

INFM 603: Information Technology and Organizational Context

## **Session 7: PHP**



Jimmy Lin  
The iSchool  
University of Maryland

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# Databases Yesterday...



# Databases today...

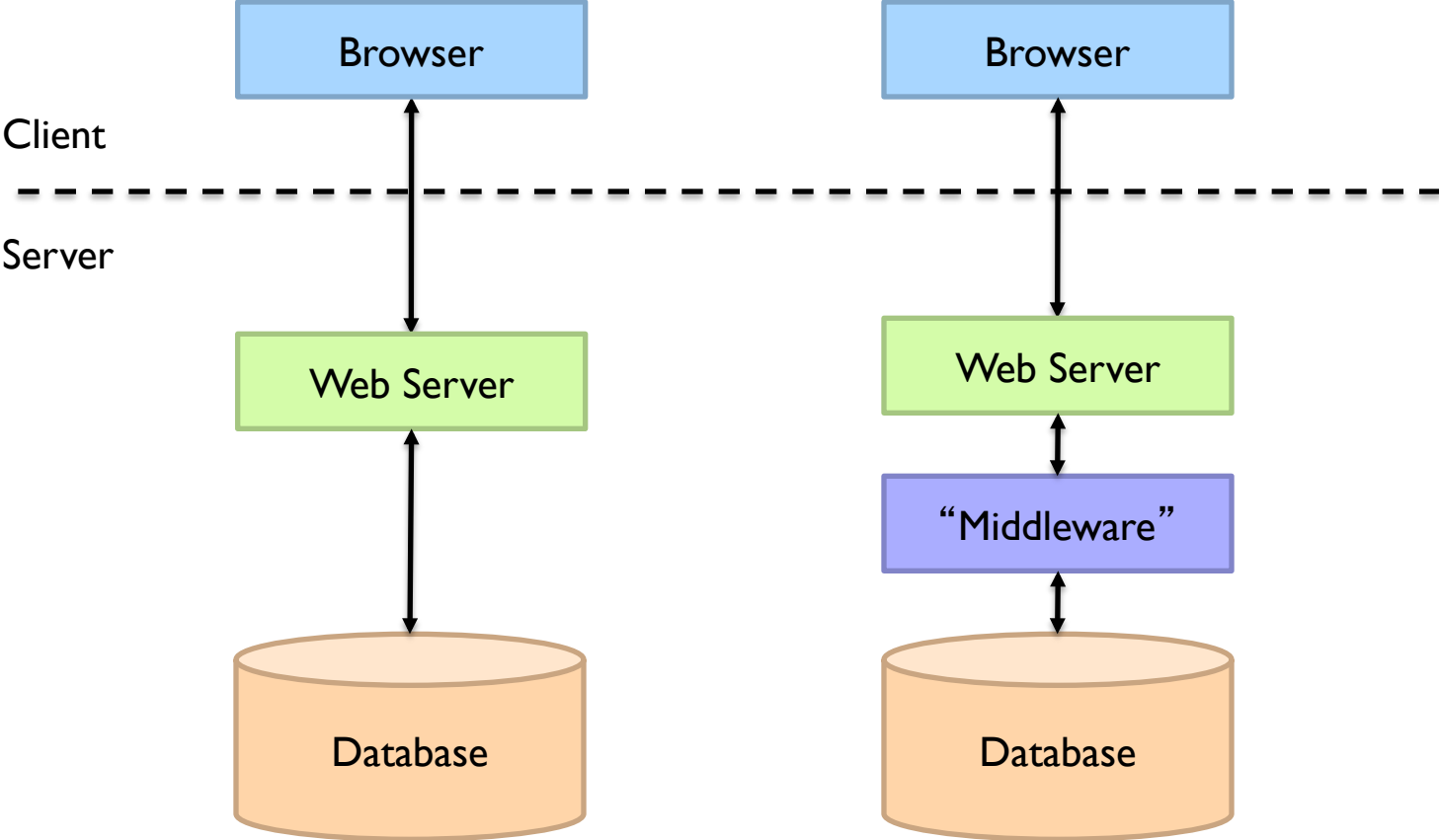


Wait, but these are websites?

