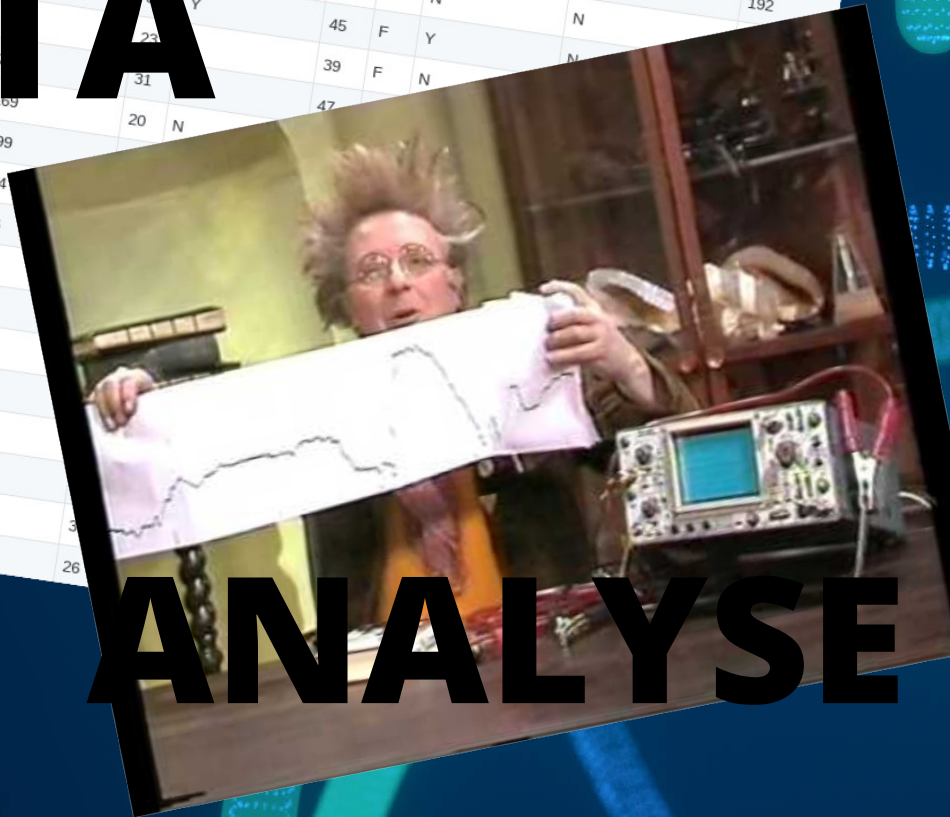
DATA

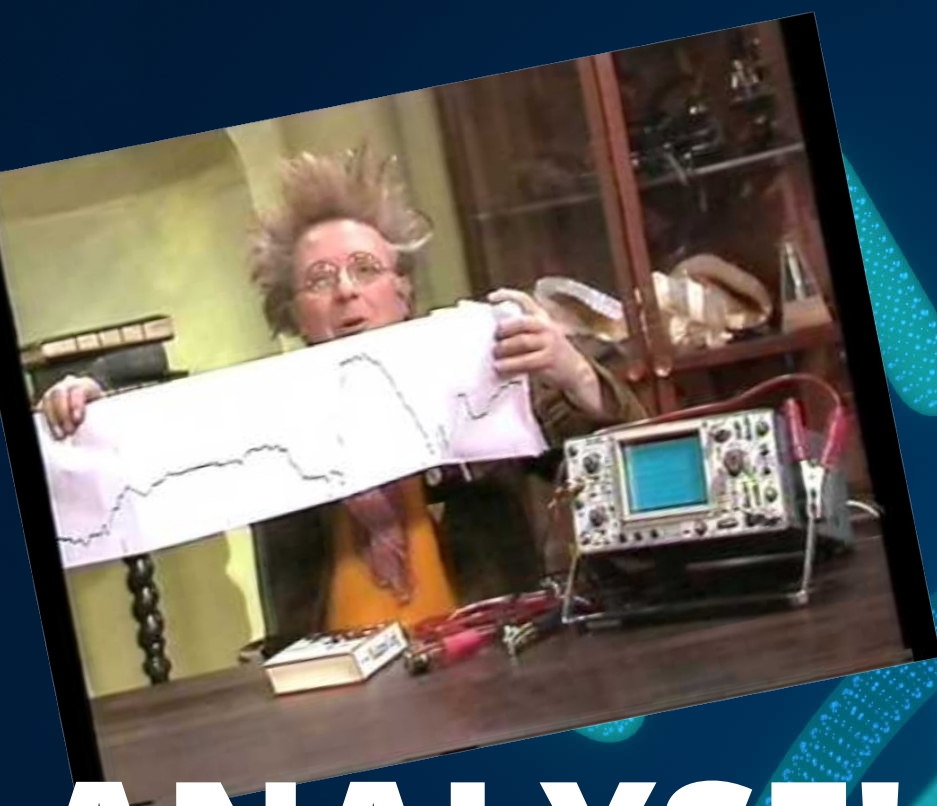
ANALYSE

APP

IBM

	HEARTBEATS PER MIN	PALPITATIONS PER DAY	CHOLESTEROL	BMI	HEART FAILURE	AGE	SEX	FAMILY HISTORY	SMOKER LAST 5 YRS	EXERCISE MIN PER WEEK
2	93	22	163	25	N	49	F	N		
3	108	22	181	24	N	32	F	N	N	110
4	86	0	239	20	N	60	F	N	N	192
5	80	36		23	Y	45	F	Y	N	
