

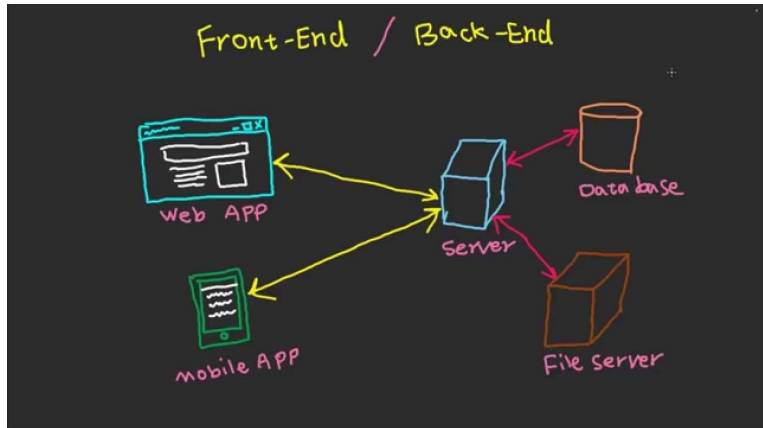
AGENDA

- Front-end
- Back-end
- Full-stack

OVERVIEW



OVERVIEW



FRONT-END

- also called *client-side*
- the front-end of a web application is everything the user sees and interacts with



Structure



Style



Interactivity

BACK-END

- sometimes also called *server-side*
- the back-end of a web application is the engine behind a website
- it processes requests from the front-end, and holds data for the app



Server/API



Database (remote/local)

DATA TRANSFER

- The front-end receives data *from* the back-end and uses it to show the information *to* the user
- The front-end sends data *from* the user and sends it *to* the back-end to update it
- If the front-end requests data, the server (back-end) will search the DB to find the relevant information
- If the front-end wants to update data, the server will update the DB as needed

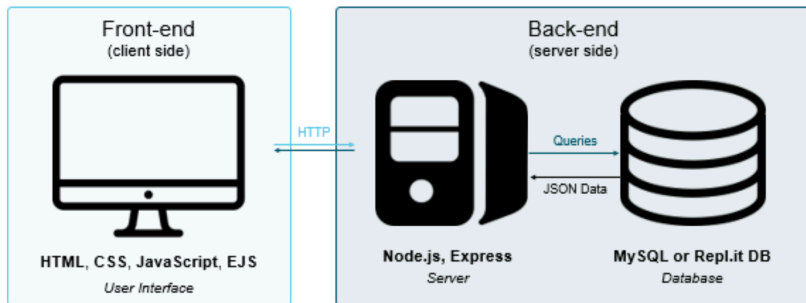
FULL-STACK EVERYTHING

For full-stack development a developer needs to understand the full picture of the application

All parts of the stack have to be worked out, those parts might use different languages and/or frameworks

HTML	EJS (Templating Engine)
CSS	HTTP (Communication Protocol)
Python	Flask (Web Framework to provide an API and/or web server)
Javascript	Node.js and Express (Web Framework to provide an API and/or web server)
Server	MySQL and AWS RDS
Database	Queries and JSON data

TYPICAL FULLSTACK WEB ARCHITECTURE



(in CIS 3368 we will use a different architecture)