Programming Assignment

Build a simple cross-platform mobile app that lists episodes of the popular TV show Futurama

The assignment consists of three components; 1) a mobile app user interface, 2) a simple API, and 3) a database. The requirements for each part are described in the sections below.

With relevant prior experience, it should be possible to complete the assignment in 6-8 hours, so be aware that if you spend significantly more time than that, you may be doing more than we expect. Please provide the source code in a zip file emailed to kristian@yourlocal.org. You can include some notes about your solution and the choices you have made, including unresolved issues or shortcuts you took due to time constraints.

User Interface

The mobile app must be built using Ionic or Ionic 2, so that it works across Android and iOS. The main page of the app should display a list of Futurama episodes ordered by air date. The app should load the first 50 episodes when it is launched. Each item in the list should have the following information about an episode: Image, Name, Air date.

When the user clicks an episode in the list, the app should display a detail view, which contains the following information about the selected episode: Image, Name, Air date, Airtime, Season and Number. There should also be a back button, so the user can navigate back to the list of episodes.

Optional additional work: Add functionality so that when the user scrolls down the list, additional episodes are loaded dynamically in batches of 25. Add your own CSS styling to the app or override parts of Ionic's default styling.

API

The app should fetch episode data from an API. Create the API as a REST service running on Node.js using the Express framework. You can use other additional frameworks as you see fit. The service should have a single endpoint, which returns JSON containing episode data. The service should support one or more arguments controlling which episodes are included in the response.

Database

The service should retrieve the data from a MongoDB or PostgreSQL database. Use the dataset found here to populate the database:
http://api.tvmaze.com/singlesearch/shows?q=Futurama&embed=episodes