6	66	36		31		39	F	N		
7	125	36		20	N	47				
8	83	27	169	20	N					
9	107	31	199							
92		28	174							
84		12	206							
60		1	194							
134		7	228							
103		0	237							
01		39	157							
		2	169							
		27	234							
		14	155							
		9	204							





ANALYSE!

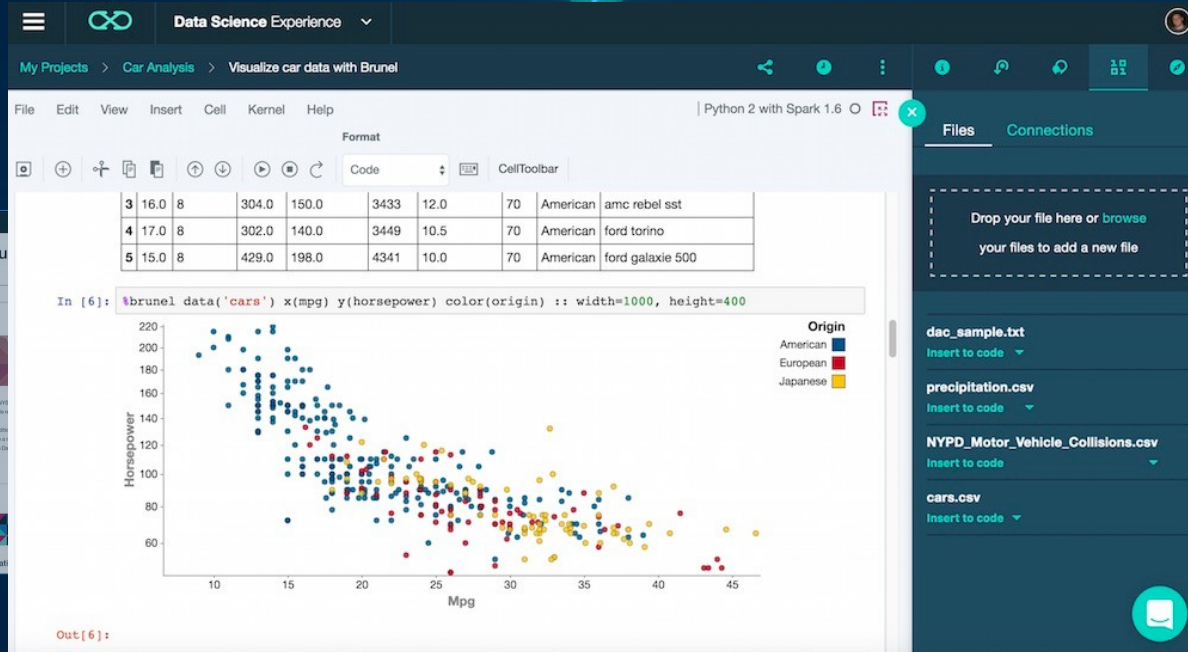
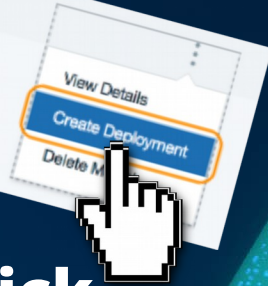


