

API Testing Fundamentals

Get a headstart on installing the Postman app.

Download the desktop app from <https://www.getpostman.com/> and follow instructions.

Open our workshop Trello board at <https://goo.gl/U8hdro>.

This board is our agenda! We'll move each card as we complete activities.

Please add your questions as they arise to the Questions card in the Participant Questions list.

Workshop Agenda

1 - Getting our feet wet

Let's go to the website for the API we'll be using --
<https://darksky.net/forecast/28.5421,-81.379/us12/en>

We'll be using the forecast endpoint, documented here:
<https://darksky.net/dev/docs/forecast>

In the ****Enter Request URL**** field in postman, type the following text:
<https://api.darksky.net/forecast/0c47af62b75cc3ed47f3e299da4a861c/28.4256818,-81.4345439>

If you prefer, you can get your own key by signing up for a free account at
<https://darksky.net/dev/>.

2- Fundamental - Exploratory Tests

Exploratory testing approach

- Identify the variable parts.
- Identify the testable hypotheses from the documentation.
- Apply Heuristics to the variables (not all of these may be applicable to our example)
 - Zero, One, Many
 - Some, None, All
 - Beginning, Middle, End
 - Too Many, Too Few
 - Relative Position, i.e. content

3 – Fundamental - Functional Tests

We will add an assertion to our GET weather request.

Open a new tab in Postman.

Type or paste your request from 1-GET weather activity.

Click the 'Tests' tab (check out Dan's screen).

First we'll add a test for the status code (Dan will talk us through this).

Then we'll check our response to make sure we're getting the correct expected forecast (can we predict the weather????).

4 - Fundamental - Non-functional Tests

Functional tests can serve double-duty as non-functional tests. Dan shows us how to add a performance test.

5 - Fundamental - “EndToEnd” Tests

We can test business logic by chaining requests together.

In real life, a weather app will give you weather based on either a search for your city and state or by geo-locating you. We'll simulate the location search using the Google Places API, get the latitude and longitude of our location, and feed that lat and long into our weather api.

What other scenarios can we test?