

Integrating Django with Amazon S3

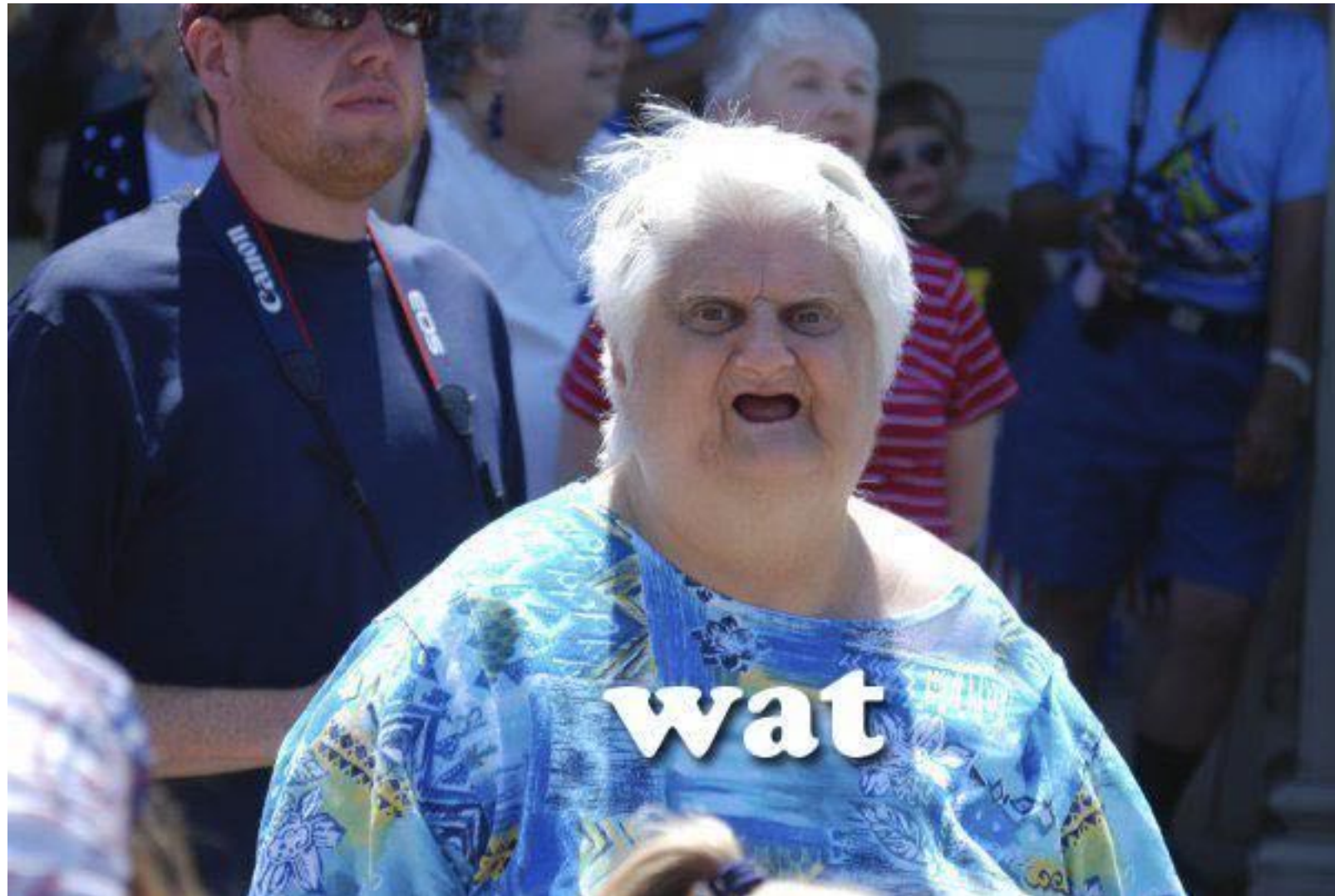
Born -> HTML/CSS/JS -> PHP -> C# -> Java -> Objective-C ->
Swift -> Ruby -> Python -> Death (probably in 2038)

