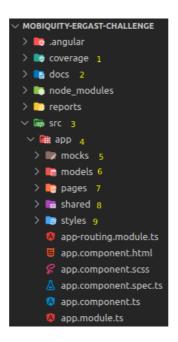
This document is divided in 4 sections:

- Section 1 aims to explain the project structure
- Section 2 shows the aplication components
- Section 3 shows the aplication ErgastService
- Section 4 Assumptions

Section 1 – Project structure



1.1 – coverage

In this folder you can find the report (index.html) created each time the unit tests run (you can generate it in your terminal, running the following command: *ng test*).



1.2 - docs

All relevant documentation for this project must be saved here.

1.3 - src

This is the source for the entry point for the SPA.

Assets and environment configurations must be placed inside this folder. You will also find the global styles.scss here.

1.4 - app

This is the main component of this application. The routing configuration is available here.

1.4.5 – mocks

All necessary mocks for development or running unit tests must be here.

1.4.6 – models

Here you will find the entities contract representation.

1.4.7 - pages

In this folder, we are storing all page-wrapper components. For each application page we must have a component representing this page here.

1.4.8 – shared

Components, services, etc., that might be used in more than one place, *probably* should be here.

1.4.9 - styles

Shared styling, such as color palette.

Section 2 – Application Components

The current application components are:

- 1 main (page)
- 2 race-winners (page)
- 3 header (shared)
- 4 list (shared)
- 5 spinner (shared)

2.1 - main

This component creates a main page for the application. This will be the component rendered when the application loads the first time (with the root url).

It displays a list of years from 2005 until now, and when we click on any of these, it sends us to another route (/race-winners/yearNumberHere).



Main Page

2.2 – race-winners

In this component, we have a list with all race and its winners for a given year. It is currently displaying the World Champion highlighted when available.



2.3 - header

The header component is a shared component used mainly to display a title and provide a button to navigate back to the previous page.

Other components can send urls to the goBack stack or a title to be displayed by using the header service.

2.4 - list

This component works as a High Order Component, which receives an list of items and the <ng-template> item with the UI implementation of the item list.

2.5 - spinner (shared)

A simple html/css spinner to be used when loading / rendering / fetching data.

Section 3 - ErgastService

The ErgastService is the implementation for the F1Service (src/app/shared/services/interfaces). It creates the concrete resolution for the following operations:

- + getSeasonsBetweenYearInterval
- + getSeasonsFromYearUntilNow
- + getWorldChampionByYear
- + getAllRacesWinnersOfAYear

Section 4 – Assumptions

To code this application according to (frontend-challenge-description.pdf), the following were taken as true:

- The first year for a F1 seasons is the same as it is on the database, 1950 and this will never change
- The data returned is always available, therefore I am deep accessing object without throwing exceptions for null-ish fields.
- For the current year, some races will still be pending, therefore they will have no winners. Also, the world champion of a given year will be available only after the last day of the last race.