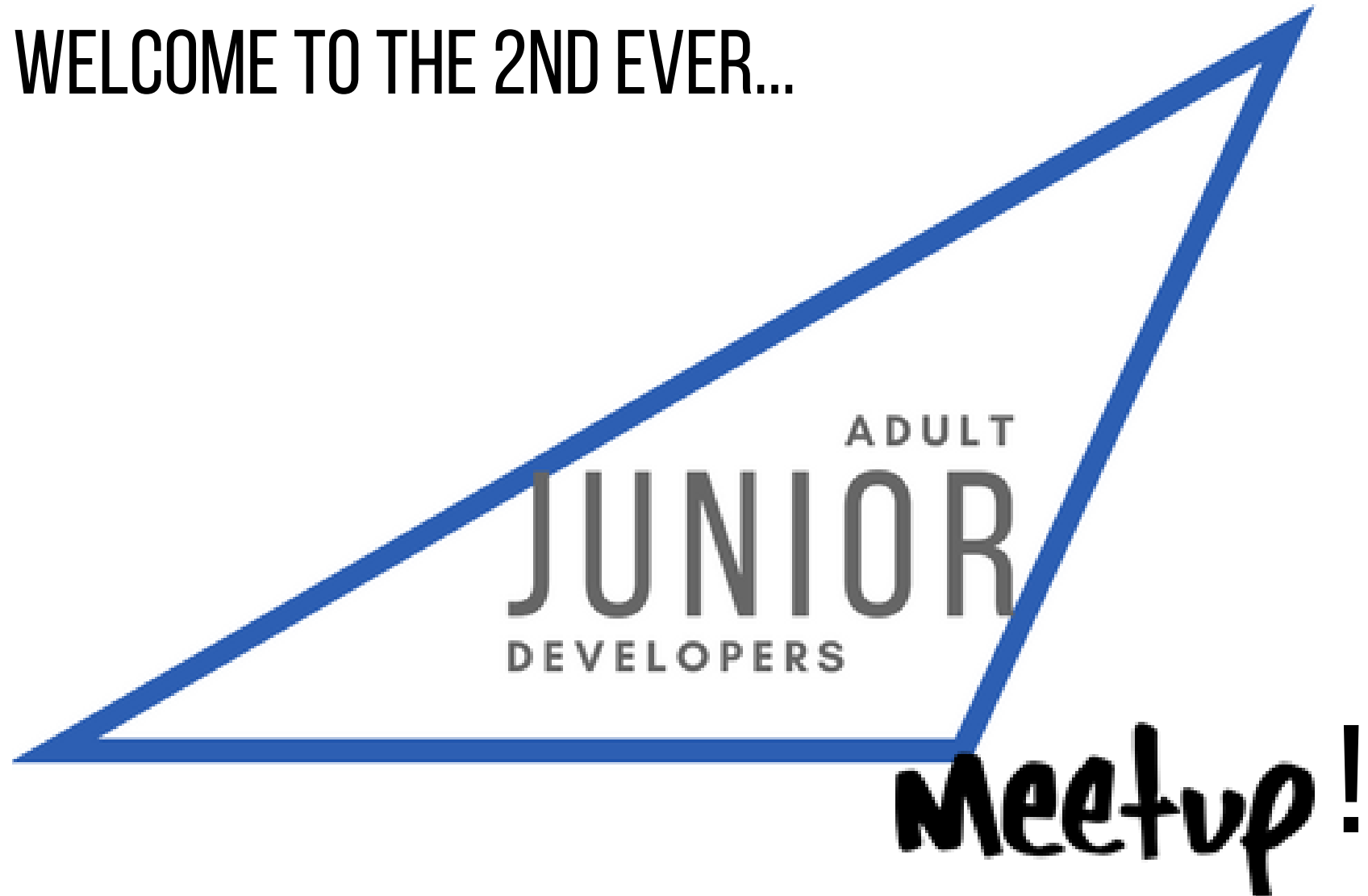


NOVEMBER 8, 2017

WELCOME TO THE 2ND EVER...



A G E N D A

1. ACTIVITY
2. A FEW NOTES (LOGISTICS, AGAIN)
3. TOUCHY-FEELY STUFF
3. SURVEY
4. KICK-ASS TALKS!
6. MINGLE!

1. ACTIVITY

**STUART
SCHAFFER,
EVERYBODY!**

2 . A F E W N O T E S

2ND WEDNESDAY OF EVERY MONTH

7 TO 8:30PM

TEKSYSTEMS

THANK YOU, KARA & CHRIS!!

A FEW MORE NOTES



slack

- * FOR ALL COMMUNICATION BETWEEN MEETUPS
- * JOIN BY FOLLOWING THIS LINK.

