# GREETINGS

# WHO'S THIS GUY??

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# GOOGLE APP ENGINE

- What is Google Appengine?
- Common misconceptions
- What Google Appengine IS
- What Google Appengine ISNT
- Why Google Appengine?
- The GOOD and the BAD
- Setting up Google Appengine, os platforms, options for testing code, web framework options.
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# and finally...

## Getting down to the code

# What is Google Appengine?

Google App Engine is a <u>runtime platform</u> that provides :

- web application hosting

- data storage

- high-speed networking by running on top of Google's massive infrastructure.

# Common misconceptions

- Google Appengine is a web framework

- Google Appengine is a VPS/IaaS(Infrastructure as a Service)

- Google Appengine is a SaaS(Software as a Service)

# Why those are wrong

- Google Appengine is not a web framework.
- Different frameworks can be used to create apps meant to run on Appengine.
- In Python, it supports Webapp2(default, comes bundled), Django, Pyramid.

# Appengine is an IaaS

- Appengine is not an IaaS(Infrastructure as a Service). It does not provide VPS(Virtual Private Server) solutions. Example IaaS is Amazon EC2, DigitalOcean, Rackspace, Linode etc.

- Google however has as IaaS solution. It is called Google Compute Engine.

# Appengine is not SaaS

- Appengine is not a SaaS(Software as a Service)

- Example is SignNow, Salesforce

-  SaaS is a software delivery model in which software and associated data are centrally hosted on the cloud. SaaS is typically accessed by users using a thin client via a web browser. SaaS has become a common delivery model for many business application.

- e.g Google Docs

# What Google Appengine is

- Platform as a service (PaaS)

- This is a category of cloud computing services that provides a computing platform and a solution stack as a service.

- Other PaaS example is Heroku

# Languages supported

- Java

- Python

- Go

- Php

- Any other language that runs on JVM(JRuby, Jython, Scala e.t.c)

# Google Appengine

## THE GOOD

# The good

- High uptime
- Takes infrastructure worries from the developer(hardware, bandwidth)
- Simplifies system admins' work greatly(node balancing, reporting, security)
- Reliable data storage
- Simplifies scaling
- No maintenance
- Provides features like message queing in a sandboxed environment.

# The "bad"

- Read only filesystem access. BlobField used to save files.

- Only accepts HTTP requests

- For Python devs, only supports pure python libraries

- Those coming from a SQL background, takes application refactoring since by default its datastore is NoSQL. Google Cloud SQL is available though.

# Setting up GAE SDK

Go to https://developers.google.com/appengine/downloads

- Download the relevant installer

- For Linux users, place it in home folder then append its PATH to path.

- e.g if its in home folder, add the following to .bashrc:

  - export PATH=$HOME/google_appengine:$PATH
  - Then logout and login again