USING ***CLOUD DEVELOPMENT PLATFORMS*** *IN SENIOR DIGITAL SOLUTIONS*

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BEING A DIGITAL SOLUTIONS TEACHER MEANS CONTINUALLY FALLING DOWN **RABBIT HOLES**

Tech Tip:

Type 'top 5' or 'top 10' in Google will often lead to reviews by people have already done research

RABBIT HOLE 1: PYTHON ANYWHERE

- 8 years ago, I searched for a Python web server that I could teach to my students….

  My search led to Django and Flask…

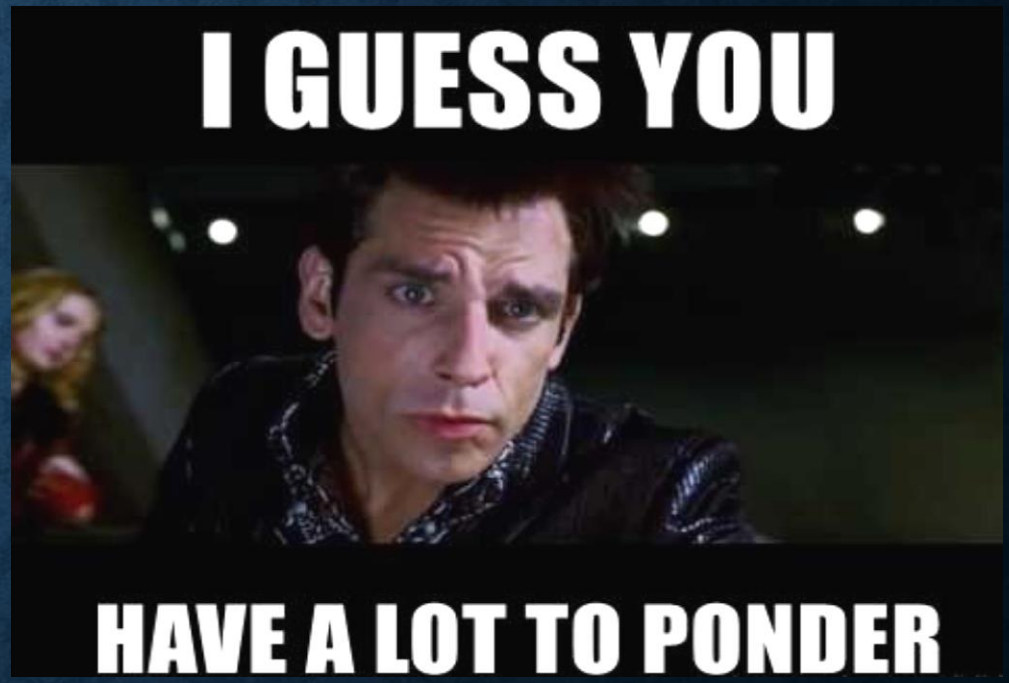
- But then I also found this cloud development environment called Python Anywhere

WHAT IS PYTHON ANYWHERE?

Python Anywhere is a Cloud Development Platform that allows the developer to set up and edit a Python Web Server

BENEFITS

- Free!!
- Uncomplicated
- The Python Web Server is live!!
- Allows the teacher to view, test and edit student code. WOW!!!!
- Good customer support.
- Solves issues of student installation – ARGGHHH!!
- Server management tools e.g. HTTPS, logs, server tasks



RISKS / Downsides

- No backups with the free account – students have to backup manually or connect their account to GitHub.
- *PythonAnywhere could go bust or change their pricing model*
- Student could create an inappropriate site and the site is live.
- No code auto-completion

