

I- How It Works

Download the file weather.zip from Google Drive and deploy it in any php development platform (wamp/xampp server).

Ps: Wamp Server has been used as development platform with php 7.0.10

Unfortunately, I don't have a secure server for deployment. Javascript geolocation functions only works on secure server as localhost or https. Meanwhile, internet is needed for the api call to work.

I-1 Browser compatibility

Below, there is a list of compatible weather

The application works on certain browser (Image 1).






Browser Support					
The numbers in the table specify the first browser version that fully supports Geolocation.					
API					
Geolocation	5.0 - 49.0 (http) 50.0 (https)	9.0	3.5	5.0	16.0

Image 1: Browser compatibility.

I.2 Browser Version

➤ Check your browser version case of Firefox

-Open your internet browser (Mozilla Firefox) then click on the menu (right top corner, Image 2)

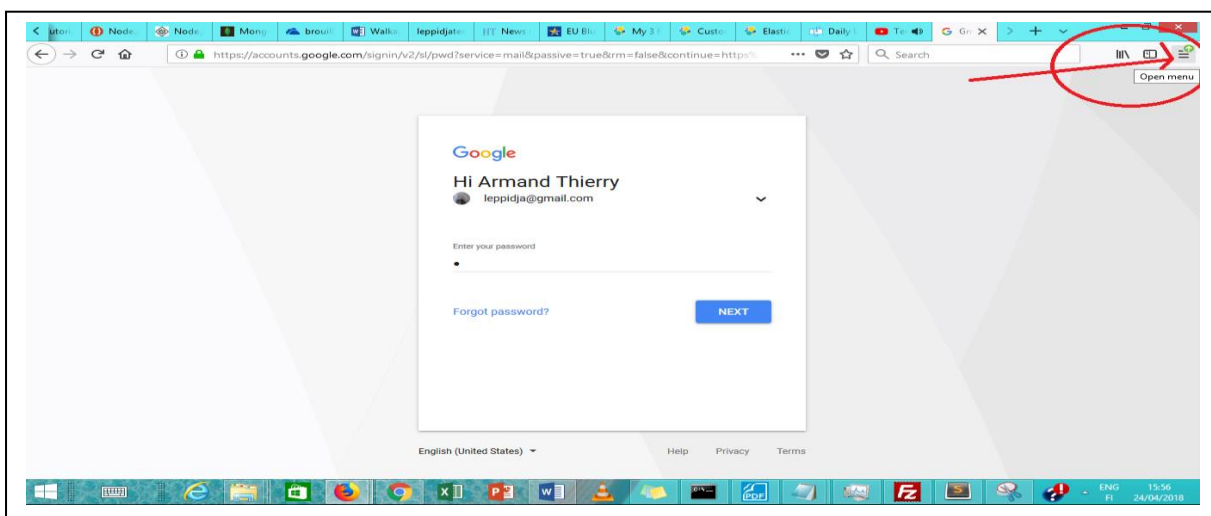


Image 2: Click on the icon (menu).

-Click on help: once the menu is opened, scroll down and click on “Help” as shown on Image 3.

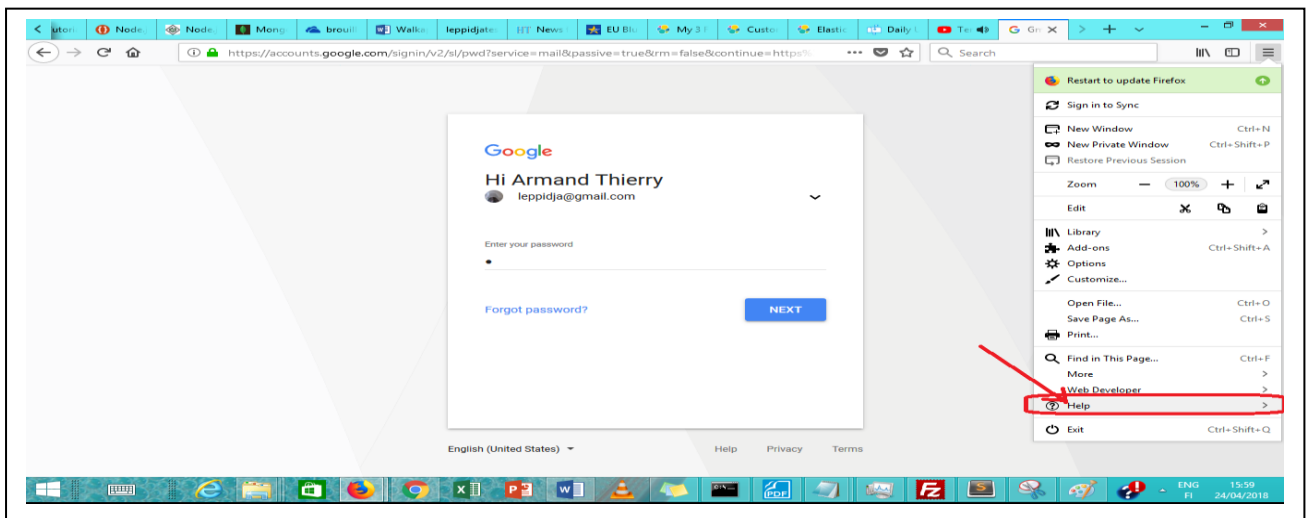


Image 3: Click on help.