DEPLOYMENT...

& open-source... **IBM**

DSX - DEPLOYMENT!

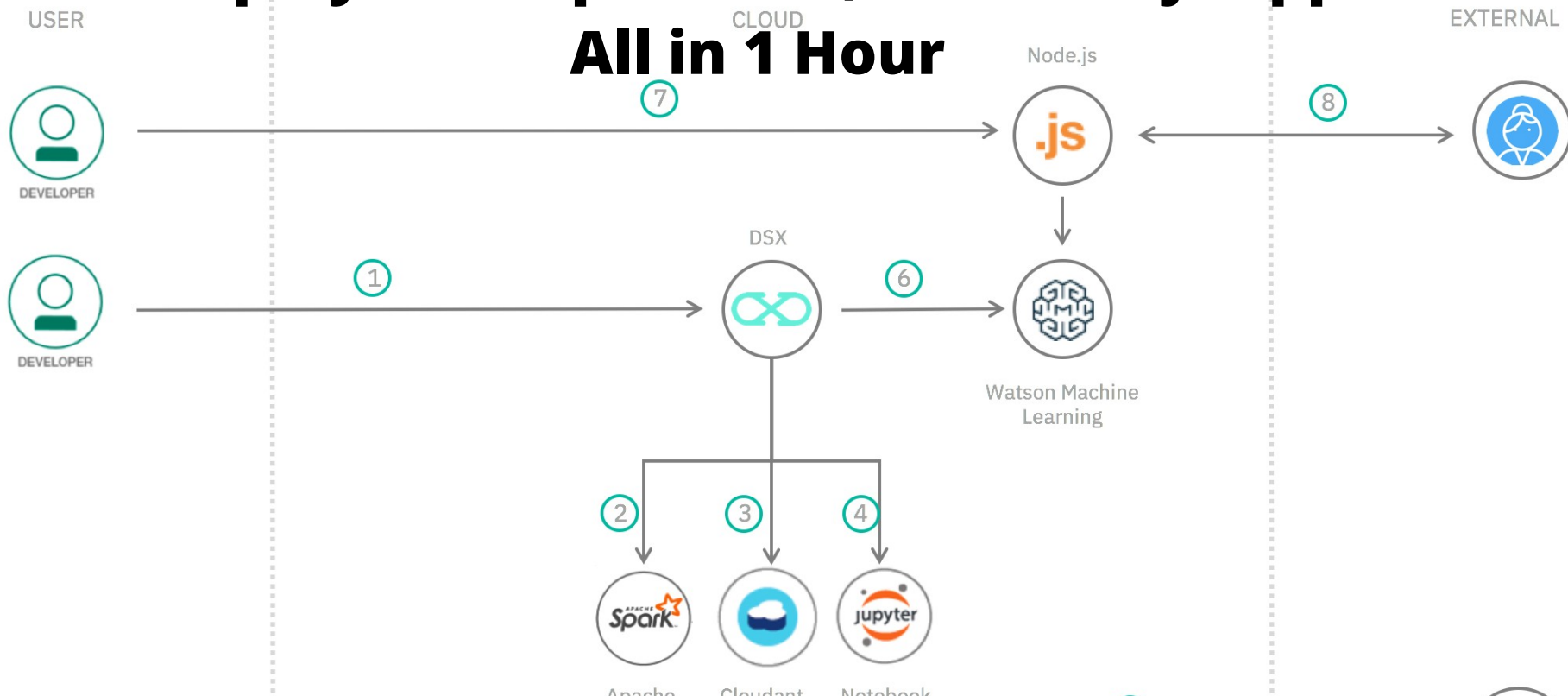
Wrap a Model in a REST API with a single click
Spark / Python (SKlearn) / SPSS ...

