CS 310 : Scalable Software Architectures

Week 05 (Oct 21 – 25)



October 2024

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5
7	8	9	10	11	12
14	15	16	17	18	19
21	22	23	24	25	26
28	29	30	31		
	7 14 21	1 7 8 15 14 15 21 22	1 2 7 8 9 14 15 16 21 22 23	1 2 3 7 8 9 10 14 15 16 17 21 22 23 24	1 2 3 4 7 8 9 10 11 14 15 16 17 18 21 22 23 24 25

www.a-printable-calendar.com

This week in CS 310:

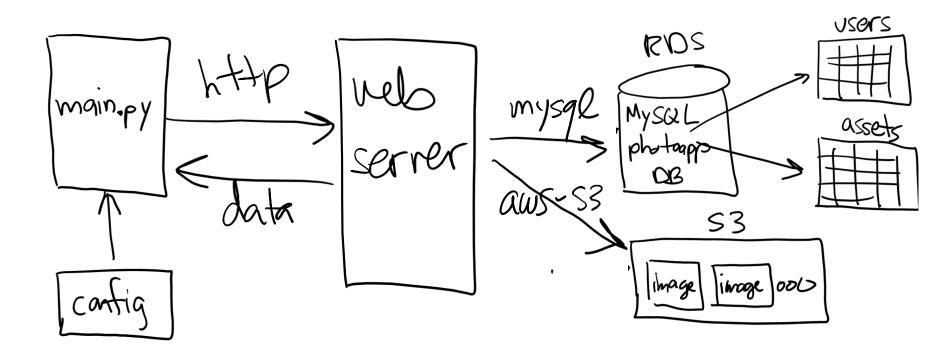
- Focus this week:
 - Scalability, performance, serverless
- Project 02 has been released, two steps:
 - 1. Program web service for PhotoApp, rewrite client
 - 2. Configure AWS EC2 to host web service
 - Both parts due Friday October 25th @ 11:59pm
- Exam on Tuesday, October 29th in class
 - In-person, hand-written
 - Multiple choice, short answer, code read / write
- Some optional readings on JavaScript coding:
 - <u>https://bit.ly/async-js-intro-01</u>
 - https://bit.ly/async-js-intro-02



Topics

- Review: node.js execution model
- Scalability
- Horizontal vs. vertical scaling
- Performance: latency, bandwidth, throughput
- Measuring performance with apache benchmark
- Introduction to serverless computing

Project 02



Class sessions

Tuesday:

- -Abstract server-side design scenarios --- "how would you execute these N operations concurrently, given this set of restrictions on the order of operations"
- GET vs. PUT/POST requests, testing with postman.com vs. python-based client

Thursday:

- Sample exam questions
- *Q&A*: lecture recordings, project 02?