- Click on: “About Firefox”: once the sub menu (Help) appears, click on “About Firefox” as shown on Image 4.

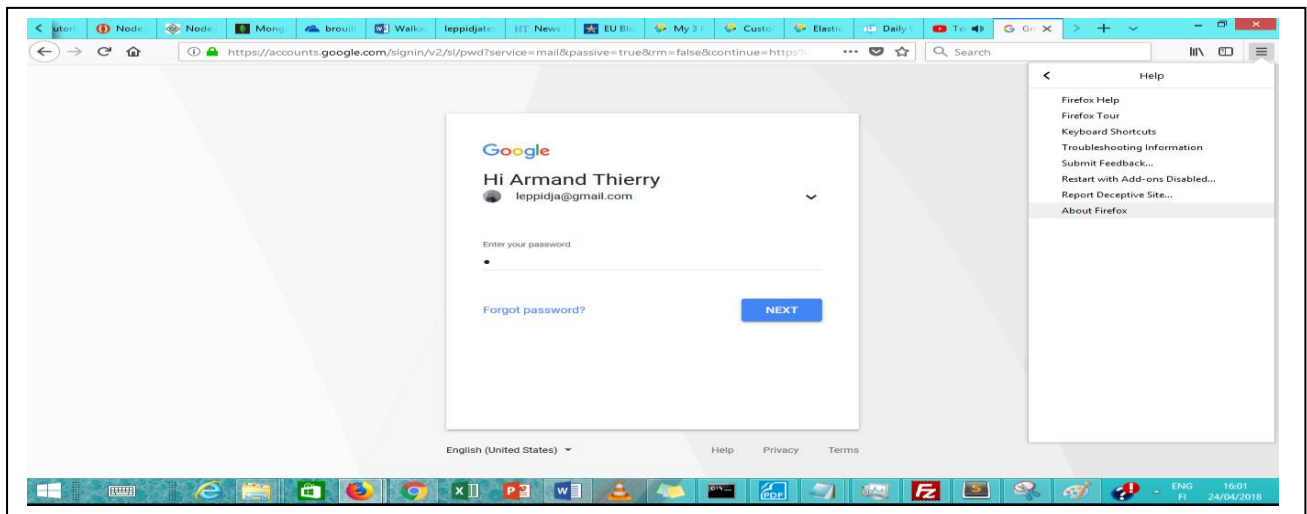


Image 4: click on “About Firefox”.

- Firefox version: Firefox version, is displayed as highlighted (circled in red) below.

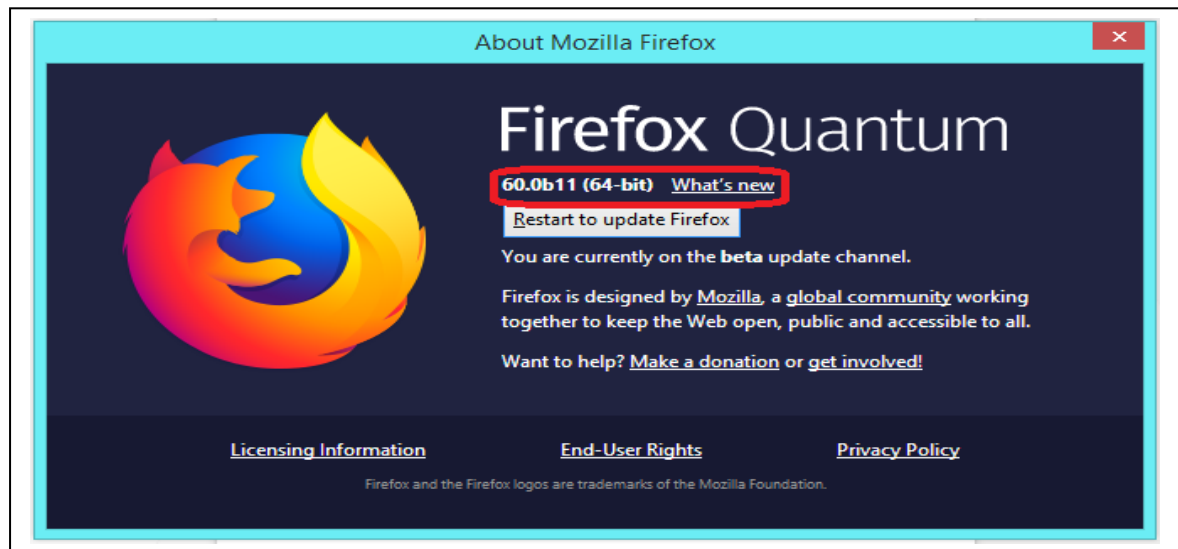


Image 5: Firefox version.

