

API Development with Swagger

fred@willerup.com



LeanLaw - helping lawyers create lean practice

- Started by Gary Allen (Givens-Pursley)
- Proof-of-concept by RoyalJay
- Angel investment this summer



LeanLaw - software for lawyers

- .NET WebAPI with Angular front-end
- Chrome app and Gmail extension
- Outlook add-in
- nodejs microservice
- Integrations: Google Apps, Quickbooks, ...
- CD using Azure and TeamCity

Enough about me... Let's do this!

- swagger the **language** for spec'ing APIs
- the swagger **editor**
- swagger for online **documentation** (UI)
- auto-generating **client libraries** (C# and js)
- generating **server-side** code
- **spec-first** vs code-first workflow

<http://github.com/willerup/swagger-demo>

When I say API, I mean

REST + JSON (+ OAuth2)

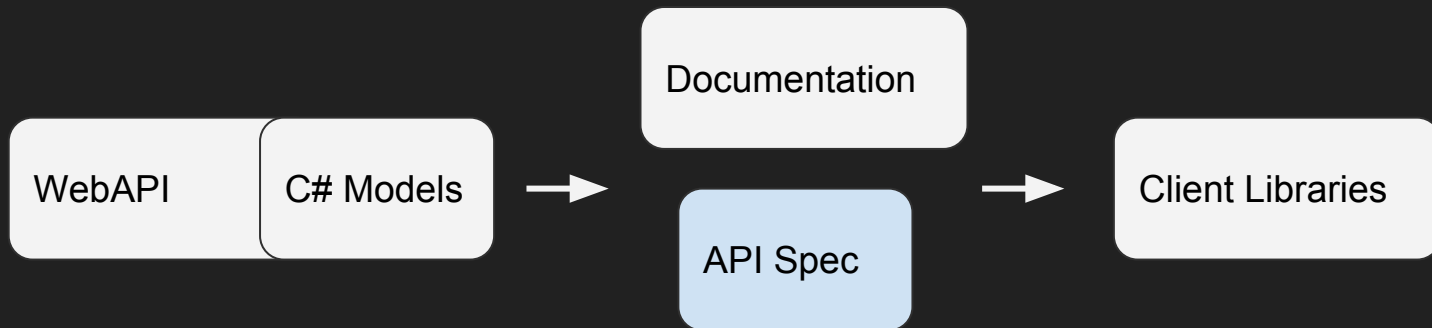
Swagger ML and editor for spec'ing REST APIs

- Resources: Paths, HTTP verbs, Status
- Parameters: path, query, header, body, form
- Schemas: type(array,string,integer,number,boolean),
format(date), enum
- Tags, Examples
- Security: oauth2/apikey, scopes
- Global parameters
- <http://petstore.swagger.io/>
- Gotchas: operationsId and “required:true” for path parms

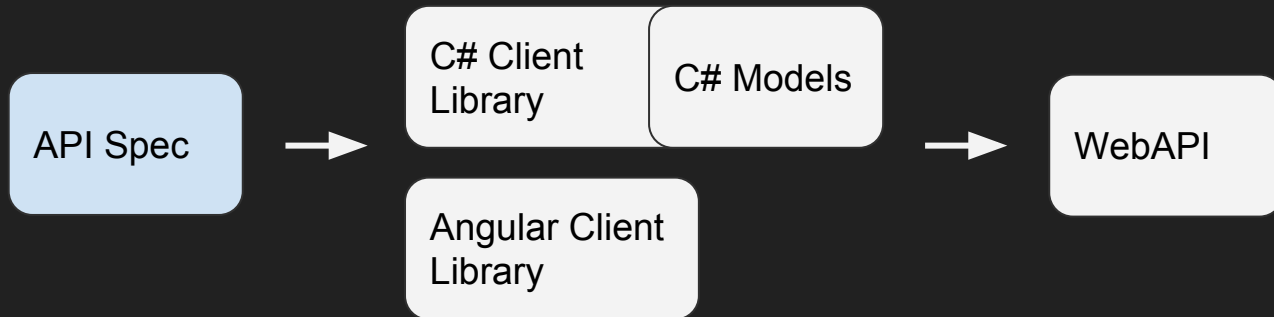
Swashbuckle

- Generates Swagger spec (and UI) from WebAPI
- <https://github.com/domaindrivendev/Swashbuckle>

Code-First



Spec-First

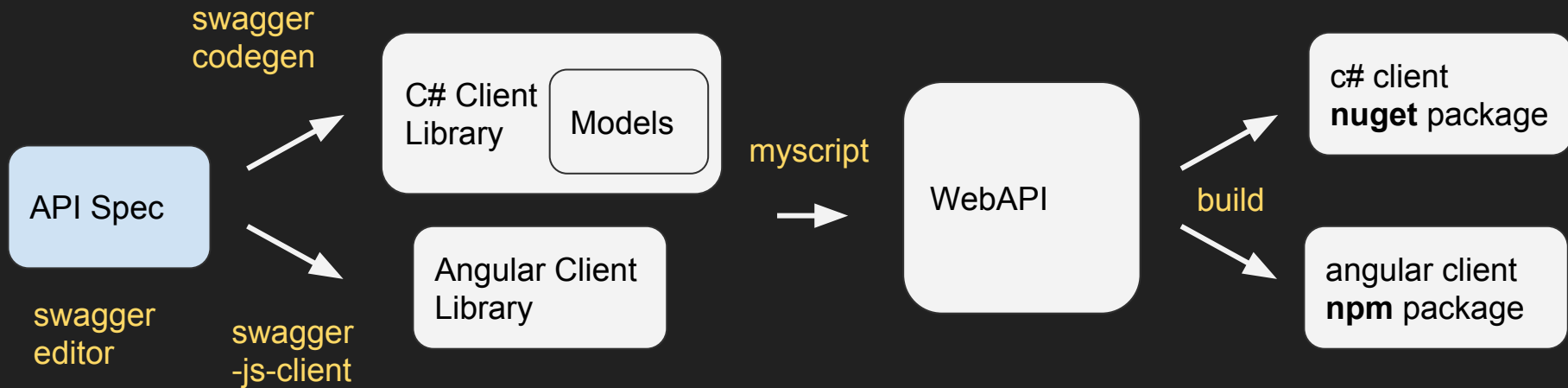


Why API first?

- APIs are the center of a micro-service architecture
- APIs available for third-parties
- Prevents leakage of internal data
- Design - mock - test - build

Why not? More work for simple systems.

Our spec-first flow in more detail



Swagger CodeGen

- Generate client libraries from Swagger spec
- Invoke from editor or run locally (java app)
- Install
 - Packages: RestSharp and Newtonsoft.Json
 - Reference: System.Runtime.Serialization

Javascript

- generate dynamically from URL
 - swagger-js
- or use
 - swagger-js-codegen

Contact

fred@willerup.com /
fwillerup@leanlaw.co

@fwillerup

cell 899-3893

Comparison

Swagger

- YAML, JSON
- Better tools

RAML

- YAML
- Better spec
 - grouping things
 - JSON schema
 - Resources