WHY DID I START THIS GROUP?



WHY DID I START THIS GROUP?

TO ADDRESS THE UNIQUE NATURE OF ENTERING A DEVELOPMENT
CAREER AFTER A PREVIOUS CAREER.
(AKA "LATER IN LIFE")



WHY DID I START THIS GROUP?

TO ADDRESS THE UNIQUE NATURE OF ENTERING A DEVELOPMENT
CAREER AFTER A PREVIOUS CAREER.
(AKA "LATER IN LIFE")

TO PROVIDE A COMMUNITY TO US IN THAT CATEGORY WHO ARE
MATURE AND EXPERIENCED IN NON-TECHNICAL WAYS.

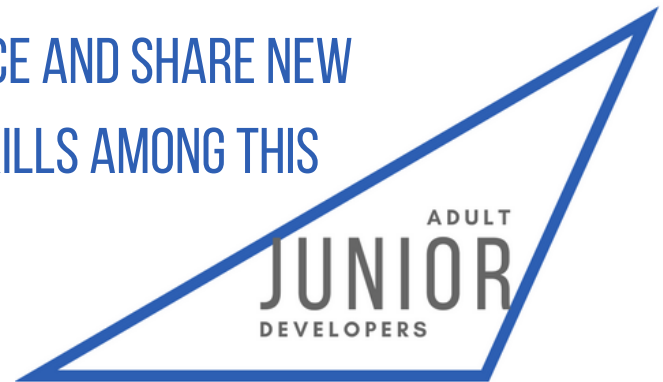


WHY DID I START THIS GROUP?

TO ADDRESS THE UNIQUE NATURE OF ENTERING A DEVELOPMENT
CAREER AFTER A PREVIOUS CAREER.
(AKA "LATER IN LIFE")

TO PROVIDE A COMMUNITY TO US IN THAT CATEGORY WHO ARE
MATURE AND EXPERIENCED IN NON-TECHNICAL WAYS.

TO CREATE A SAFE SPACE TO PRACTICE AND SHARE NEW
TECHNICAL AND NON-TECHNICAL SKILLS AMONG THIS
COMMUNITY.



WHAT WILL WE DO?

* SPEAKERS / WORKSHOPS

* SHOW-N-TECH

* DISCUSSION

* HELP EACH OTHER GROW AS
DEVELOPERS!

* SOCIALS (AKA 'NETWORKING')

LAST NOTE, I SWEAR

CODE OF CONDUCT, V 1.0

THE TRIANGLE ADULT JR. DEVELOPERS' COMMUNITY SHALL BE A HARASSMENT-FREE COMMUNITY, REGARDLESS OF GENDER, GENDER IDENTITY AND EXPRESSION, AGE, SEXUAL ORIENTATION, DISABILITY, PHYSICAL APPEARANCE, BODY SIZE, RACE, ETHNICITY, RELIGION (OR LACK THEREOF), **OR TECHNOLOGY CHOICES.**

4 . S U R V E Y

<https://tinyurl.com/y7x7m9l5>



Containerization: what does
it mean, and how can you
use it?

OVERVIEW

- * WHAT IS CONTAINERIZATION?
- * WHAT PROBLEM DOES IT SOLVE?
- * WHAT TOOLS ARE USED?
- * HOW CAN YOU GET STARTED?
- * RESOURCES

WHAT IS CONTAINERIZATION?

APPLICATION CONTAINERIZATION:
ALSO KNOWN AS CONTAINER-BASED
VIRTUALIZATION -- IS A DISTRIBUTED
APPLICATION DEPLOYMENT MODEL
THAT OFFERS AN ALTERNATIVE TO
LAUNCHING A VM FOR EACH
APPLICATION. ISOLATED
ENVIRONMENTS, CALLED CONTAINERS,
INSTEAD RUN ON A SINGLE CONTROL
HOST AND SHARE THE SAME OS
KERNEL.

WHAT IS CONTAINERIZATION?

APPLICATION CONTAINERIZATION:
ALSO KNOWN AS CONTAINER-BASED
VIRTUALIZATION -- IS A **DISTRIBUTED**
APPLICATION **DEPLOYMENT** MODEL
THAT OFFERS AN ALTERNATIVE TO
LAUNCHING A **VM** FOR EACH
APPLICATION. ISOLATED
ENVIRONMENTS, CALLED CONTAINERS,
INSTEAD RUN ON A SINGLE CONTROL
HOST AND SHARE THE SAME OS
KERNEL.

WHAT IS CONTAINERIZATION?

