

# CS 310 : Scalable Software Architectures

*Week 03 (Oct 07 – 11)*



## October 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

www.a-printable-calendar.com

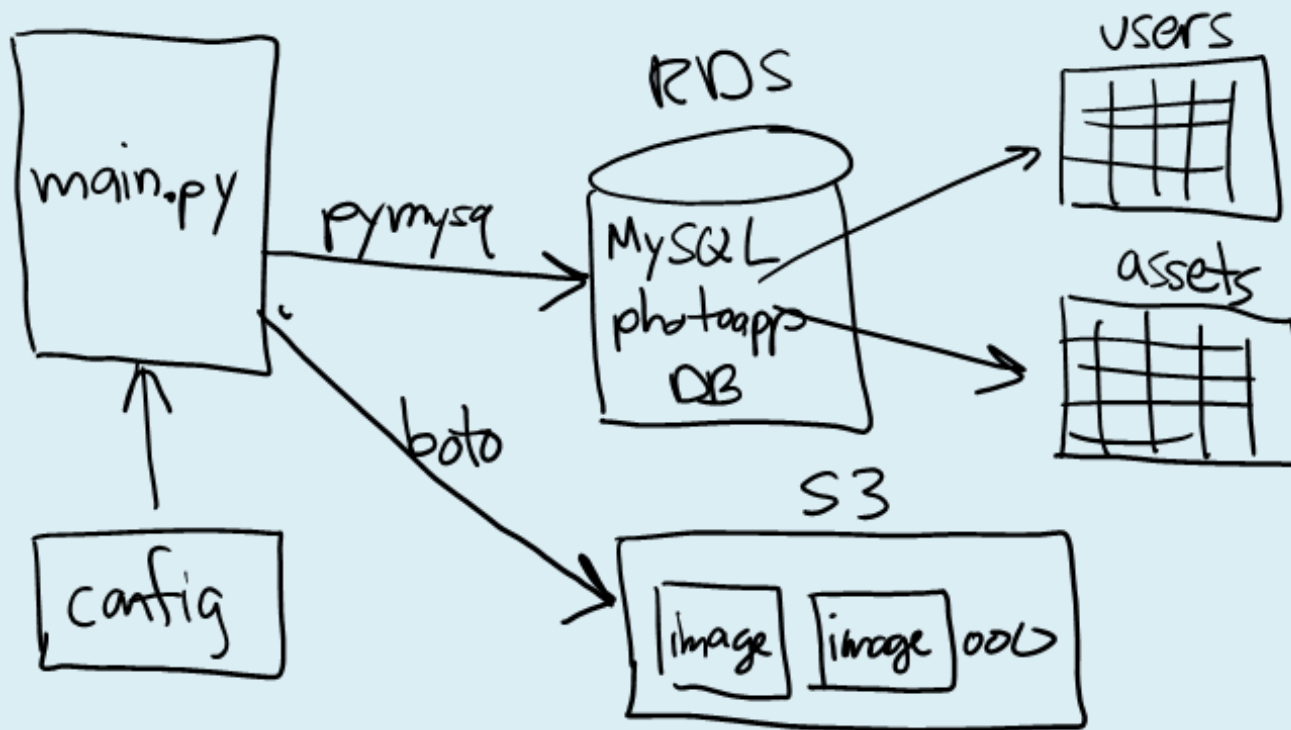
## This week in CS 310:

- *Focus this week:*
  - *Web services*
- *Class sessions **\*are\*** being recorded this week*
  - *Will be available under Panopto on Canvas*
- *Project 01 due Wednesday Oct 9<sup>th</sup> @ 11:59pm*
  - *Building a simple client-server Photo app*
  - *Gradescope is open (unlimited submissions)*
  - *Can submit as late as Friday night*
- *Office hours have started --- we have 20+ TAs*
  - *See link on Canvas for hours and locations*