PYTHON ANYWHERE DEMO

QUESTIONS

DIGITAL SOLUTIONS AT MARIST

WORK PLAN

- Unit 1 – Game design using Pygame (FA1)
  Students create a 2d game using Object Oriented Python
- Unit 2 – Online Databasing with Flask (FA2)
  Students create an external Flask web server on Python Anywhere
- Unit 3 – Internet of Things (IA1, IA2)
  Students design a Raspberry Pi solution to connect to an external Flask web server (IoT). Students control a robot using a Raspberry Pi running an internal Flask web server (robotics)
- Unit 4 – Mobile Application (IA3)
  Students create a mobile app that communicates with an external Flask web server on Python Anywhere

RABBIT HOLE 2: MONACA.IO

- Oh no…ADOBE PHONEGAP IS DEAD!!
  - Cordova and JQuery Mobile

- This year I searched for a Mobile App development environment and that search led to monaca.io

Monaca

WHAT IS MONACA.IO?

Cloud Development software that allows the developer to code a Mobile App.

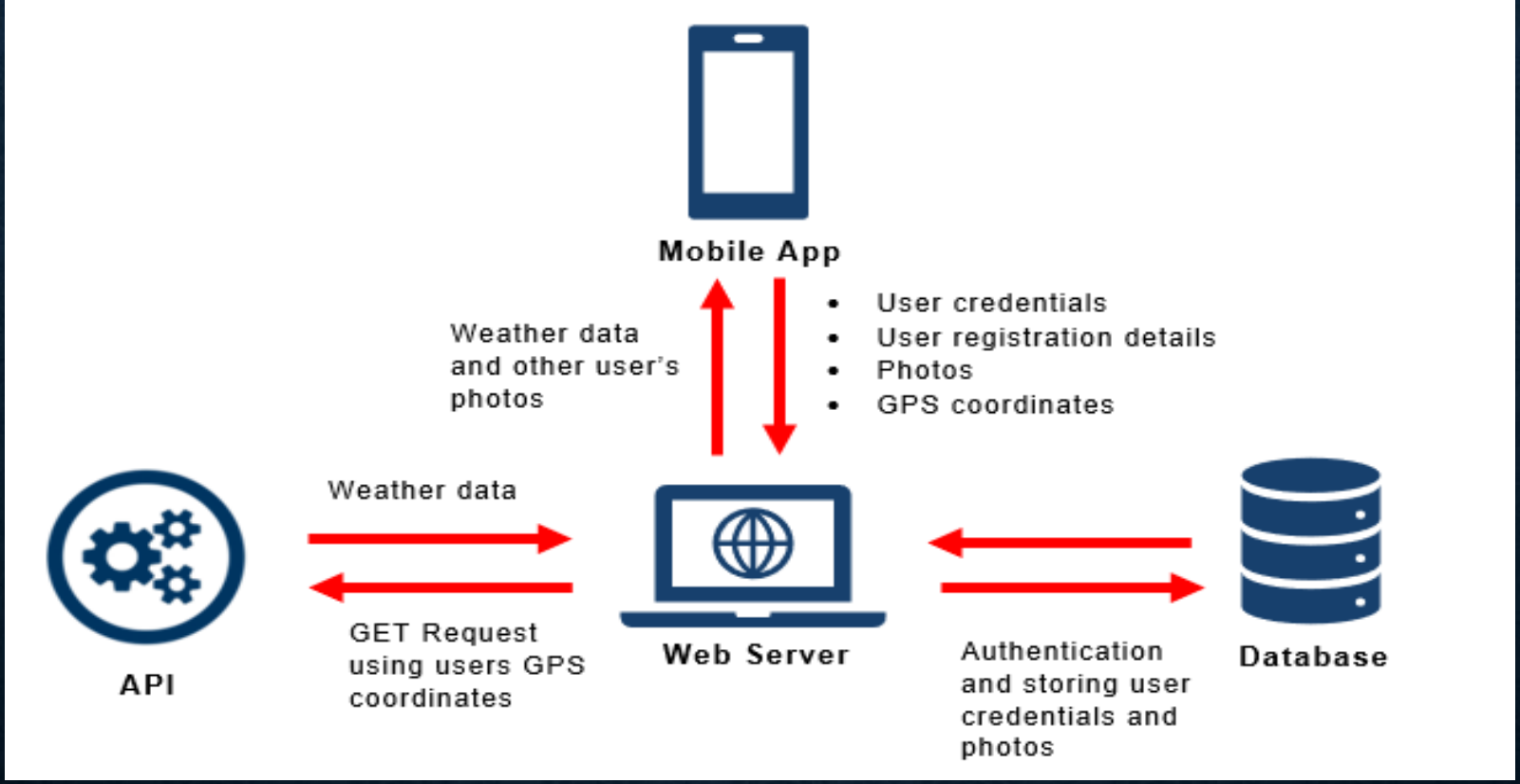
BENEFITS

- Free!!
- Include Templates using one of many different JavaScript frameworks
- Includes phone emulator
- Solves issues of student installation (CORDOVA IS SO, SO ANNOYING TO INSTALL)
- Includes Cordova Component Library and platform specific builds
- Easy to use Interface
- A TESTING APP (WOW!!)

MONACA.IO DEMO

MOBILE APP PROJECT (IA3)

- What is we combine Flask using Python Anywhere and JavaScript Mobile using Monaca.io



RABBIT HOLE 3: RAPID API

The third part of the Mobile App project was connecting an API to their application…

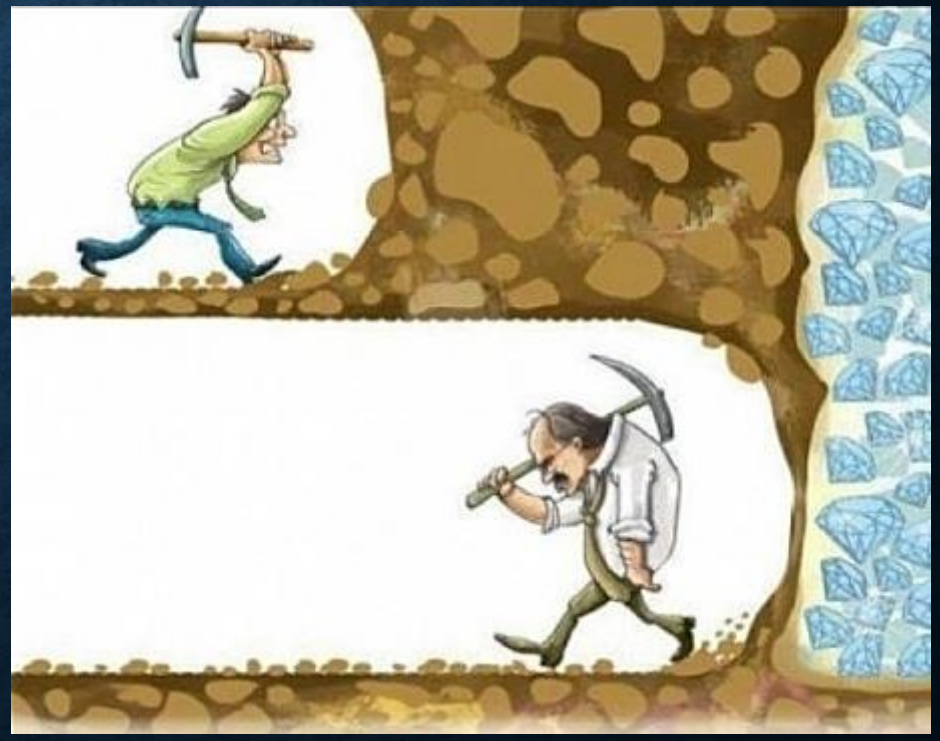
RAPID API DEMO

IN SUMMARY…

With the move to Cloud Software, Cloud Development Systems will be come more and more common into the future.

They are not without risks but the benefits can be GREAT!!!

Sometimes Rabbit Holes can be time consuming, and a complete waste of time, but other times, you can find diamonds.



QUESTIONS