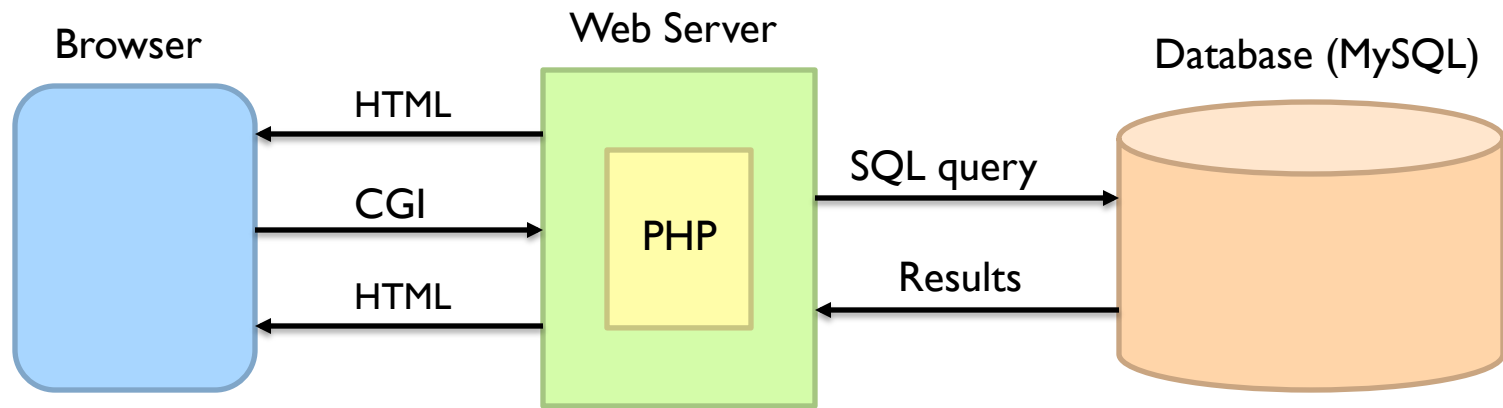
# Websites that are really databases

- Most of the content is in a database
- Web pages are dynamically constructed from results of database queries

# Multi-Tiered Architectures



# Putting the Pieces Together...



# What is PHP?

- PHP is a server-side scripting language
  - **Must** run on a server (*not* in the browser)
  - More specifically, runs inside the web server
- Typical PHP script:
  - Fetches input from user forms
  - Executes SQL queries
  - Constructs an HTML page containing results
- Part of the “LAMP” stack
  - Linux, Apache, MySQL, PHP

# PHP Scripts

- Are just like normal HTML pages
- With the exception of code between `<?php ... ?>`
- Variables begin with dollar signs
  - E.g., `$a`, `$b`
- Use “echo” to output HTML
  - Just like `document.writeln(...)` in JavaScript
- Use “.” to concatenate string
  - E.g., “here is” . “ some text”
  - Just like “here is” + “ some text” in JavaScript



# Sample PHP Script

1. Get input from user from
2. Connect to the database
3. Execute SQL query
4. Process results to generate HTML

# RideShare Exercise

- Design a database to match drivers with passengers for ride sharing on long car trips:
  - Drivers post available seats; they want to know about interested passengers
  - Passengers come looking for rides: they want to know about available rides and can make reservations
  - These things happen in no particular order
  - To simplify, passengers don't get to post "rides wanted" ads
- Build a web application to accomplish the above

# RideShare Exercise: Tasks

- Design the tables you will need
  - First decide what information you need to keep track of
  - Then design tables to capture this information
- Design SQL queries
  - What happens when a passenger comes looking for a ride?
  - What happens when a driver comes to find out who the passengers are?
- Role play!