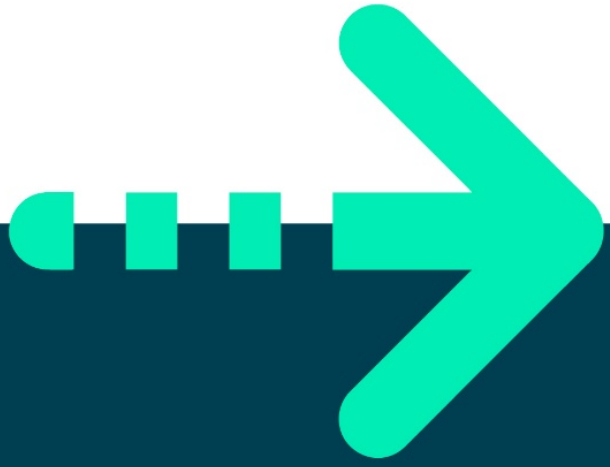
Building Web Applications with Angular

HACKATHON GUIDE



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Overview

In this Hackathon you will be presented with the requirements to create a web application for QA Cinemas. The skills and knowledge needed for each part will have been covered in the course.

Objectives

To use the skills and knowledge gained so far to create an Angular application that displays information and collects data from a form. The data for the application to display will come from an external source of data (i.e. a RESTful service).

Application Overview

QA Cinemas has approached us to create a modern looking web application promoting their cinemas. In the first iteration, they would like to be able to provide their customers with general information about their cinemas, schedule and opening hours and allow them to subscribe to receive some promotional materials.

Part 1 – Application Layout and Functionality

In the initial discovery, the client has asked for three views to be included in the application. The first, arbitrarily called 'Home' should display information about the cinema. A 'Schedule' view should display the cinema's opening hours and the movies that are currently on show. The third is a 'Sign Up' view that presents the use with a form to complete to send to the application so that they can register for promotional materials. Submission of the form should generate a new User and log their details for the console.

This application is to be a proof of concept to the client so no external data need be accessed.

Use a TDD or BDD methodology to ensure the quality of the product.

Application Header

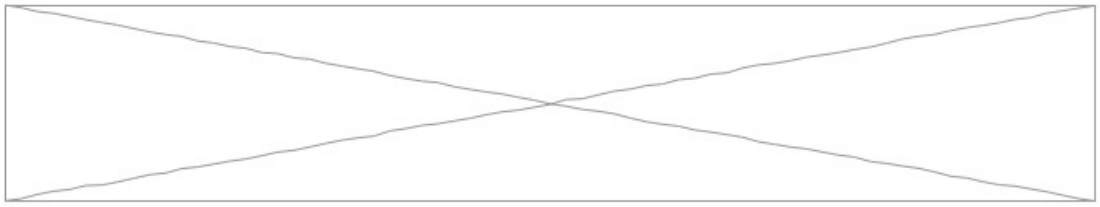
The application header should contain the QA Logo along with Navigation links to Home, Schedule and Sign Up:

Application Footer

The application footer should have a horizontal line at the top to separate it from the content and contain the text © QA Cinemas 2019-.

The ‘Home’ View

The Home view should contain a banner image at the top and then a section of text. The first and second sections of text should be broken up with 3 images in a row. Images and text to use are provided. The banner image should scale on smaller devices and the separator images should display one on top of the other.



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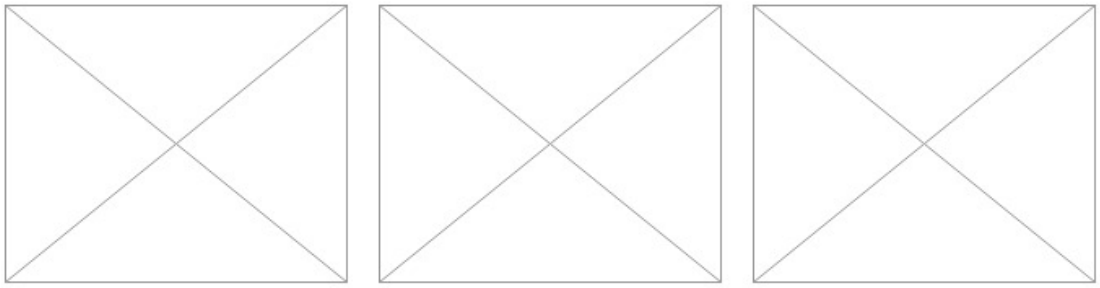

