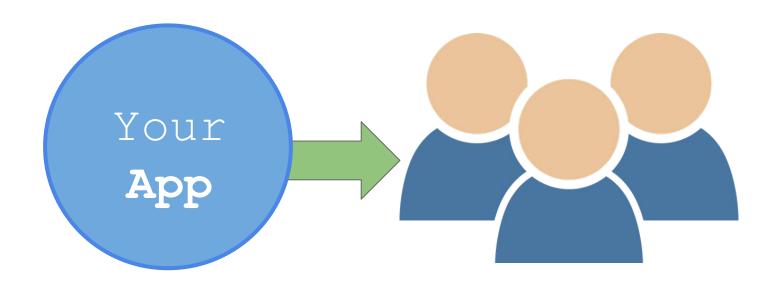
# Application Programming Interfaces (APIs) & GSA

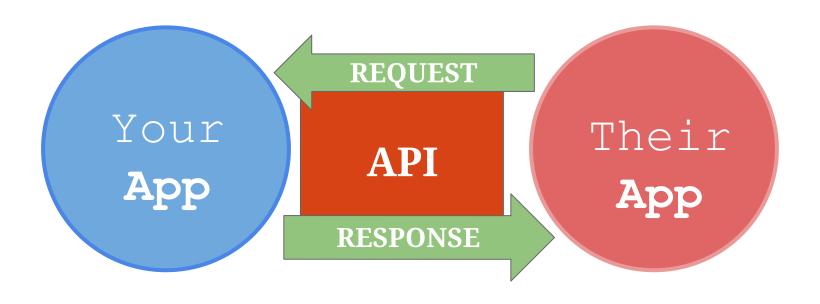
Ryan Day (IC) & Joe Castle (IG)

7/20/17

## **Users Directly Accessing Your App**



## **API = Application Programming Interface**



## For this presentation, we're talking about <u>Web</u> APIs



#### Web APIs Generally:

- Use HTTP to communicate
- Have a web-accessible address
- Use a request and response
- Typically transfer data in XML or JSON formats

