Architecture Planning Template Example

Dan Wahlin

@DanWahlin



App Overview	App Features	Domain Security
Domain Rules	Logging	Services/ Communication
Data Models	Feature Components	Shared Functionality



App Overview

- Overall Goals
 - Support viewing and editing customers
 - Support viewing orders
 - Secure customer edit form
- Key Requirements
 - Display customers with card/grid option
 - Support filtering, sorting, and paging customers
 - Map customers (Google maps)
 - Customer editing support (CRUD)
 - Display orders with paging
 - Support login/logout with email/password



App Features

- Customers Feature
 - Display customers
 - Support card/grid modes
 - Display customers on map
 - Support filtering/paging/sorting
- Customer Feature
 - Create/Update/Delete customer entity
 - Display customer details/orders/map
 - Form provides validation
- Orders Feature
 - Display orders
 - Support paging
- Login/Logout Feature



Domain Security

- Email/Password for initial release
- Consider tokens for future release?
 - HttpInterceptor could be used to set auth header
 - What option will be used for token issuer?



Domain Rules

- Each order must be associated with a customer
- Order totals should be shown for a given customer
- Customer edit form should validate data entry
- User must login to access customer edit form (route guard)
- Validate login credentials



Logging

- Create an Angular service for logging
- Consider using Azure Applnsights
 - Wrap existing Applnsights client SDK
 - Handle logging to different areas based on dev/stage/prod:
 - Console logger
 - AppInsights logger



Services/Communication

- RESTful Service will be used (Node.js)
- Angular Services
 - Data Services: Use HttpClient
 - Customers/Orders
 - Login/logout (auth)
 - Sorting service
 - Filtering service
 - Logger service
 - Mediator/EventBus if needed
- HttpInterceptor will set token for HTTP requests if tokens used (GET/PUT/POST/DELETE/PATCH)



Data Models

- Application models/interfaces:
 - Customer model/interface
 - Auth model/interface
 - No order editing so include with Customer?
- Create a class or just use an interface on the client-side?



Customer Model

id number firstName string lastName string ... orders Order[]



Feature Components

Customers

Display/filter/sort/page customers (need data service)

Customer

Create/read/update/delete customer (need data service and modal needed for deletes)

Orders

Display/page orders

Login

Login form and logout functionality (need auth service)



Component UI Layout

Customers | Orders | Login

Customers

Toolbar

Display Cards and/or Grid

Loads immediately

Lazy Load Feature?

Component Structure?



Shared Functionality

- Toast/Growl (success/information)
- Modal dialog
- Google maps
- Pager
- Menu
- Grid/Card (used more than once?)



Shared Functionality (3rd party)

- Are we going to use any 3rd party components? Research a few options such as:
 - Prime Ng
 - Ng Bootstrap
 - Angular Material
 - ag-grid