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# Project 01

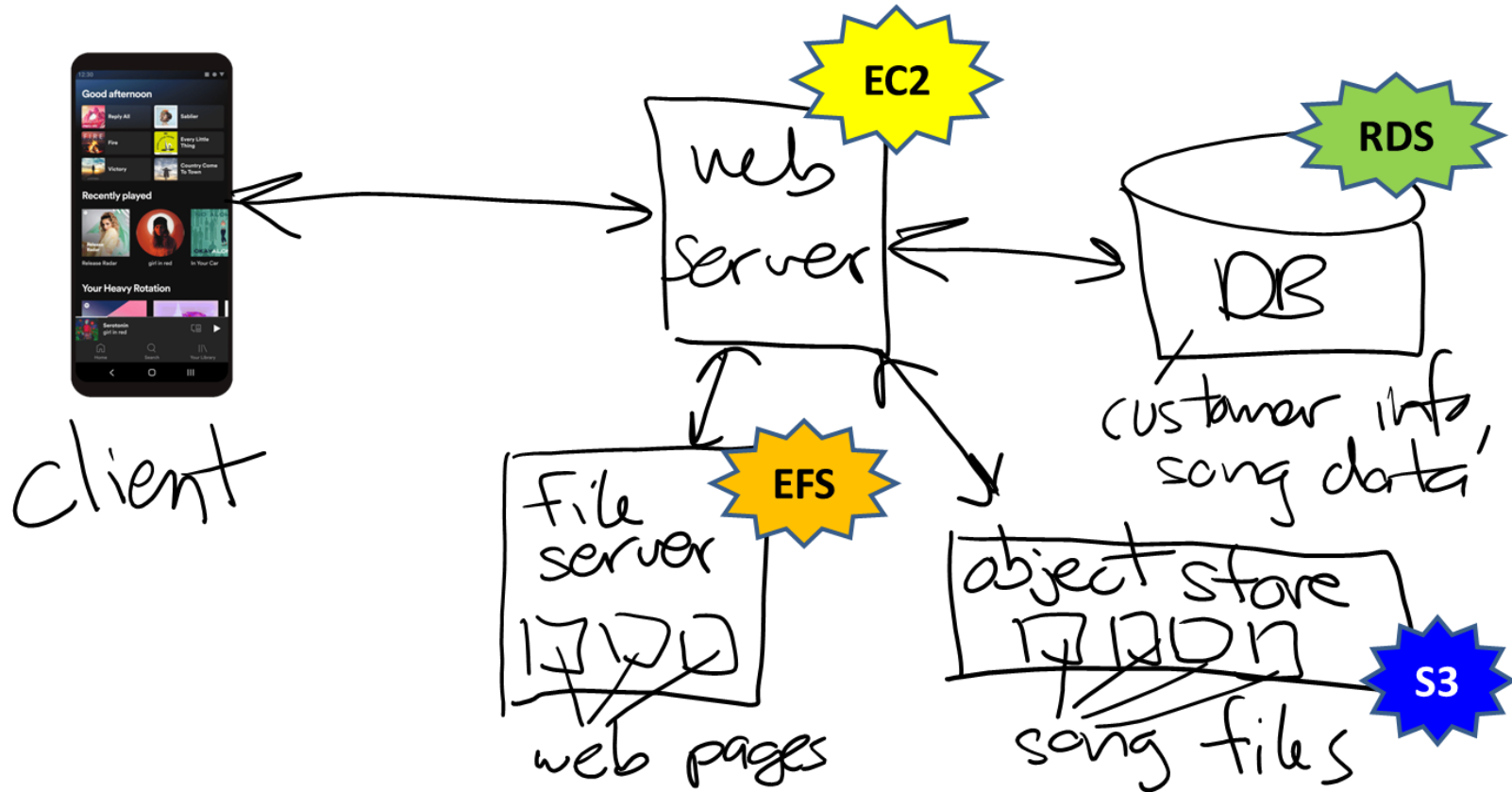


## Goals?

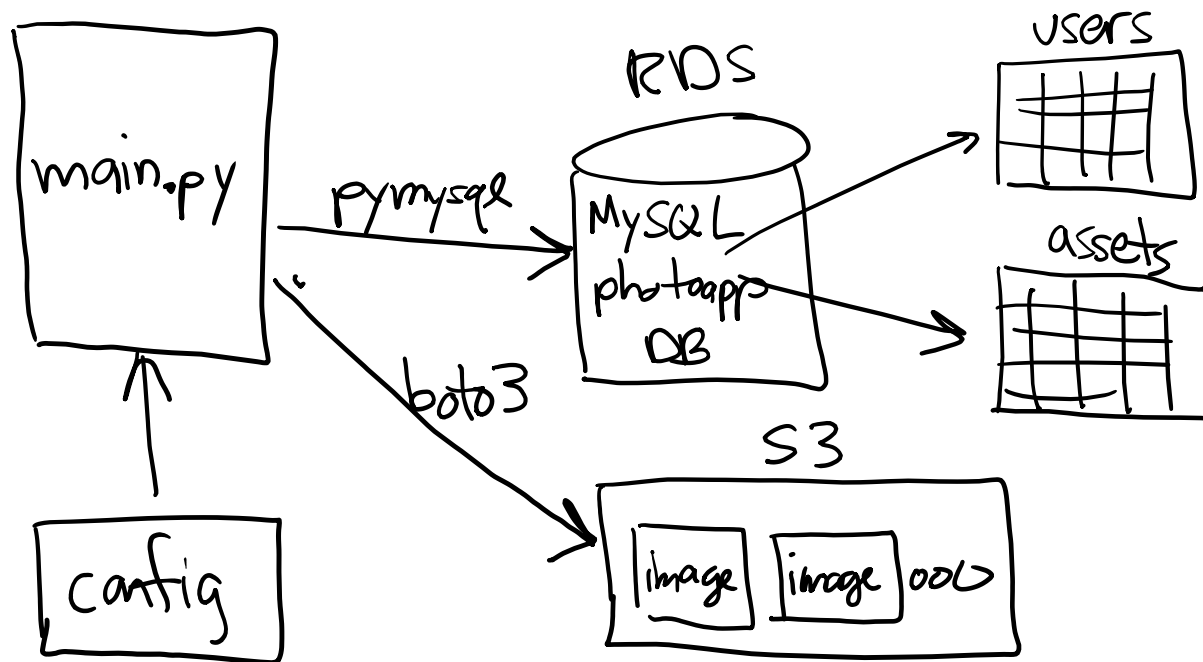
- Start with a simpler, client-server architecture
- Experience with AWS, DB, SQL and Python
- Create infrastructure needed for future projects

# Multi-tier architecture

- Recall that most software is multi-tier design...



# Project 01 => Project 02



# Topics

- **Service-oriented architectures (SOA)**
- **Web services**
- **Building a web service using JavaScript, Node.js and Express**
- **Serialization and JSON**
- **Examples and demos**

# Class sessions

- Summarize key points of lecture
- Compare / contrast client-server vs. multi-tier
- Build two web services: a simple calculator and a more realistic service for MovieLens database
- Notes:
  - *To work in class, make sure Docker Desktop is installed*
  - *Provided software uses Docker, download files from GitHub:*
    - <https://github.com/joe-hummel/intro-web-services>
    - Clone repo or download ZIP

