Integrating Django with Amazon S3
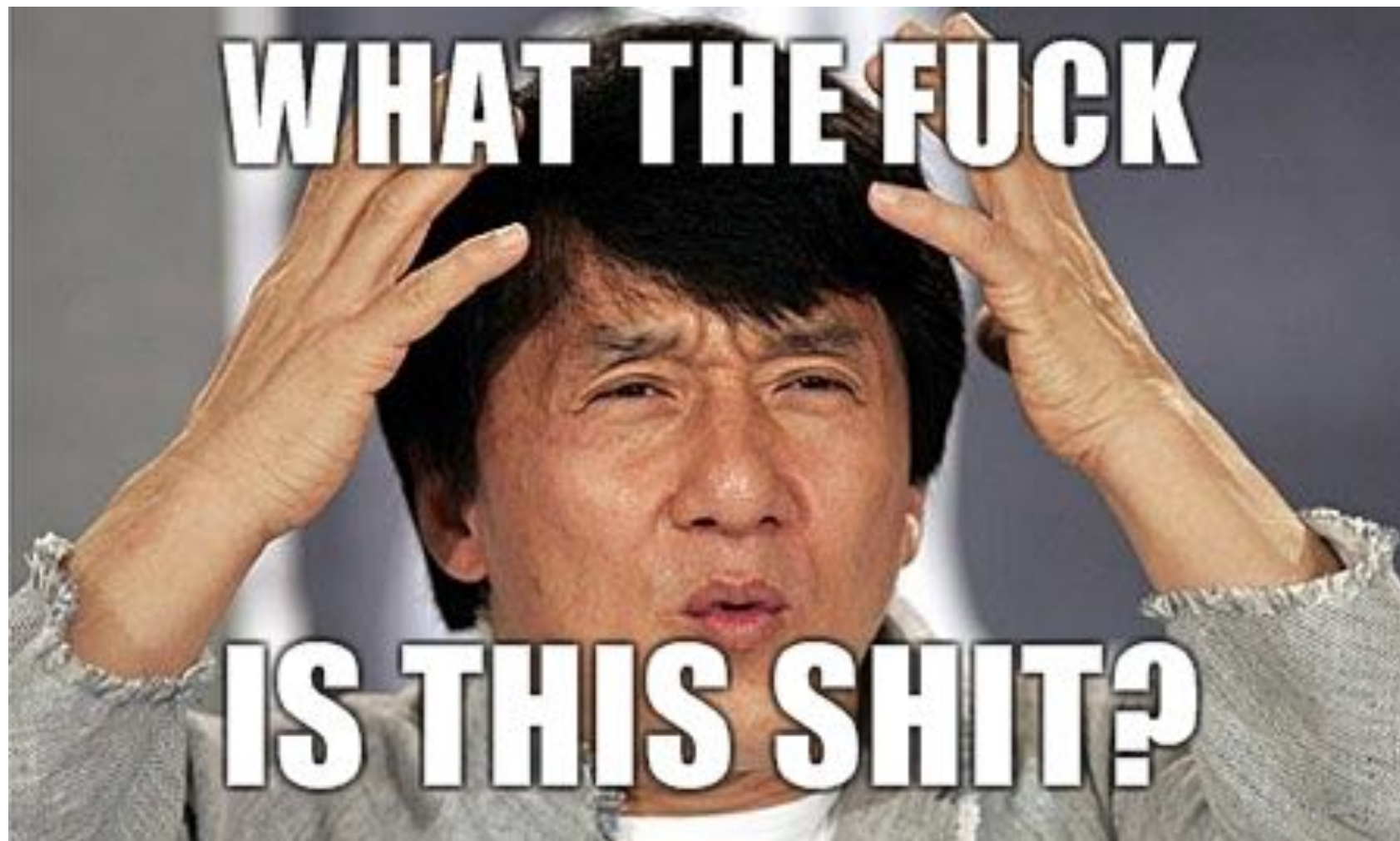
Born -> HTML/CSS/JS -> PHP -> C# -> Java -> Objective-C -> Swift -> Ruby -> Python -> Death (probably in 2038)

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WHAT THE FUCK IS THIS SHIT?

aws

(File) Storage in Cloud.

Simple (I guess) yet quite powerful.

Use Cases

- File based database

- Backups and Storage

- Highly scalable and available media streaming

- Data Integrity (https://aws.amazon.com/premiumsupport/knowledge-center/data-integrity-s3/)

- All of the things above can be based on custom permissions (Policies)

- And many more… Just use your imagination.

Why should you use it with Django?

- I don't know. I don't wanna enter your personal space.

Why do I use it?

- Easy to integrate, manage, customize and maintain (AWS console - AWS command line interface)

- Can replace FTP needs of the clients (over https)

- Supports proxy servers (Squid - http forward)

- Helps to analyze stored data (logging)

- Triggers the backend to act upon any change (SNS)

- Client/user based permission settings (IAM/Policies)

Demo

- Bucket permissions / IAM management

- boto3 usage (AWS Python SDK)
  (instead of django-storage)

- URL signing (why is it important?)

- SNS message to the backend

- https://github.com/ebsaral/pyconweb2018

Real Life Examples

- Recent elections in Turkey

- Data analyze with Amazon Athena (serverless query service) - https://aws.amazon.com/blogs/big-data/analyzing-data-in-s3-using-amazon-athena/

- A famous TV network using it for ads in other platforms

Pricing

- "New AWS customers receive 5 GB of Amazon S3 storage in the Standard Storage class, 20,000 Get Requests, 2,000 Put Requests, and 15 GB of data transfer out each month for one year." - Amazon

- https://aws.amazon.com/s3/pricing/

Pricing

	Pricing
S3 Standard Storage	
First 50 TB / Month	$0.023 per GB
Next 450 TB / Month	$0.022 per GB
Over 500 TB / Month	$0.021 per GB

	Pricing
Data Returned by S3 Select	$0.0007 per GB
Data Scanned by S3 Select	$0.002 per GB
PUT, COPY, POST, or LIST Requests	$0.005 per 1,000 requests
GET, SELECT and all other Requests	$0.0004 per 1,000 requests
Lifecycle Transition Requests into Standard – Infrequent Access or One Zone - Infrequent Access	$0.01 per 1,000 requests

Thank you!

Reggie Watts

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