#### An API is like a wall socket

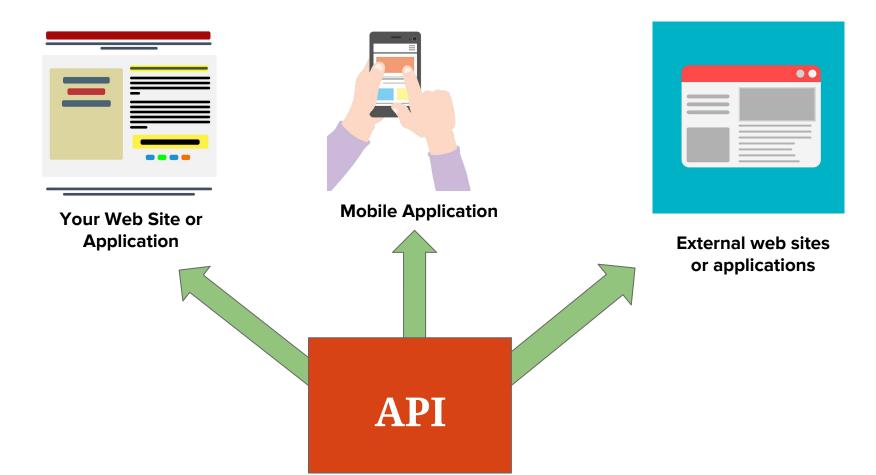






Creative Commons Thatonewikiguy

### An API can serve multiple consumers



#### EXAMPLE



Email or phone number

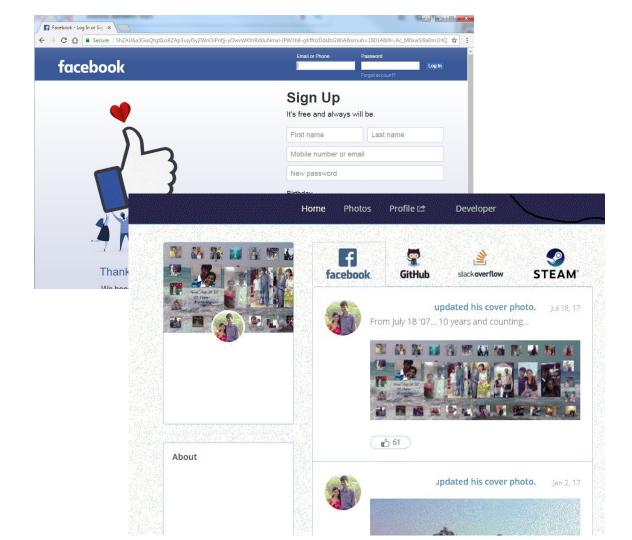
Passwor

Log In

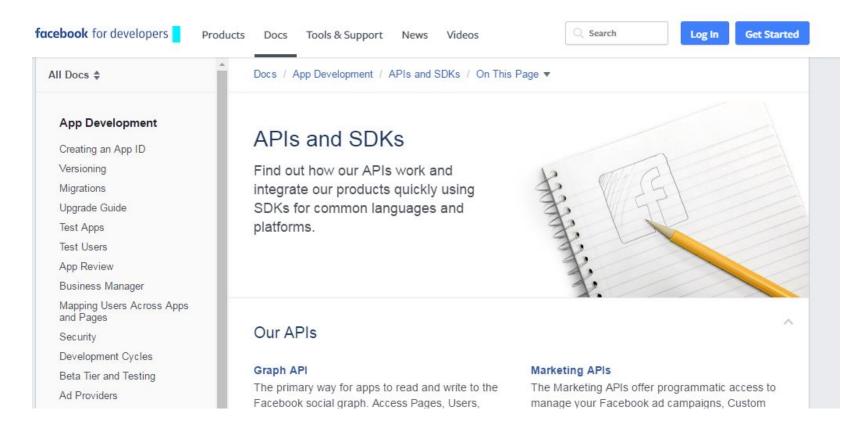
Forgot Password?

OR

Create New Facebook Account

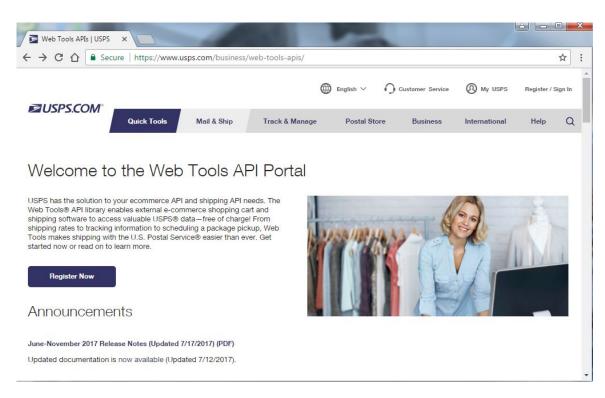


#### **FACEBOOK APIS**



https://developers.facebook.com/docs/apis-and-sdks

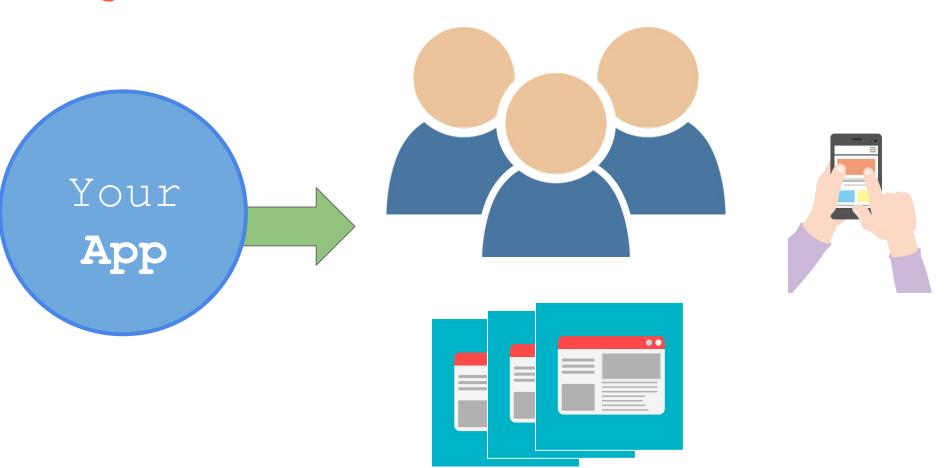
## What other Government APIs are out there?