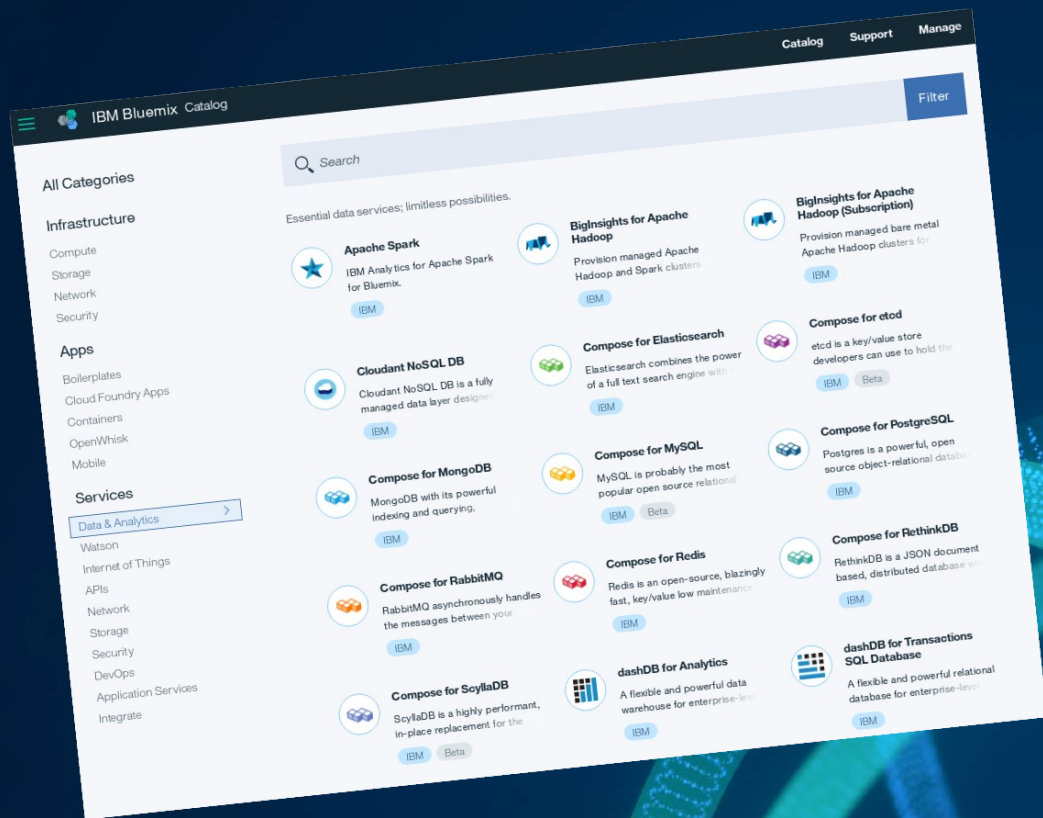


Spawn Clusters & Services

**Load Data, Analyse, Create model in Spark
Deploy & Wrap in REST, for Node.js app.**

All in 1 Hour





Bluemix

You are a System Administrator

Deploy Services.
Leave for a year, and
use the next minute. We
update it for you!

