Angular 5 Training Course Outline

Javascript review

- **Variables**: var and let
- Loose/strict equality, truthy/falsy
- **Arrays**
- **Objects**, JSON
- Copy by reference/value
- **Functions** and ES6 arrow functions
- **Functional** techniques: forEach, map, filter, reduce.
- **ES6** constants, destructuring, classes, modules, template literals.

Typescript

- Types, Interfaces, Classes, Generics

Angular

Exercise a-intro
- Create a **minimal** Angular app using the Angular CLI.
- The **structure** of an Angular app.

Exercise b-shop
- Iterate over an array using **ngFor**.
- Add a currency **pipe**
- Add a **(click) event**
- Conditionally display/style using **ngIf** and **ngClass**.

Exercise c-compose
- Angular components are **composable**.
- Using **ng generate** to add a new component.
- Pass **inputs** into a component.
- Emit **output** events from a component.

Exercise d-translate
- Convert a jQuery translation example into Angular

Exercise e-di
- Create a new **service** to read JSON data using HTTP.
- Connect the service to a component using Dependency Injection.

Exercise f-pipe
- Built-in Angular pipes
- Create a custom pipe.

Exercise g-observable
- Introduce Observables using JS
- Implement an Observable in Angular.

Exercise h-hike
- Take a skeleton app and build the view by composing components together.

Exercise i-vote
- Use GET/PUT with HTTPClient to read/write to a Node server.

Exercise j-forms
- FormControls , FormGroups
- FormBuilder
- Validation
- Custom validation

Exercise k-router
- Define an Angular router.
- Route parameters
- Nested routes
- Guards.

Exercise l-lifecycle
- Working with component life cycle hooks
- Creating a stateful pipe with onDestroy.

Exercise m-game
- Working in teams, port a word game from plain JS to Angular.

Exercise n-testing
- Unit testing with Jasmine and Karma

Exercise o-directive

- Create a custom directive.
- Communicate between the directive and its parent component

Exercise p-redux

- Centralise state using the Redux pattern.

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