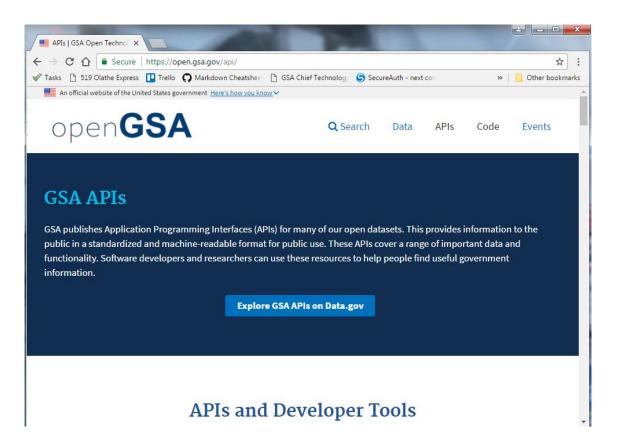
- Package tracking
- Postage price calculator
- Package pickup scheduling
- Address validation

https://www.usps.com/business/web-tools-apis/

## Why create an API?



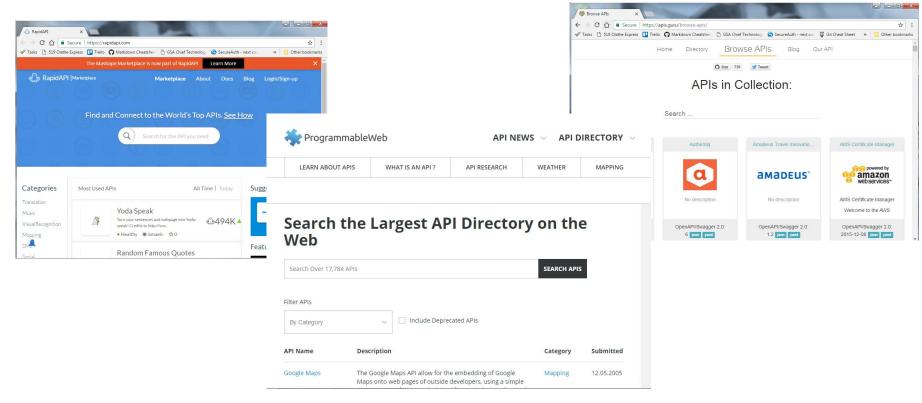
#### What GSA APIs are out there?



https://open.gsa.gov/api

#### What other APIs are out there?

Search "API directory"

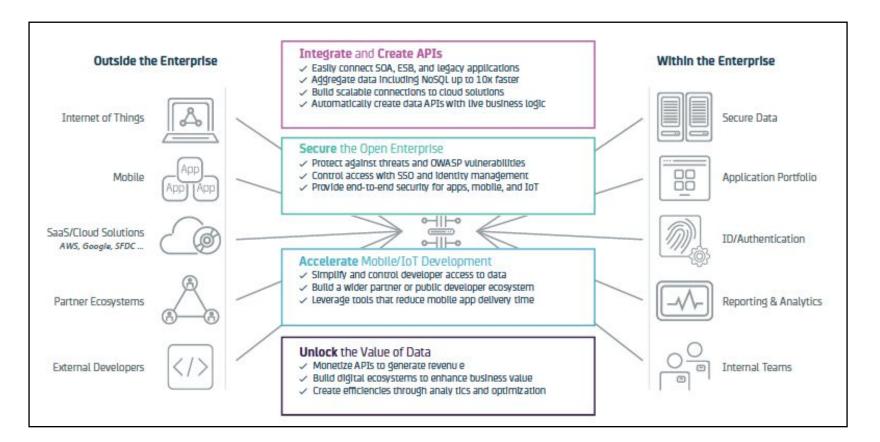


## API Strategy (w/ examples)

- GSA API Strategy developed and presented to leadership in March 2016
  - Objectives
  - Specifications
  - Recommendations

- Best place to start <a href="https://open.gsa.gov/api/">https://open.gsa.gov/api/</a>
  - Standards, Documentation, Feedback
  - City Pair Program and prototype

#### **API Interactions - External and Internal**



## Follow-up

- Explore the documentation provided in this Tech Talk
  - Slides posted online at tech.gsa.gov/techtalks
  - Reach out to Ryan and Joe with questions
  - Consider creating your own APIs

- Join our quarterly API Workgroup
  - Features APIs currently being developed at GSA
  - Features industry and government guest speakers