

# From Gulp to Angular CLI and beyond

Angular Athens Meetup - Aristeidis Bampakos

@abampakos



# who am I

- Front End Web Developer @Plexscape.
- Early adopter of AngularJS (2012).
- Active @github (Angular projects, map visualization libraries).
- Blogging @medium.
- Gaming console enthusiast, novice farmer, free diving.

# αα

#### Introduction

- Real world problem.
- Licensing application in AngularJS (codebase ~ 3000 LOC).
- Official upgrade guide with SystemJS.
- First beta versions of Angular CLI.
- Focus on tooling.
- Move closer to the Angular ecosystem.

# αα Agenda

- Review the AngularJS application.
- Integrate with the CLI.
- Introduce Typescript.
- Bootstrap in hybrid mode.
- Upgrade artifacts from bottom to top (services, components, router).
- Remove AngularJS completely.



#### Step 0: AngularJS application

- AngularJS Angular Material Gulp Bower
- Built with <u>AngularJS style guide</u> by John Papa.
- Inspired by <u>modular (ng-demos</u>) and <u>gulp-patterns</u>.
- <u>Lite-server</u> for development.
- Marvel API





### Step 1: Move into Angular CLI

- Install Angular CLI and copy files from a blank application.
- Remove gulp build tasks (except templatecache).
- Remove lite-server configuration.
- Move images to the assets folder.
- Copy CSS styles to styles.css
- Move JS and CSS references to CLI configuration file.
- Set main property in CLI configuration file.





### Step 2: Move into Typescript

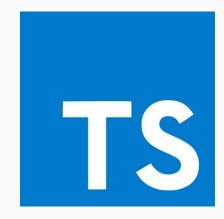
- Rename JS files to \*.ts
- Install types for AngularJS and 3rd party libraries.
- Add typeRoots in TS configuration file(tsconfig.app.json)
- Use let, const and arrow functions.
- Correct any tslint errors.





# Step 2: Move into Typescript (cont'd)

- Turn services and controllers into classes and make the exportable.
- Install AngularJS and 3rd party libraries from node.
- Use requirejs to load application files and libraries.
- Add types to services and controllers.





# Step 3: Bootstrap as hybrid app

- Install **UpgradeModule**.
- Create **AppModule**.
- Implement **ngDoBootstrap** method.
- Remove ng-app attribute from index.html
- Create main.ts and update the CLI configuration file.



## Step 4: Upgrade helper classes

- Use environment files for constants.
- Create global error handler in Angular.
- Upgrade the AngularJS version of logger service.
- ajs-upgraded-providers.ts file.



### Step 5: Upgrade services

- Create CoreModule.
- Convert logger service to Angular.
- Create feature modules.
- Upgrade data access services using HttpClientModule.
- Upgrade http interceptor.
- All services are downgraded.



### Step 6: Upgrade components

- Install Angular Material and create AppMaterial module.
- Upgrade widgets module (rename it to shared).
- Upgrade components in feature modules (some are downgraded).
- Upgrade the AngularJS version of \$state service.
- Create a custom ui-sref directive.
- Refactor layout module to a single component.



#### Step 7: Upgrade router

- Add downgraded artifacts to the main AngularJS module.
- Create routing modules.
- Upgrade components to use routerLink directive.
- Upgrade AppComponent and bootstrap it in Angular.



### Goodbye AngularJS

- Remove **gulp** completely.
- Remove upgraded AngularJS providers file.
- Remove **UpgradeModule**.
- Remove ngDoBootstrap implementation.
- Remove downgraded artifacts.
- Do not set AngularJS in main.ts





# Questions



# Thank you!

- Angular Athens demo: <a href="https://github.com/bampakoa/angular-athens-demo">https://github.com/bampakoa/angular-athens-demo</a>
- AngularJS style guide:

https://github.com/johnpapa/angular-styleguide/blob/master/a1/README.md

- modular: <a href="https://github.com/johnpapa/ng-demos/tree/master/modular">https://github.com/johnpapa/ng-demos/tree/master/modular</a>
- gulp-patterns: <a href="https://github.com/johnpapa/gulp-patterns">https://github.com/johnpapa/gulp-patterns</a>
- Marvel API: <a href="https://developer.marvel.com/">https://developer.marvel.com/</a>
- Angular upgrade guide: <a href="https://angular.io/guide/upgrade">https://angular.io/guide/upgrade</a>