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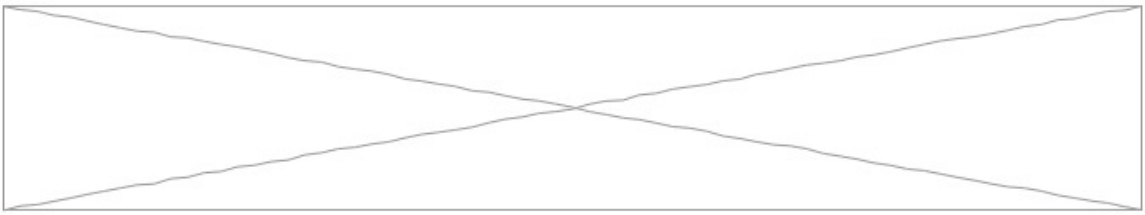
The ‘Schedule’ View

The Schedule view should contain a banner image at the top and then a table that displays the given opening times. Under this table there should be another table that displays the provided film information. This table sits beneath a heading of 'What's on'.



Monday - Thursday	16:30-21:00
Friday - Saturday	16:30-22:00
Sunday	16:00-21:30

Copyright

What's on

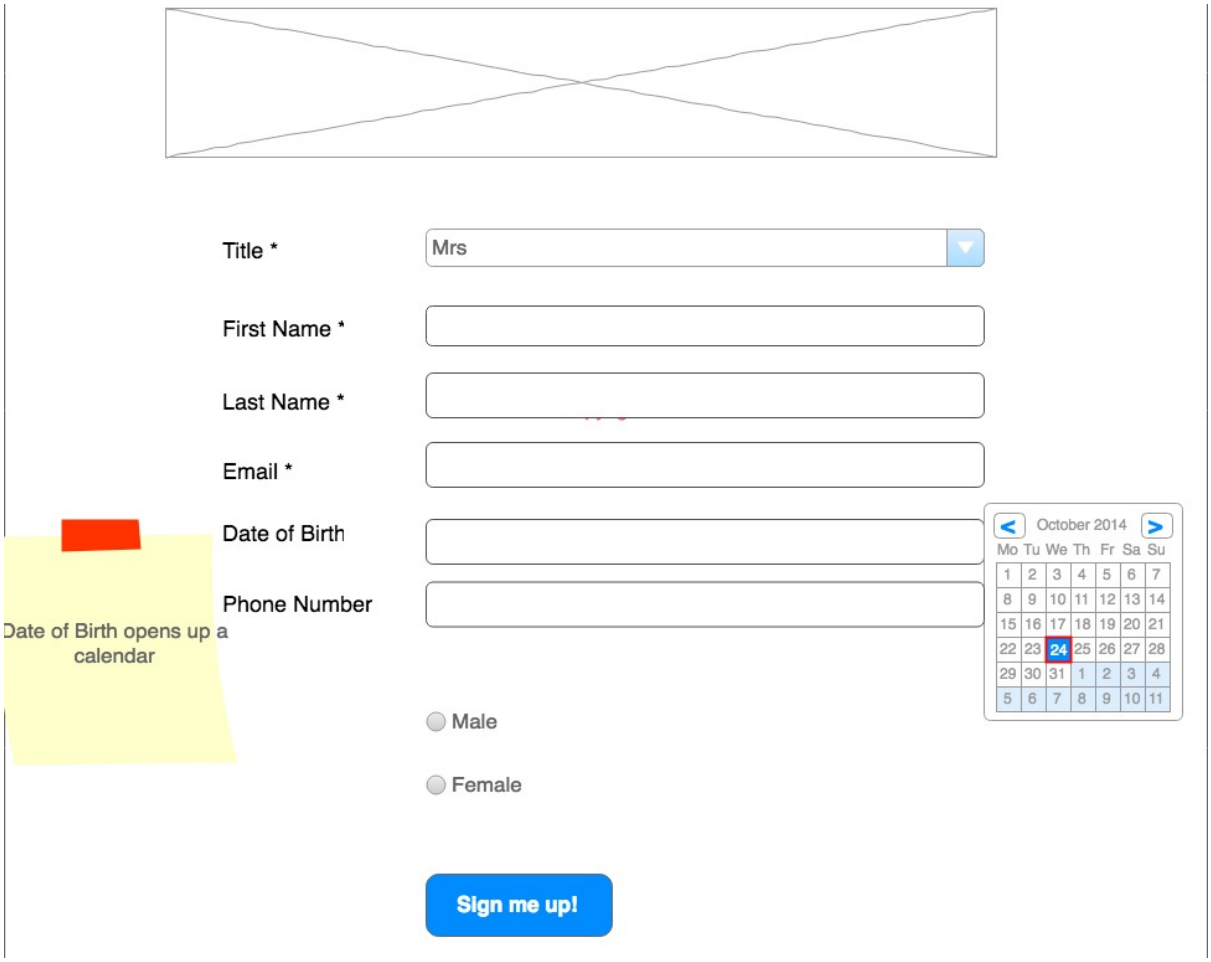
Movie Title 1	Time	Thumbnail 1
Movie Title 2	Time	Thumbnail 2
Movie Title 3	Time	Thumbnail 3

