

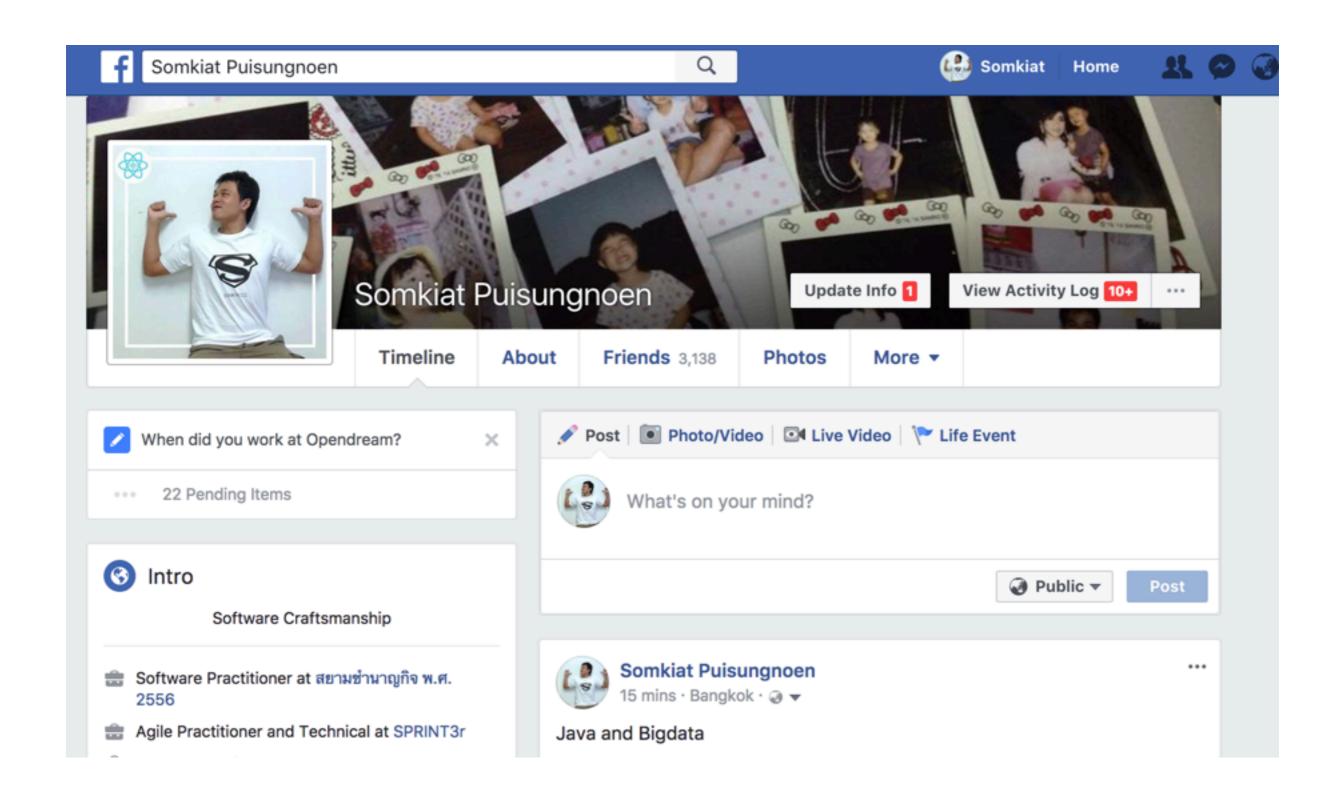
REST APIs Development



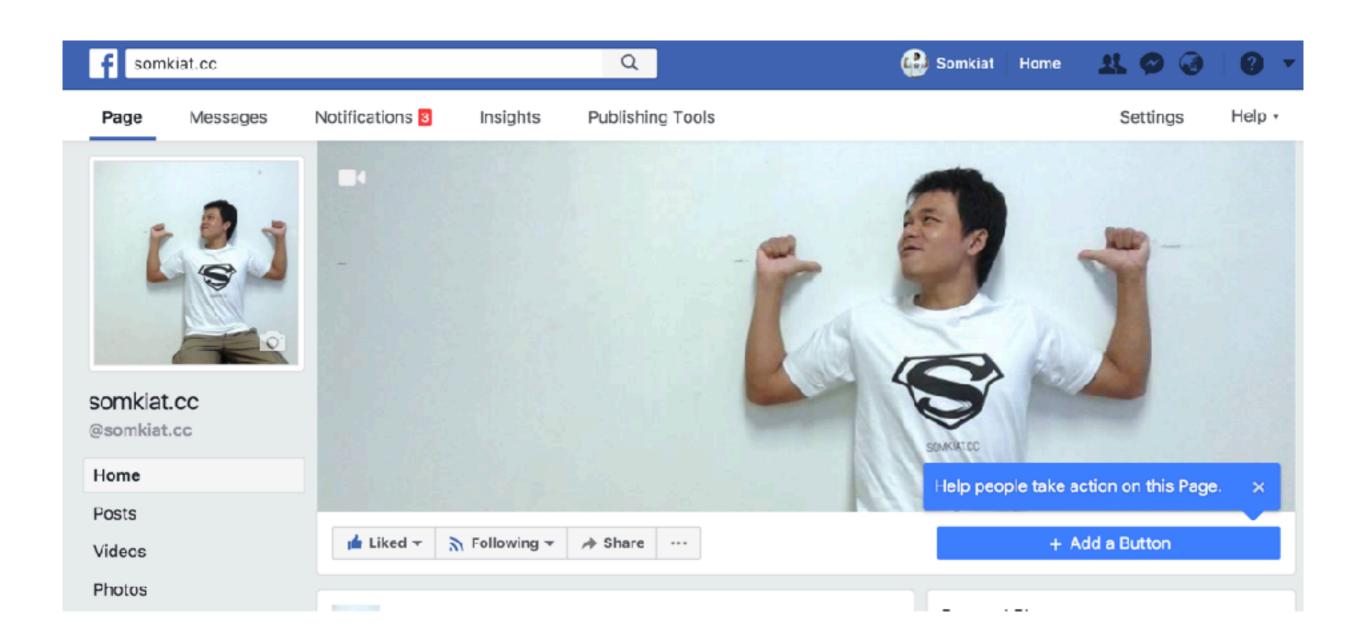














Writing REST APIs with Node.js



1. Use HTTP Methods for APIs

Operation	HTTP Method
Create	POST
Read	GET
Update	PUT
Delete	DELETE



2. API Routes

Alway use Noun as resource identifier



2. API Routes

Alway use Noun as resource identifier

Operation	HTTP Method	Routing
Create	POST PUT	/user /user/1
Read	GET	/user /user/1
Update	PATCH	/user/1
Delete	DELETE	/user/1



3. Use HTTP Status Code

HTTP Status Code	Description
2xx	Everything is OK
3xx	Resource was moved
4xx	Request can't fulfilled because of a client error
5xx	Something wrong in the API side