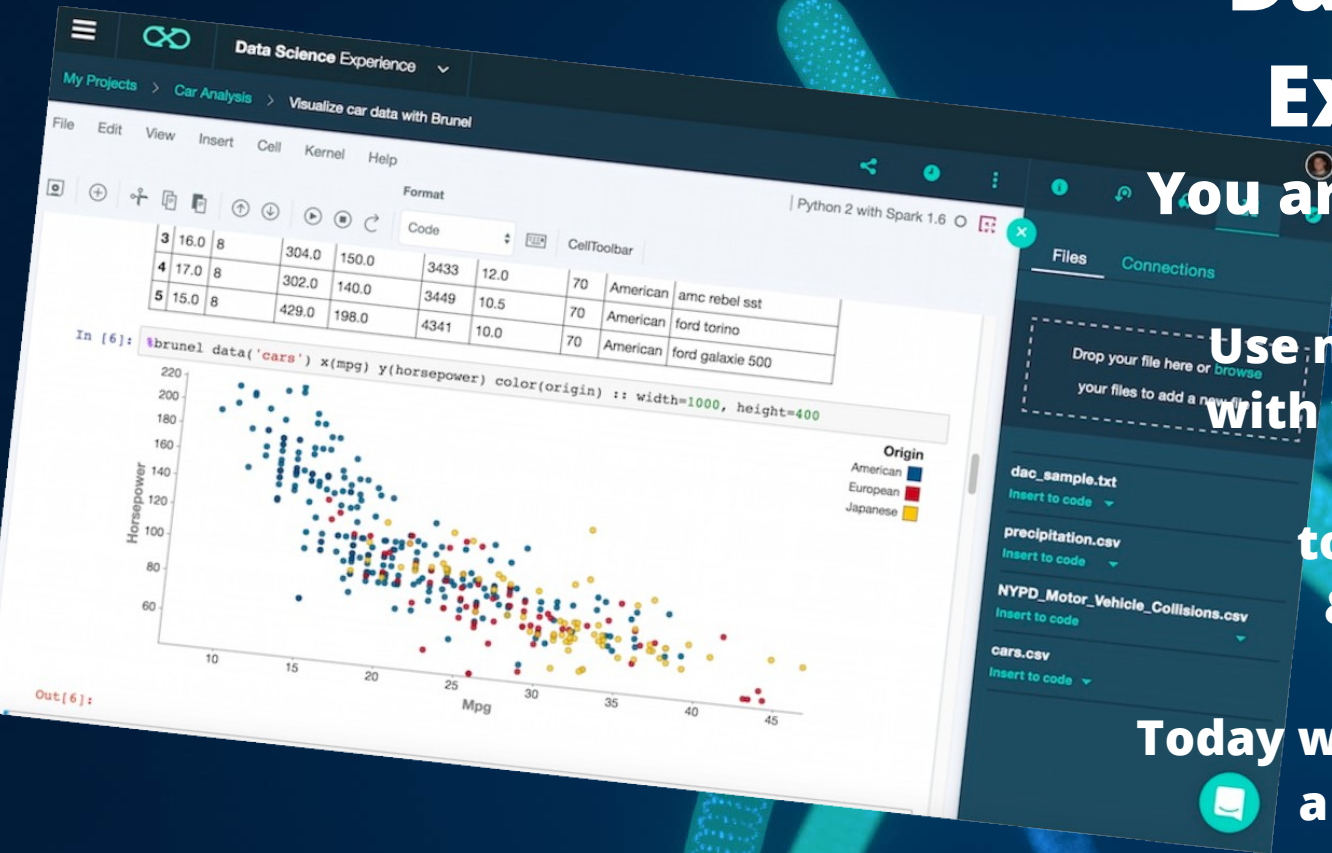
Today we Create & Connect
Services

Data Science Experience

You are a Data Scientist

Use notebooks (Jupyter) with your favorite open-source tooling to Create Models & Deploy them

Today we use Spark, to create a Random-Forest



Create Deployment

Model Name: [Heart Failure Prediction Model](#)

Name

Heart Failure Prediction Model Deployment

Description

Type

Online

Cancel

Save

spark-2.1

View Details

Create Deployment

Delete Model

Watson Machine Learning

The magic button to make your freshly baked model available to any App or Website, through a REST API

Age: 33

Sex: ☒ Male

Family History?