The ‘Sign Up’ View

The ‘Sign Up’ view should contain a banner image at the top and then a form that allows the user to enter some information. Where possible the form should be validated so that:

- Name fields can only contain letters, hyphens and apostrophes and must at least 2 characters and no more than 25.
    - A validation message should appear if the value entered is not valid.
- Emails must be properly formed (i.e. a string followed by an '@' then at least 2 strings separated by a '.') and be of at least 5 characters and no more than 50.
    - A validation message should appear if the value entered is not valid.

The Date of Birth field should reveal a calendar.



The 'Sign me up!' button should be disabled until the form is valid.

During Part 1 of the Hackathon, the button should intercept the default action and log the values on the form to the console.

Mock Data

The object representations below are examples of objects that will be provided by the RESTful service - the _id field is provided by the database. A JSON file with this data in it is supplied in the HackathonStarterFiles folder as cinemaInfo.json. It is also supplied for static import as cinemaInfo.js from the folder src/assets.

Opening Times

```
[
  {
    _id: "5ceeb04eebd86314c40a25b9",
    days: "Monday- Thursday",
    times: "17:00-21:00"
  },
  {
    _id: "5ceeb077ebd86314c40a25ba",
    days: "Friday-Saturday",
    times: "16:30-22:00"
  },
  {
    _id: "5ceeb08bebd86314c40a25bb",
    days: "Sunday",
    times: "17:00-21:30"
  }
]
```

Film Data

Film data will be presented in the following way:

```
[
  {
    _id: "5c9e51c24c6ee53ff09d5d01",
    title: "King of Thieves",
    synopsis: "King of Thieves Synopsis",
    cast: "King of Thieves Cast",
    directors: "King of Thieves Directors",
    showingTimes: "17:30, 20:00",
    releaseDate: "2019-05-27T00:00:00.000Z",
    filmStatus: "1",
    img: "./assets/KingOfThieves.jpg"
  },
  {
    _id: "5c9e51c24c6ee53ff09d5d02",
    title: "The Predator",
    synopsis: "The Predator Synopsis",
    cast: "The Predator Cast",
    directors: "The Predator Directors",
    showingTimes: "17:30",
    releaseDate: "2019-10-27T00:00:00.000Z",
    filmStatus: "1",
    img: "./assets/ThePredator.jpg"
  },
  {
    _id: "5c9e51c24c6ee53ff09d5d03",
    title: "The House with a Clock in its Walls",
    synopsis: "The House with a Clock in its Walls Synopsis",
    cast: "The House with a Clock in its Walls Cast",
    directors: "The House with a Clock in its Walls Directors",
    showingTimes: "20:00",
    releaseDate: "2019-10-27T00:00:00.000Z",
    filmStatus: "1",
    img: "./assets/TheHouse.jpg"
  }
]
```

