

Estimation. Practice creating test documentation

Assignment

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For the same app [Airport Distance Map](#) : with the requirements I wrote as a guidance:

REQ1: "Users should be able to see the total distance between two airports, placing the markers according to departure and destination."

REQ2: "Users should be able to select an airport as a departure point, and another airport for destination. Users should not be able to select the same airport as departure and destination"

Since I started off without enough information for this app, I will firstly pick a **rough technique**:

Experience Based Technique:

- **Estimated time:** From previous experience with other apps/tests:

Determined the high-level checklist for **REQ1**

"Check if the distance between any 2 airports is displayed correctly, in miles." (**3m**)

Work Breakdown Structure (WBS):

- **To estimate the time:** I will break down the **REQ2** into subtasks.

1. Determined the low-level technique:

Pairwise

2. Writing down the conditions (5m) :

C1 (Departure) : 99

C2 (Destination) : 99

Flight (Possible, Not possible) : 2

3. Creating the pairwise table (40m):

I noticed in the app code that it imports **99 points** for airports, on the map, from this link: [Airports AWS](#)

So $99 \times 99 \times 2 = 19,602$

To reduce the table, I took just two states Georgia (GEG) and Memphis (MEM) and wrote the table for them:

FROM	M1	TO	M2	=====	AIRPORT	=====	FLIGHT
	0		1.660		GEG OR MEM		OK
	1.660		0		GEG OR MEM		OK
	1.660		1.660		SAME AIRPORT		—
	0		0		SAME AIRPORT		—

So $2 \times 2 \times 2 = 8$

But then I reduced the unnecessary columns until I got 4 possible tests :

(GEG to MEM, MEM to GEG, Same airport GEG, Same airport MEM)

Reduced it again to 3 tests:

TC1 : Check if the flight from Georgia to Memphis is possible.

TC 2: Check if the flight from Memphis to Georgia is possible.

TC 3 : Check if the flight is not possible from and to the same airport.

4. Writing down the Test suite in Testrail for each of the 3 tests (15m)

Test cases are here : [Airport distance map - Testsuite.pdf](#) or in TestRail under my test suite.

5. Testing each case in the suite (2m x 3 = 6m)

TOTAL : 1h6m

Three-point-estimation:

Optimistic value 1h6m / Pessimistic value 5h / Realistic value 2h

$$E = (1.6h + 5h + 2h) / 3$$

$$E = 3h20m$$

This would've been nice, but it really took me the whole night :))) to do all of this homework 😊