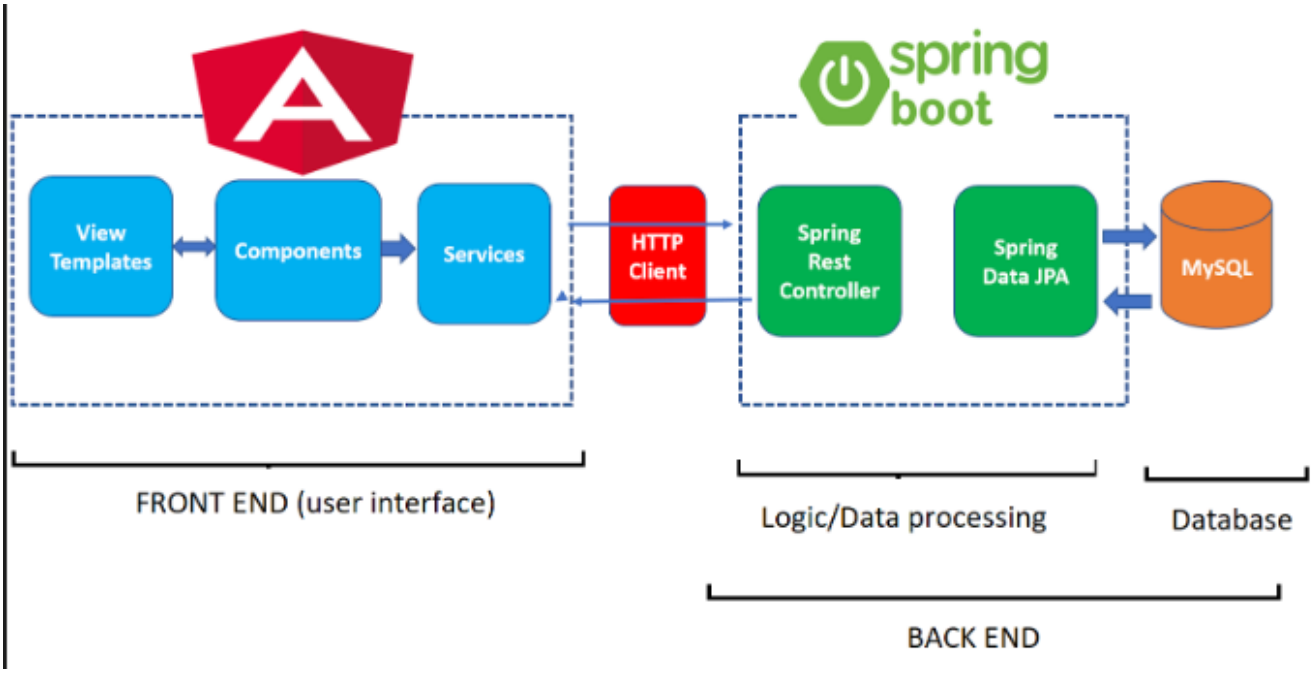
Overview



Database

- storing data and retrieving data efficiently

SQL

- "S-Q-L" also "sequel" (both pronounciations fine)
  - Standard Query Language
  - used to be called Standard English Query Language
    - high level language reads like English more than machine code
- Edgar Codd in the 1970s
  - relational model in mathematics he applied to databases
    - data stored in tables that are related, the database keeps track of these relationships
- There are different "flavors" of SQL
  - we are learning MySQL
  - others are SQLite, etc.

MySQL

- RDBMS = Relational DataBase Management System
  - (I'm going to use MySQL to referto both the software we use to build/work with our database and the "dialect" of SQL we are going to be writing code in)
  - MySQL uses SQL to create/read/update/delete data in the database
    - and to manage the database

Relational Databases

- stores data in tables with columns and rows
  - records = a row in the table
  - fields = a column in the table
- excel is NOT a database it is a spreadsheet application for visualizing data

Other types of Databases

- NoSQL
  - MongoDB - key-value pairs
    - documents - stores data in JSON format
  - not going to replace sql bc different strengths and weaknesses
- others graph, object oriented, etc.