

Topic 1: Introduction



Topic 1: Introduction

- An overview of where this course fits in the life of a Data Scientist.
- Getting started with basic development tools for the course
 - VS Code IDE
 - Docker
 - Git
 - ...

Topic 1: ...Introduction

- Where this course fits in the life of a Data Scientist
 - The work of data scientists need to be made visible to users through channels that users are accustomed to.
 - Users as digital consumers
 - Users as Web friendly people
 - Users as Mobile friendly people

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- ♥ A Data Scientist does not necessary have to be a Web or mobile app developer.
- ♥ But, it is advantageous to be able to present your solutions yourself, in a dynamic and user interactive manner.
 - You do not have to be at the mercy of professional full stack developers to deliver solutions on the Web or mobile.
 - As a developer, you can command more respect and have greater competitive advantage in the job marketplace.

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Our workstations need to be adequately equipped with requisite tools

- Requisite Runtime Environment (RTE) of chosen programming language
 - JavaScript?
 - Python?
- Integrated Development Environment (IDE) of choice
 - VS Code?
<https://code.visualstudio.com/download>
 - PyCharm?
- Database Management System (DBMS) choice
 - PostgreSQL?
 - MySQL?
- ...

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...Our workstations need to be adequately equipped with requisite tools

- Version control system
 - Git?
 - For windows OS, <https://git-scm.com/download/win>
- Operating System
 - Windows?
 - Mac?
- Testing / Staging / Deployment environment
 - Baremetal?
 - Containerized?
 - Docker download
<https://www.docker.com/products/docker-desktop/>

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- 🛡 Let's experience docker with docker-compose
- 🛡 Create a lesson project:
 - 1. Create a directory named *DAT620-MS1set*
 - 2. Open folder in VS Code
 - 3. Add two files named
 - *docker-compose.yml*
 - *datmsc1.env*

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- 4. Add the following content to *docker-compose.yml*:

version: '3'

services:

database:

container_name: postgres-datmsc1

image: postgres:latest

ports:

- 5432:5432

volumes:

- /Users/piusonobhayedo/data/postgres/datmsc1:/data/postgres

env_file:

- datmsc1.env



Reference for *docker-compose.yml* syntax:

<https://docs.docker.com/compose/compose-file/>

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- 5. Add the following content to *datmsc1.env*:

POSTGRES_DB=datmsc1

POSTGRES_USER=postgres

POSTGRES_PASSWORD=postgres

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Test-run docker-compose on terminal, from the trial project directory *DAT620-MS1set* by running the command:

docker-compose up

You should see the startup feedback on terminal

```
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'203 NLC [T] F00: qatpazse zlatem ts leaqly to accebrt connections
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'244 NLC [S1] F00: leqo ts uof lednileq
dof 0
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'244 NLC [S1] F00: tulaftq lecolq feudtu 9f 0\T2C\050: mawteq 34'
omwrtc lecollel tu bloale22
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'245 NLC [S1] F00: qatpazse zlatem m92 uof bloberly zunt qomu: 9nf
9f S055-03-S3 IT:28:22'248 NLC
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'305 NLC [S1] F00: qatpazse zlatem m92 tufelrnbteq! 922f kuomu nb
'bo20f'2435..
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'304 NLC [T] F00: ftefenuu on nux 2ockef „\vle\lnu\bozfdle2d\2
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'388 NLC [T] F00: ftefenuu on lyle 9qqle22 „:“, bolf 2435
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'388 NLC [T] F00: ftefenuu on lyle 9qqle22 „0'0'0'0..“ bolf 2435
J) ou x80'04-bc-funx-dun' combtrefq pl dcc (Dertsu 8'3'0-0) 8'3'0' 04-ptf
bozfdle2-c2c5050 | S055-03-S3 IT:28:22'388 NLC [T] F00: zt9rctud bozfdle20f J3'3 (Dertsu J3'3-J'bdq0J00+
bozfdle2-c2c5050 |
bozfdle2-c2c5050 | bozfdle20f D9fapazse qtlecfoyl 9bbe92 to coufetu 9 qatpazse! 2ktbbtnd tutf9fz9fetu
bozfdle2-c2c5050 |
vtf9cmtud to bozfdle2-c2c5050
z9r9fud bozfdle2-c2c5050 ... qoue
(paz6) b7n2ouorpu9leq0@b7n22-w9c800k-blo-5 C2C505-S05026f 9 qocxel-comboze nb
```

More explanations in class!

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- 🛡️ Let's get a visual tool that we can use to explore our DBMS environment, from our desktop.
 - Download and install PG Admin

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- Before we use our lesson project directory for JavaScript, Git initialize it by running on terminal, from the directory:

git init

- To add a remote directory on GitHub:

- 1. Login to your GitHub account online
- 2. Create a new repository named *DAT620-MS1*
- 3. Copy the URL of the remote directory for local association
- 4. Associate with the following command, on local terminal [PLEASE use your own repository address and not mine below]:

git remote add origin

<https://github.com/piosystems/DAT620-MS1.git>