

# **Intro to Servers and API's**

**What is a server?**

- A server is a program that returns data to be used by other applications or programs
- Servers can be public or private
- Servers are agnostic to programming language, they are a concept

**Why would you need a server?**

- mobile apps or websites that have a lot of content
- personalize the content for a user
- want to store user data
- want to analyze data

**How do you deliver content?**

# How do you deliver content?

## APIs / Clientside rendering

- Serve static assets, images, HTML, JS, CSS, etc
- Have logic in the JavaScript on how to get specific data and insert it into the DOM
- Serve data in specific format, JSON, XML, Protobuf, etc
- (Use JSON unless you really need to use something else)
- Many requests that are small

# How do you deliver content?

## APIs / Clientside rendering

Examples:

- Clientside: React, AngularJS, VueJS, Elm
- Serverside: Any server that returns data



# How do you deliver content?

## Serverside rendering

- Take template and fill in data, then serve completed HTML
- All data is served at one time
- Usually all processing happens on the server (minimal DOM manipulation on the clientside)
- One request that takes a lot of processing

# How do you deliver content?

## Serverside rendering

Examples:

- Ruby on Rails, Django, Jinja, handlebars, ejs