APPLICATION CONTAINERIZATION:
ALSO KNOWN AS CONTAINER-BASED
VIRTUALIZATION -- IS A DISTRIBUTED
APPLICATION DEPLOYMENT MODEL
THAT OFFERS AN ALTERNATIVE TO
LAUNCHING A VM FOR EACH
APPLICATION. **ISOLATED**
ENVIRONMENTS, CALLED **CONTAINERS**,
INSTEAD RUN ON A SINGLE CONTROL
HOST AND SHARE THE SAME OS
KERNEL.

WHAT IS CONTAINERIZATION?

SOME MORE TERMINOLOGY:

- * CONTAINER TECHNOLOGY
- * CLOUD SERVICES
- * AWS
- * CONTAINER
- * CLUSTER
- * SWARM
- * DOCKER
- * KUBERNETES

WHAT PROBLEMS DOES IT SOLVE?

- * LESS OVERHEAD THAN A VM

WHAT PROBLEMS DOES IT SOLVE?

- * LESS OVERHEAD THAN A VM

- * ENVIRONMENT VARIATION

WHAT PROBLEMS DOES IT SOLVE?

- * LESS OVERHEAD THAN A VM

- * ENVIRONMENT VARIATION

- * DEVELOPER TIME SPENT

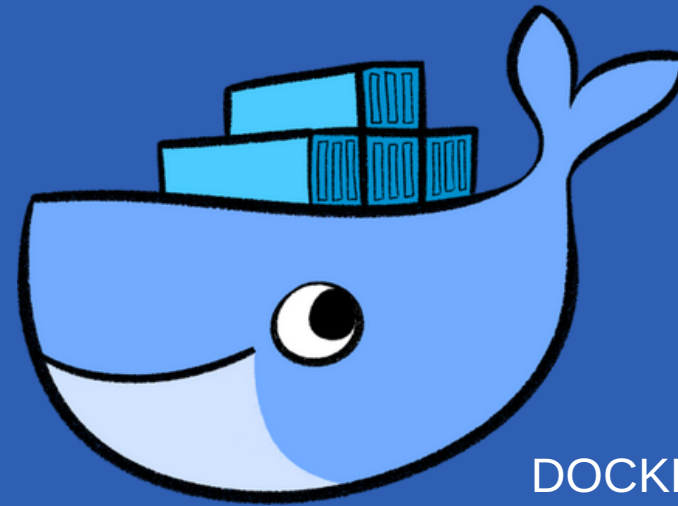
WHAT PROBLEMS DOES IT SOLVE?

- * LESS OVERHEAD THAN A VM
- * ENVIRONMENT VARIATION
- * DEVELOPER TIME SPENT
- * INSTANCE LIMITATIONS

WHAT TOOLS ARE USED?



kubernetes



DOCKER



AZURE CONTAINER
SERVICES

LET'S TALK ABOUT DOCKER

Let's talk about Docker.

- * Real Docker Adoption Has Increased 40% in One Year
- * Larger Companies Are Leading Adoption
- * Adopters Quintuple Their Container Count within 9 Months

* [HTTPS://WWW.DATADOGHQ.COM/DOCKER-ADOPTION/](https://www.dataDogHQ.com/docker-adoption/)


```
Hannahs-MacBook-Pro-2:practice Hannah$ cd docker/; ls
Dockerfile          app.py              requirements.txt
Hannahs-MacBook-Pro-2:docker Hannah$ python app.py
Traceback (most recent call last):
  File "app.py", line 1, in <module>
    from flask import Flask
ImportError: No module named flask
Hannahs-MacBook-Pro-2:docker Hannah$ _
```

```

Hannahs-MacBook-Pro-2:docker Hannah$ brew update python
Error: This command updates brew itself, and does not take formula names.
Use 'brew upgrade python' instead.
Hannahs-MacBook-Pro-2:docker Hannah$ brew upgrade python
Error: python not installed
Hannahs-MacBook-Pro-2:docker Hannah$ brew install python
==> Installing dependencies for python: sqlite, gdbm
==> Installing python dependency: sqlite
==> Downloading https://homebrew.bintray.com/bottles/sqlite-3.21.0.el_capitan.bottle.tar.gz
##### 100.0%
==> Pouring sqlite-3.21.0.el_capitan.bottle.tar.gz
==> Caveats
Homebrew has detected an existing SQLite history file that was created
with the editline library. The current version of this formula is
built with Readline. To back up and convert your history file so that
it can be used with Readline, run:

    sed -i~ 's/\\040/ /g' ~/.sqlite_history

before using the `sqlite` command-line tool again. Otherwise, your
history will be lost.

This formula is keg-only, which means it was not symlinked into /usr/local,
because macOS provides an older sqlite3.

If you need to have this software first in your PATH run:
    echo 'export PATH="/usr/local/opt/sqlite/bin:$PATH"' >> ~/.bash_profile

For compilers to find this software you may need to set:
    LDFLAGS: -L/usr/local/opt/sqlite/lib
    CPPFLAGS: -I/usr/local/opt/sqlite/include
For pkg-config to find this software you may need to set:
    PKG_CONFIG_PATH: /usr/local/opt/sqlite/lib/pkgconfig

==> Summary
📦 /usr/local/Cellar/sqlite/3.21.0: 11 files, 3MB
==> Installing python dependency: gdbm
==> Downloading https://homebrew.bintray.com/bottles/gdbm-1.13.el_capitan.bottle.tar.gz
##### 100.0%
==> Pouring gdbm-1.13.el_capitan.bottle.tar.gz
📦 /usr/local/Cellar/gdbm/1.13: 19 files, 554.4KB
==> Installing python
==> Downloading https://homebrew.bintray.com/bottles/python-2.7.14.el_capitan.bottle.tar.gz
##### 100.0%