4. Use HTTP Header to send metadata

Authentication
Pagination
Rate limiting



5. Choose the right framework

express

(**) Feathers



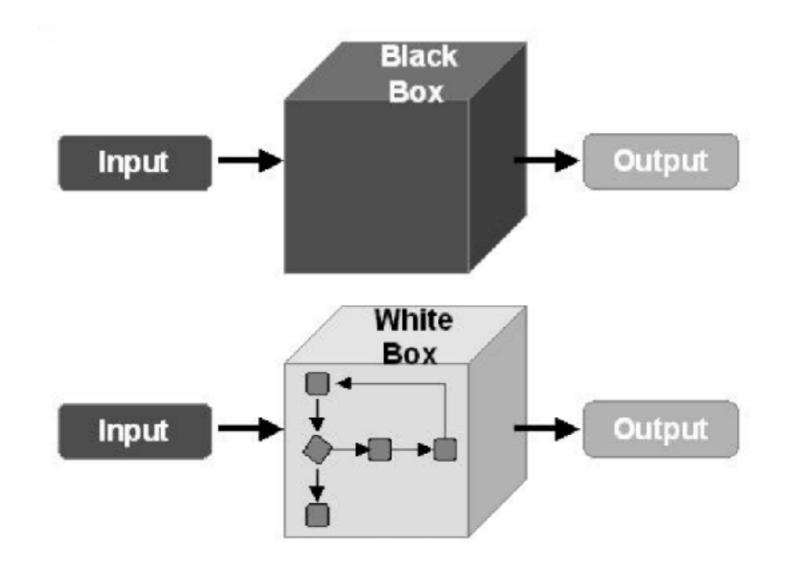


next generation web framework for node.js





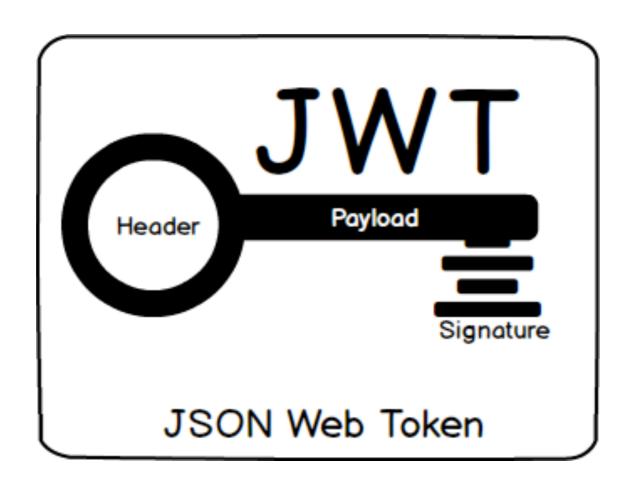
6. Testing for REST APIs





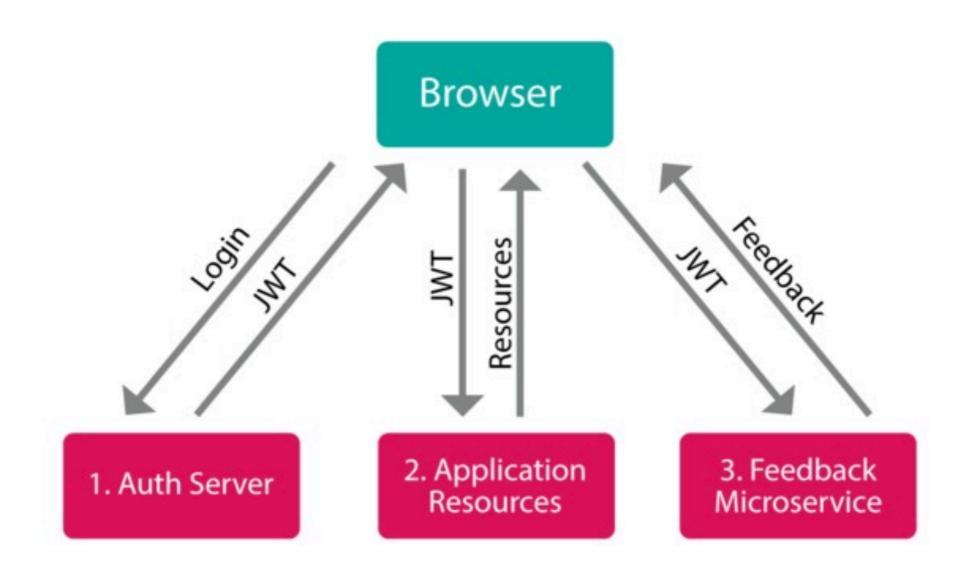
7. Authentication

Stateless such as JWT (JSON Web Token)





Flow of JWT





8. Rate Limiting

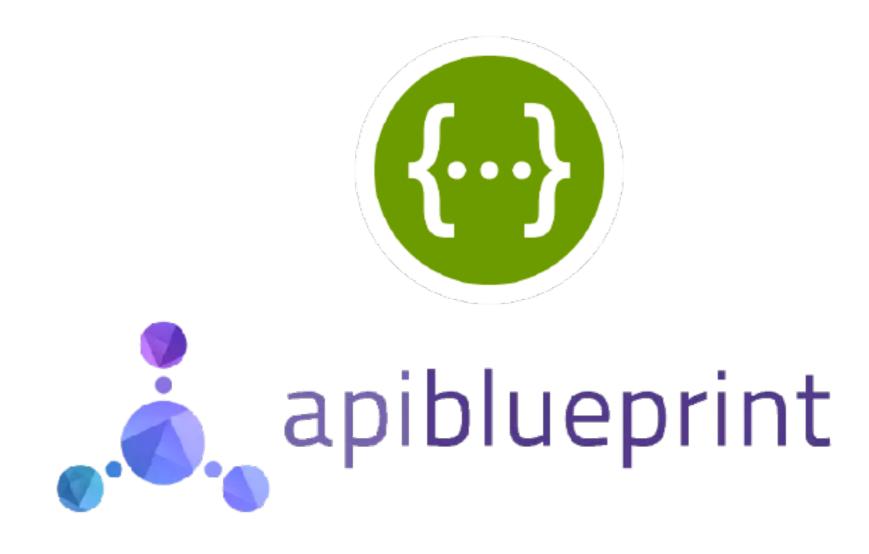
Use to control how many requests a given consumer can send to the API

