Distributed Systems
An Automated And Personal Touristic Tour Application Using Google Maps API
Final delivery

Quentin Augrain
Florent Mallard

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Contents

1 Introduction

In the context of the Distributed System Engineering project task, we designed a web-based application using the tools provided by the Google Maps API, that allows a tourist to personalize and optimise is route while visiting a city. The user may enter in the page the places he wants to visit, and the application will provide a optimized path to the several places the user setted, with travelling indications. In this report, we will first present our application, its features and how it is used. Then, we will detail the technologies we used to create our application, with some illustrations. Finally, in the second part of our report, we will conclude on the performance testing of the application.

2 Application

2.1 Presentation

Here we will present the look of our application, and describe its functionnalities. In the FIGURE 6 we can see the welcoming screen of the guide. It has :

1. A title;
2. A data entering zone;
3. A welcoming map.

If HTML5 geolocation is not enabled by default on your browser, or if you ask for each time a website wants to access if, you may see the pop-up in FIGURE 2, asking you to enable this feature.

If you decide to enable it, the welcoming map will display your position, as shown in the FIGURE 3.

Once the welcoming page reached, you can start using the application. It is very simple, you should follow these steps :

1. Enter a starting point;
2. Adding an arrival point;
3. Add the intermediate points you want to reach by entering one by one the points, and clicking the "Add" button.
4. Click the "Calculate button"

The route you should follow is displayed on the map

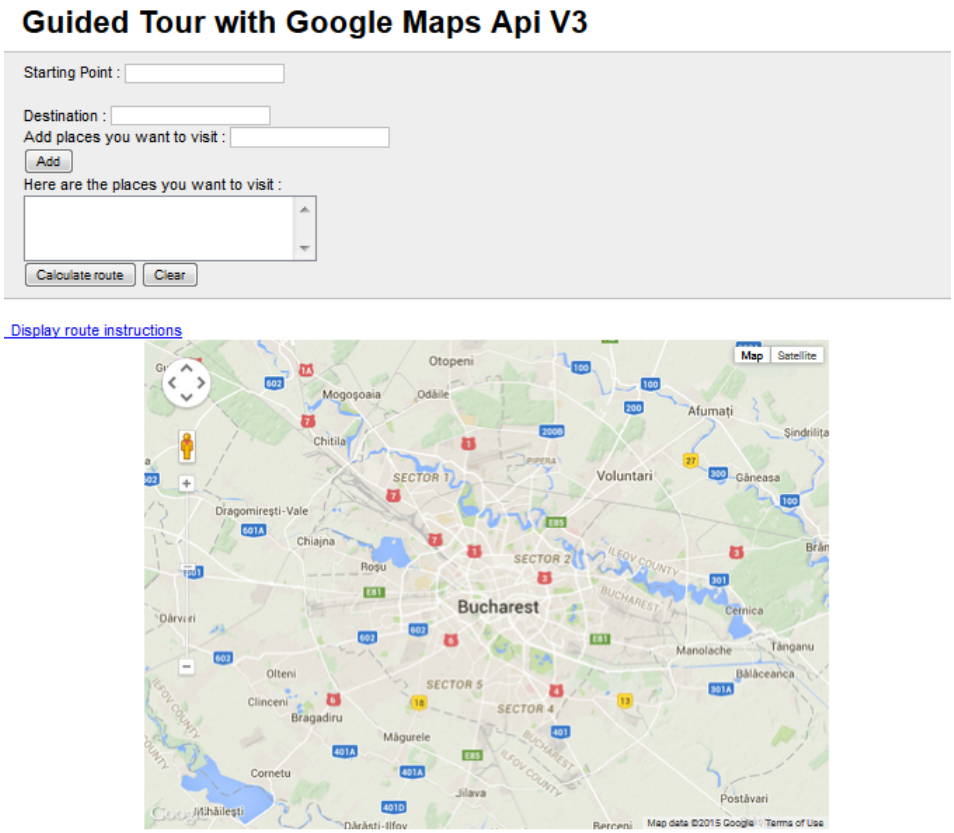

Figure 1: General look of the application.