```

```
Hannahs-MacBook-Pro-2:docker Hannah$ sudo easy_install pip
Searching for pip
```

```
Hannahs-MacBook-Pro-2:docker Hannah$ sudo pip install virtualenv
The directory '/Users/Hannah/Library/Caches/pip/http' or its parent directory
has been disabled. Please check the permissions and owner of that directory.
Use the --trusted-host flag.
The directory '/Users/Hannah/Library/Caches/pip' or its parent directory is
has been disabled. check the permissions and owner of that directory. If ex
Collecting virtualenv
  Downloading virtualenv-15.1.0-py2.py3-none-any.whl (1.8MB)
    100% |#####| 1.8MB 617kB/s
Installing collected packages: virtualenv
Successfully installed virtualenv-15.1.0
Hannahs-MacBook-Pro-2:docker Hannah$
```

```
Hannahs-MacBook-Pro-2:pythonApp Hannah$ virtualenv venv
New python executable in /Users/Hannah/Documents/Work/code/practice/docker/pythonApp/venv/bin/python
Installing setuptools, pip, wheel...done.
Hannahs-MacBook-Pro-2:pythonApp Hannah$ _
```

```
File "/Library/Python/2.7/site-packages/werkzeug/serving.py", line 699
    fd=fd)
File "/Library/Python/2.7/site-packages/werkzeug/serving.py", line 593
    passthrough_errors, ssl_context, fd=fd)
File "/Library/Python/2.7/site-packages/werkzeug/serving.py", line 504
    HTTPServer.__init__(self, (host, int(port)), handler)
File "/System/Library/Frameworks/Python.framework/Versions/2.7/lib/python2.7/SocketServer.py", line 442
    self.server_bind()
File "/System/Library/Frameworks/Python.framework/Versions/2.7/lib/python2.7/SocketServer.py", line 427
    SocketServer.TCPServer.server_bind(self)
File "/System/Library/Frameworks/Python.framework/Versions/2.7/lib/python2.7/SocketServer.py", line 412
    self.socket.bind(self.server_address)
File "/System/Library/Frameworks/Python.framework/Versions/2.7/lib/python2.7/SocketServer.py", line 397
    return getattr(self._sock, name)(*args)
socket.error: [Errno 13] Permission denied
Hannahs-MacBook-Pro-2:pythonApp Hannah$ sudo python app.py
* Running on http://0.0.0.0:80/ (Press CTRL+C to quit)
127.0.0.1 - - [08/Nov/2017 16:11:18] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [08/Nov/2017 16:11:19] "GET /favicon.ico HTTP/1.1" 404 -
```

R E S O U R C E S

* [HTTP://SEARCHCLOUDCOMPUTING.TECHTARGET.COM
/FEATURE/WORDS-TO-GO-CONTAINERS-IN-CLOUD-
COMPUTING](http://searchcloudcomputing.techtarget.com/feature/words-to-go-containers-in-cloud-computing)

* [HTTPS://WWW.AIRPAIR.COM/DOCKER/POSTS/8-
PROVEN-REAL-WORLD-WAYS-TO-USE-DOCKER](https://www.airpair.com/docker/posts/8-proven-real-world-ways-to-use-docker)

* [HTTPS://WWW.DATADOGHQ.COM/DOCKER-
ADOPTION/](https://www.datadoghq.com/docker-adoption/)

* [HTTPS://BLOG.JESSFRAZ.COM/POST/DOCKER-
CONTAINERS-ON-THE-DESKTOP/](https://blog.jessfraz.com/post/docker-containers-on-the-desktop/)