Images

Images to use within the project are supplied in the src/assets folder in HackathonStarterFiles. This can be copied into the same location in your project should you wish.

User Stories

The User Stories have been prioritized and ordered from 1 (most important) to 5 (least important):

1. As a User, I want to be presented with a home page, so that I can see some general information and pictures showing QA Cinemas.
2. As a User, I want to be able to see the opening hours of the cinema, so that I know when the cinema is open.
3. As a User, I want to be able to see the movie schedule for this week, so that I know what is on and at what time.
4. As a User, I want to be able to subscribe to the website using a form, so that I can receive the latest promotions and information.
5. As a User, I want to be able to access the website on any device, so that I can access the information I need on the device of my choice.

Hackathon Part 2 - Services

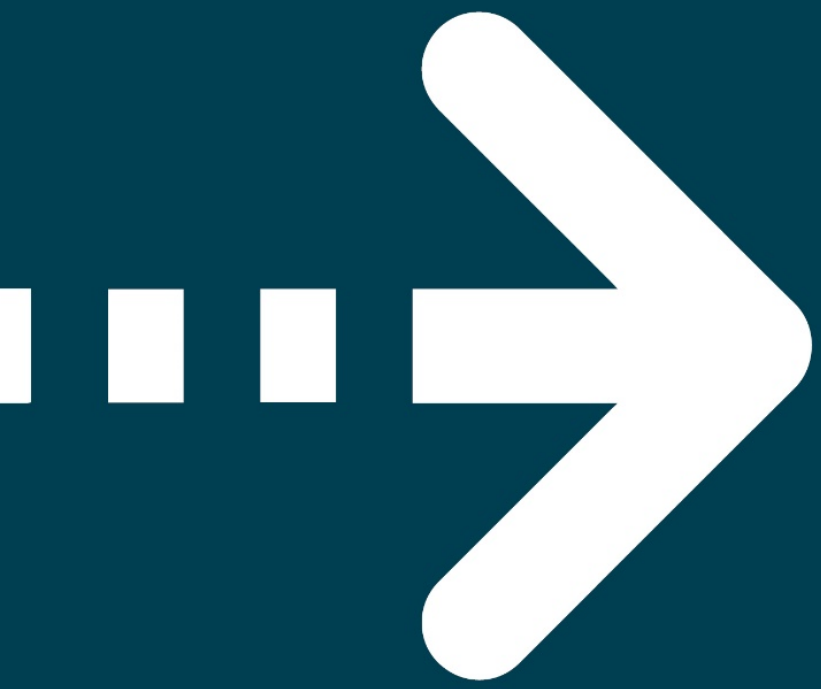
The client was happy with the proof of concept provided at the end of the last sprint.

The requirements are now to add the business logic to the application. All data provided for opening times and films should be obtained from a RESTful service that uses the paths http://localhost:3000/openingTimes and http://localhost:3000/films respectively.

A sign up submit should POST a new user to the path http://localhost:3000/signup.

Hackathon Part 3 - Routing

The final iteration of the product is to add routing so that:

- The Home component should be displayed on the application root route
- The Schedule component (including the Opening Times and What's On components) should be displayed on the route /schedule
- The Sign Up form should be displayed on the route /signup

For usability, the form should not be navigated away from unless the user confirms that this is the action they wish to take.