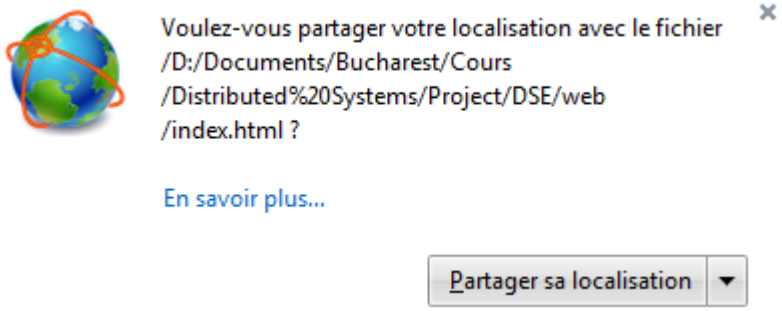

Figure 2: Pop-up asking for your location.

2.2 Technologies

- NetBeans
- Google Maps API
- JS

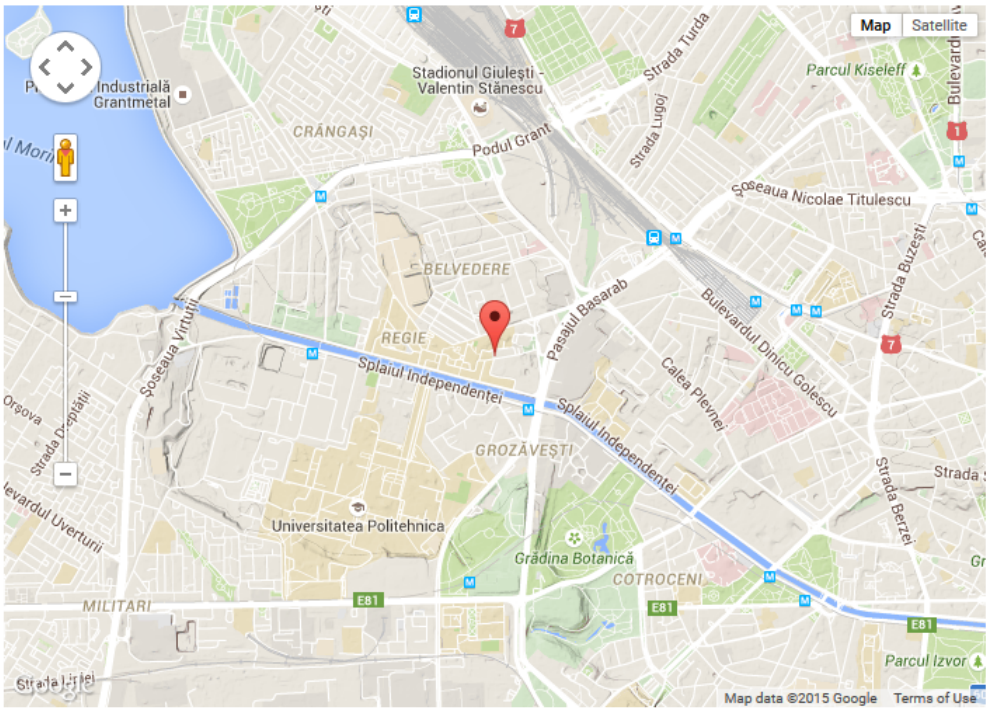

Figure 3: Map showing your position.

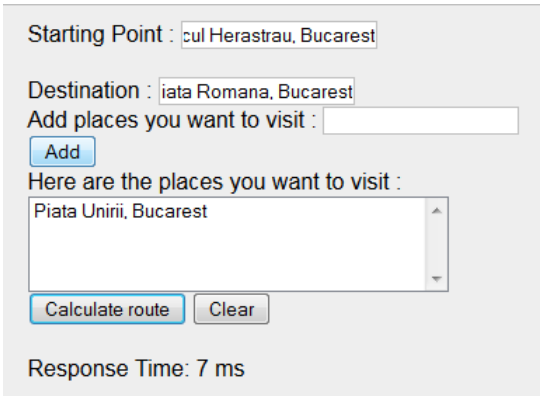

Figure 4: How to use the application.

