T8 – Web Development

T-WEB-800

Epic road trip

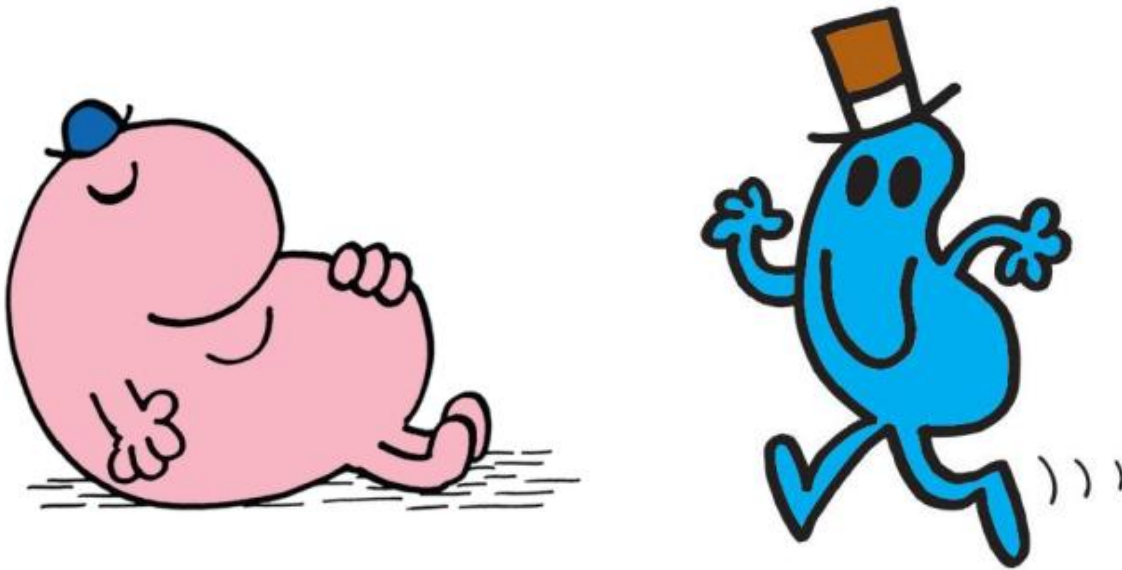Dream & ride

{EPITECH.}

Epic road trip

binary name: epicRoadTrip_$AcademicYear_$GroupNumber.zip
delivery method: Moodle

- The totality of your source files, except all useless files (binary, temp files, obj files,...), must be included in your delivery.

- All the bonus files (including a potential specific Makefile) should be in a directory named *bonus*.

Some are too lazy, and some are too busy: a lot of people can't organize a vacation by themselves...

So, you're going to do it for them, through an amazing trip planner which gathers intel, and suggests events and services!

Users enter one (or more) keywords, corresponding to a location (or elsewhere). Your app takes care of everything else and they only have to choose, chill, eat, drink, sleep, have fun...

This project is ambitious, but you're gonna have to prove to yourselves that you can complete it entirely in a very short time, thanks to the quality and resources that others have already put at your disposal.

Tools and techniques

+APIs & microservices

Your first mission is to find some websites which can easily provide you with tons of intel. Then, learn how to retrieve and display this information on your website, in a way that suits users best.

+Test driven development

You want to become the cream of the crop, and be part of the elite. So, your next mission is testing before implementing! Tests will inform you if your application correctly fulfills the expected functionalities.

For example, check that you are able to retrieve content during a search. The test must be written before implementing the functionality.

> Tools like Jasmine may help you during this process

Specifications

Requirements

With your web application, users can:

- input one (or more) locations
- refine results according to dates|budget|area|…
- get suggestions on cultural and sporting events
- get proposals for accommodation|restaurants|bars|transport
- visualize multiple information/events on a map
- get itinerary suggestions between two points
- get a printable version of users trip's details, with maps
- save their search to reuse or share it

+FEATURES

You will now create your own API. Here are, among others, the constraints that it must respect:

- enjoy (location [, constraints]) -> list of existing events|activities

- sleep (location [, constraints]) -> list of available accommodations

- travel (location [, constraints]) -> list of available transports

- eat (location [, constraints]) -> list of available restaurants

- drink (location [, constraints]) -> list of available bars

You must think about all the informations that defines an event|activity|restaurant|bar|transport.
Each functionality development will start with coding some tests. Once tests are defined, you can implement the functionality. You should add functionalities to include|exclude some constraints in a search.

+DOCUMENTATION

You should give as much as you receive. So you will share your API with others, and you must document it to help them too.

> Tools like Swagger may help you during this process

+AUTOMATION

The purpose of your site is to ultimately combine a number of microservices. Therefore you can add new features to your API as you go.

To make it easy to detect potential future errors during these additions, we suggest that you learn how to automate several tasks such as launching tests, generating documentation (to be completed in writing if necessary) and deploying your production site.

> Tools like Gulps may help you during this process

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+UI / UX

UI and/or UX can make a big difference. Make sure that information is easy to access and to understand.

Your application must be able to be used on a smartphone, so it must be reactive and responsive.

Bonus

You can imporve this project in many ways, including:

- consuming more microservices
- adding other functionalities
- include a payment microservice
- suggest videos of others user experiences
- plan an intergalactic trip from Tatooine to Dagobah
- reverse the process (choose an event => find locations)
- increasing security of your website

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