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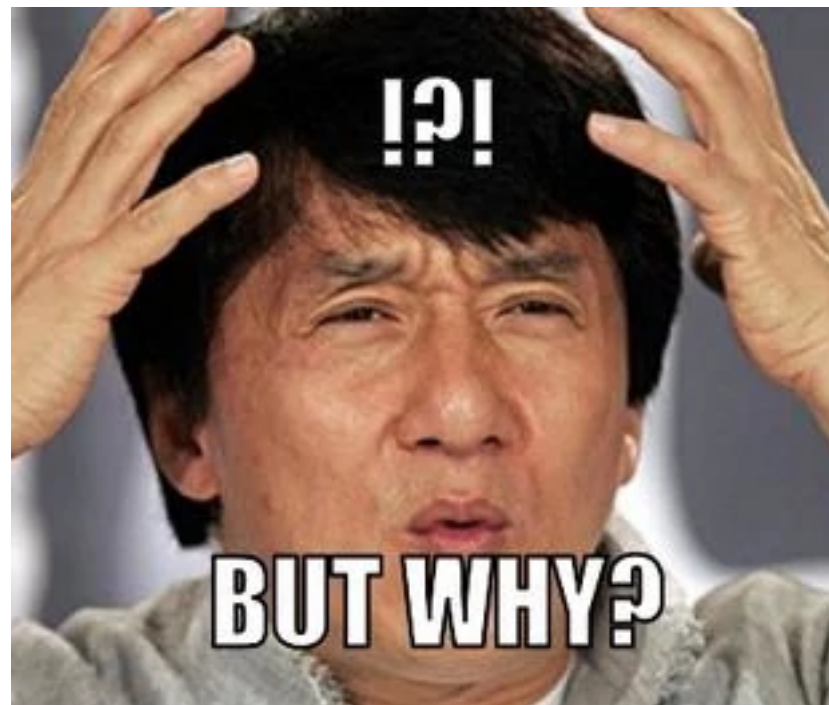
(File) Storage in Cloud.

Simple (I guess) yet quite powerful.

- 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.



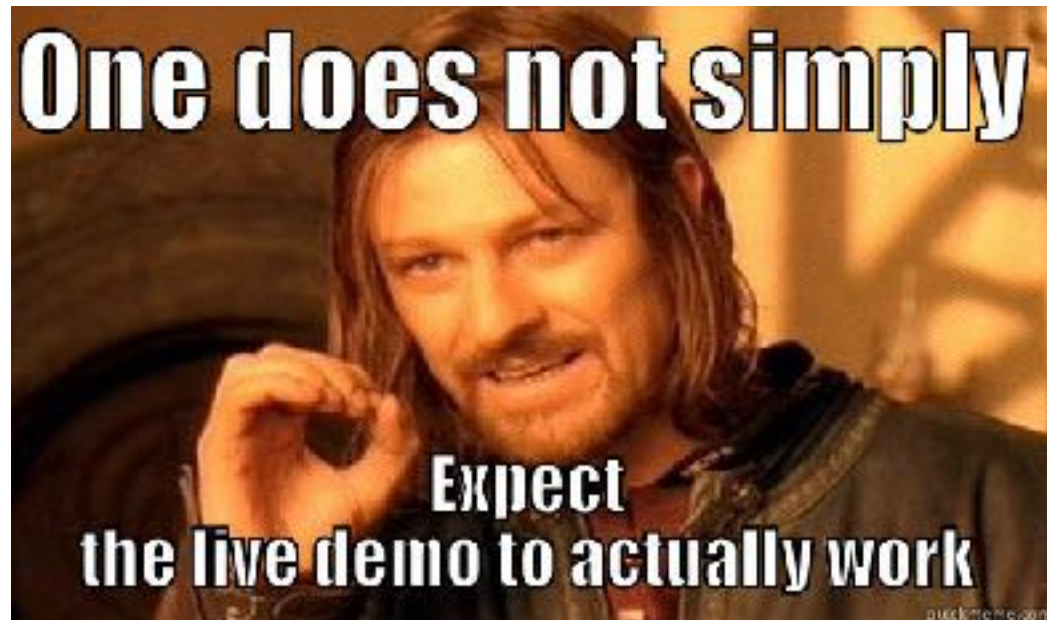
Why should you use it with Django?



- 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
- Lifecycle feature to delete temporary files on S3
- Don't forget to mention proxy servers and why it's needed

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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