Smoker last 5 y

Exercise (minutes per week): 30

Cholesterol: 242

Body Mass Index (BMI): 21

Average beats per

Number of palpitations per day: 85

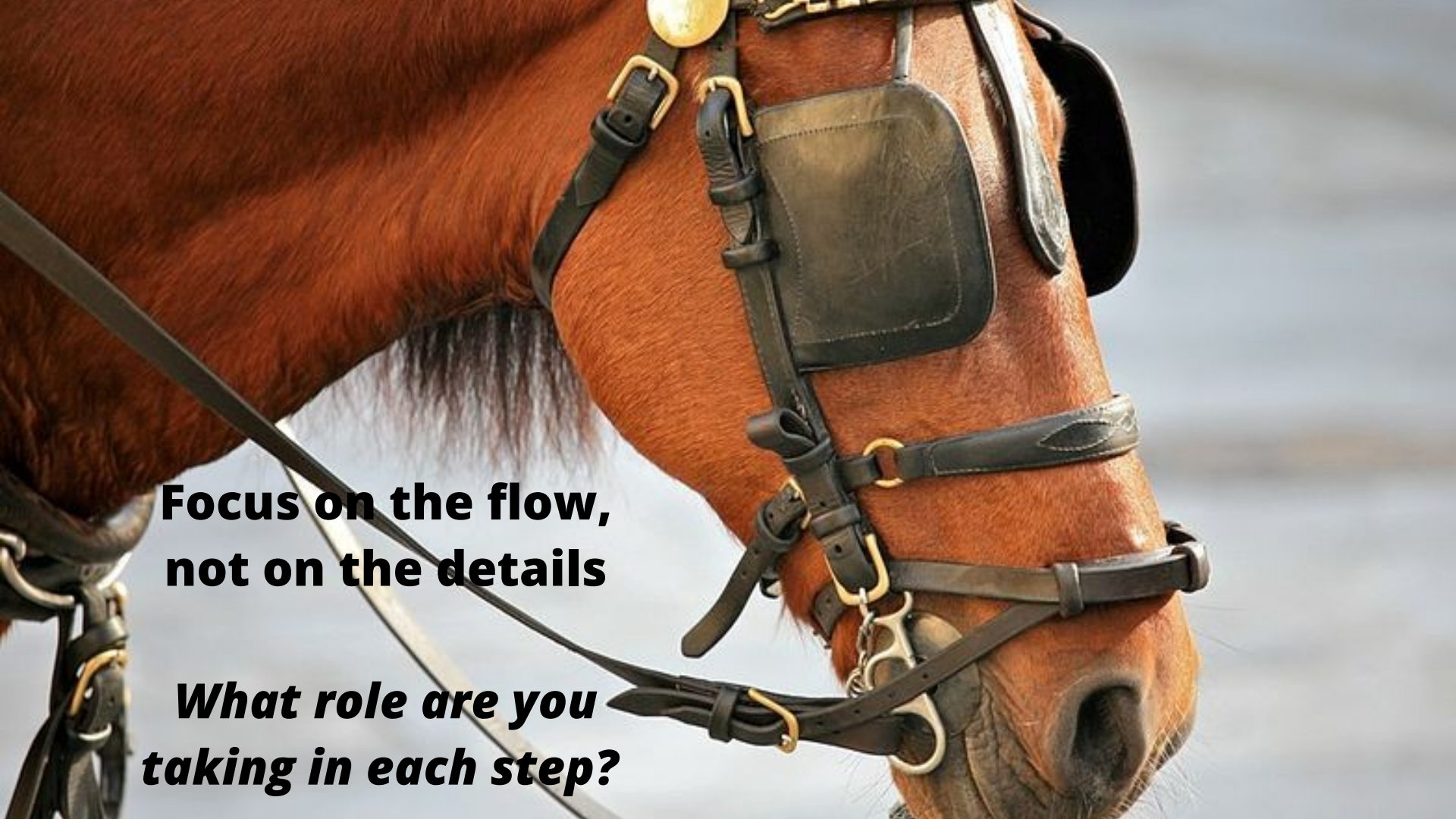
Score Now

Age	Sex	Family History?	Smoker	Exercise/week	Cholesterol	BMI	Avg Beats/min	Palpitations per day	Heart failure risk ?	Confidence
33	M	Yes	No	30	242	21	70	85	No	70.10%

☒ Close

Edward prepared the Node.js APP for us, thank you!

I have No Heart failure, with 70% Confidence...



**Focus on the flow,
not on the details**

***What role are you
taking in each step?***

http://ibm.biz/summitai