3 Proof of testing

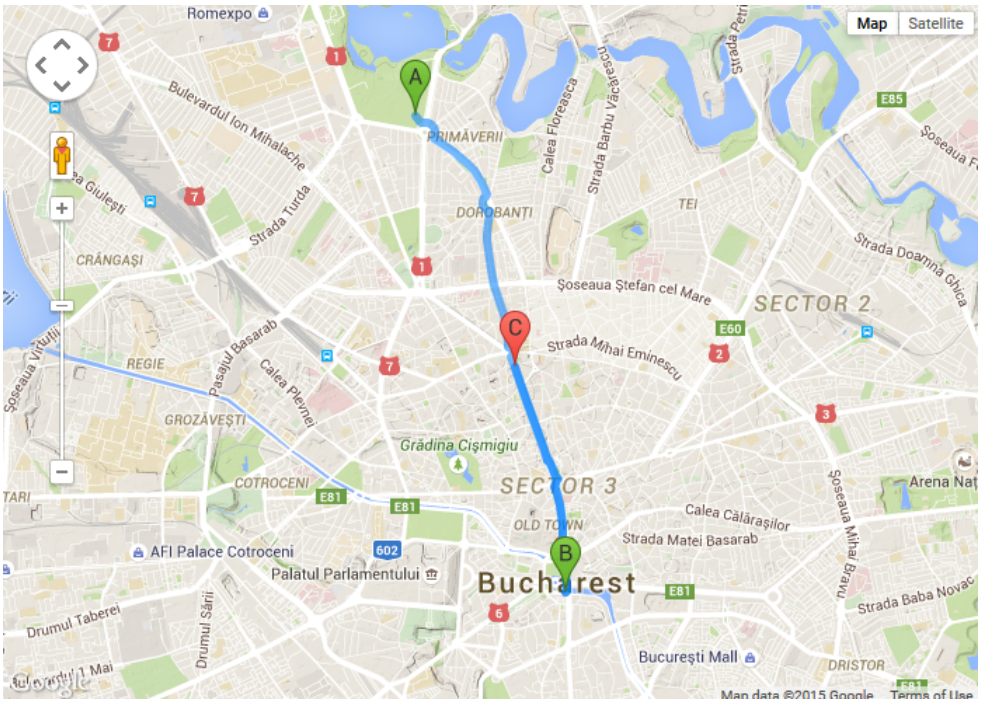

Figure 5: Map displaying your optimized way through the points wanted.

Display route instructions

Walking directions are in beta. Use caution – This route may be missing sidewalks or pedestrian paths.

Parcul Herăstrău, București, Romania

5.3 km - about 1 hour 6 mins

1.	Head **northeast**	5 m
2.	Turn **right**	89 m
3.	Turn **left**	0.2 km
4.	Turn **left**	0.8 km
5.	Turn **right** toward **Strada Roma**	39 m
6.	Continue straight	0.2 km
7.	Turn **right** onto **Strada Roma**	0.7 km
8.	Continue onto **Strada Căderea Bastiliei**	0.6 km
9.	Turn **left** toward **Bulevardul General Gheorghe Magheru/DN1/DN7/E60**	85 m
10.	Take the crosswalk	56 m
11.	Turn **left** onto **Bulevardul General Gheorghe Magheru/DN1/DN7/E60** Continue to follow DN1/DN7/E60	1.1 km
12.	Turn **left** onto **Strada Batiștei**	12 m
13.	Take the crosswalk	0.2 km
14.	Turn **left** toward **Pasajul Nicolae Bălcescu**	22 m
15.	Turn **right** onto **Pasajul Nicolae Bălcescu** Take the stairs	0.3 km
16.	Take the crosswalk	0.3 km
17.	Slight **left** at **Strada Șepcari**	0.2 km
18.	Turn **right**	14 m

Figure 6: You can display the specific directions.