HTTP Header Name	Description
X-Rate-Limit-Limit	# of requests allowed in a given time interval
X-Rate-Limit-Remaining	# of requests remaining in the same interval
X-Rate-Limit-Reset	the time when the rate limit will be reset



9. API Documentation

Swagger, API Blueprint





More ...



GraphQL



Why we need to test?

Help you to catch bugs
Develop features faster
Enforce modularity of your project



But, It's take time to learning and practice!!



Goals

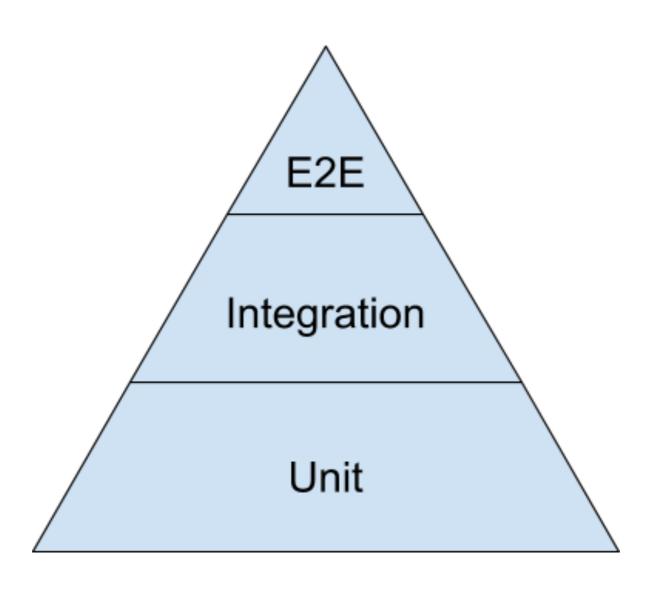
How to **THINK** when and where you should test



Type of testing

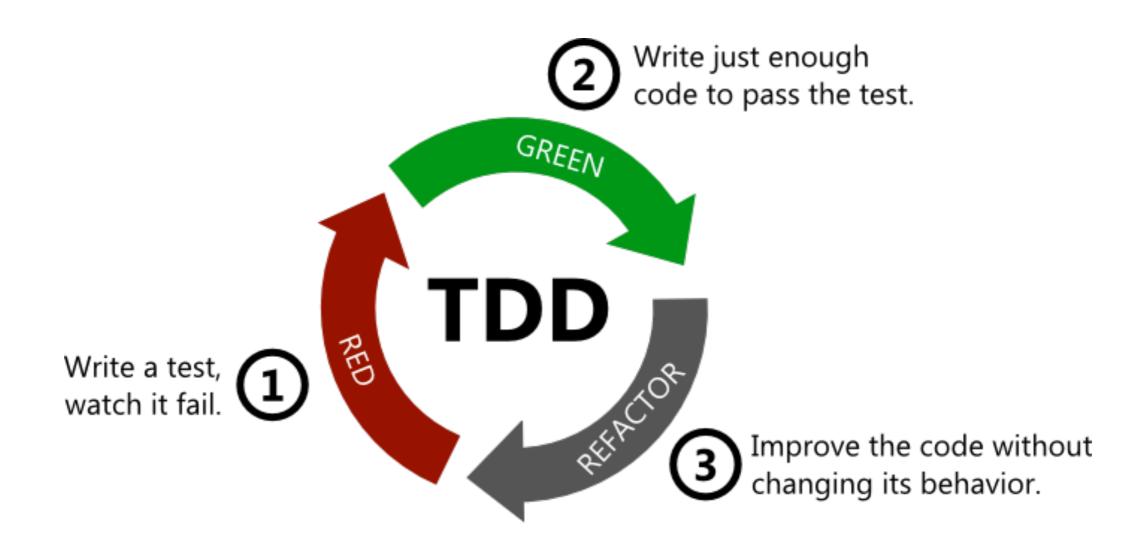


Testing Pyramid





Test-Driven Development





Workshop