As it can be seen (Image 5), the Firefox version is highlighted in red.

I-3 Allow the browser to access your location

A pop-up message will appear on your browser asking you to allow the application to access your current location i.e.: The message appears in case you have not yet done it previously. Click on allow

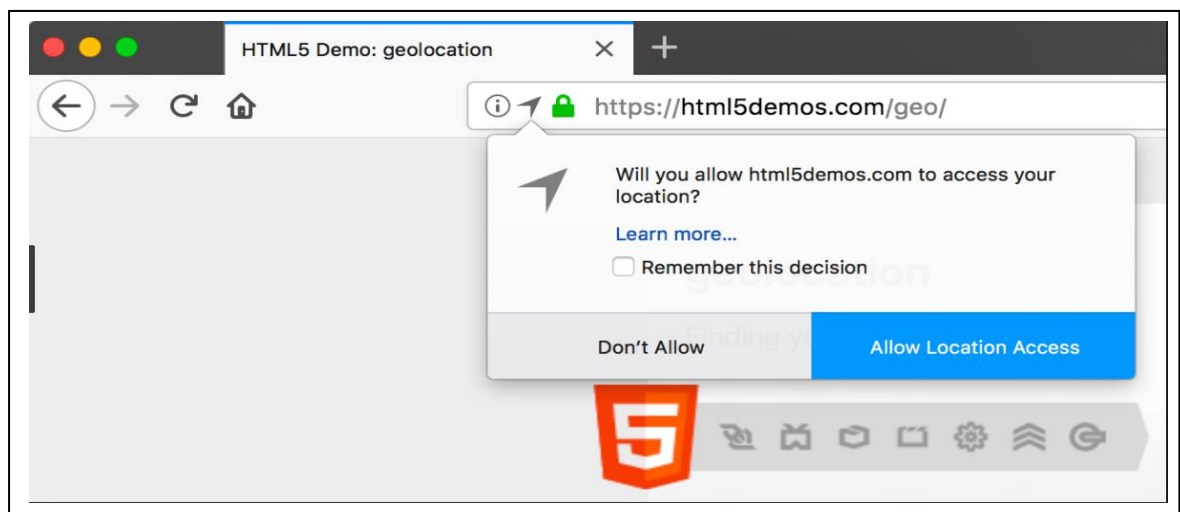


Image 6: Allow your browser to access your location.

I-4-Using the application

- By default, it shows the weather of Helsinki.
- To update data, click on the button: “**Actualize**”. It will display the result of your current location

II- Development platform

Web platform have been used to develop the application.

II-1 Programming language used

Programming language	Version	Usage
PHP	7.0.10	Most of the coding has been done with php
JavaScript	prototype	Getting longitude and latitude
xhtml		Design the interface
Css		Color and style

Table 1: List of programming language used.

II-2 Webservice used

Webservice used	Data format	Usage
http://api.worldweatheronline.com/premium/v1/weather.ashx	xml	Retrieved current data from weatheronline.com based on city and country.
https://maps.googleapis.com/maps/api/geocode/json	json	Getting the city and country name based on latitude and longitude.

Table 2: List of webservice used.

II-3 Testing Environment

- Browsers used

Browser	Operating system	Browser Version	Testing compatibility
Firefox	Windows 8.1	60.0b11 (64-bit)	yes
Chrome	Windows 8.1	65.0.3325.181 (Official Build) (64-bit)	Yes
Chrome	Android 7.0.0; SM-G390 F Build/NRD90M	64.0.3282.137	Not working since, my server is not secured (https)and localization function work. I can't test from distant device

Table 3: List of browsers used for testing

-Servers used for development

Servers	Result
Localhost/weather/ Or 127.0.0.1/weather/	It works perfectly
http://leppidja.netne.net/weather/	Data cannot be actualized since JavaScript localization function: (navigator.geolocation.getCurrentPosition) does not work on non-secure servers.

Table 4: List of browsers used for testing

-Files structure: below in the image 7, the file structure is displayed

Name	Date modified	Type	Size
cache	24/04/2018 19:51	File folder	
js	24/04/2018 12:58	File folder	
index	24/04/2018 21:51	PHP File	5 KB
readme	24/04/2018 22:08	Microsoft Word D...	763 KB
screen	19/08/2013 13:20	CSS File	4 KB
test	24/04/2018 14:36	Text Document	3 KB
WeatherForecast	19/08/2013 13:20	File	71 KB
WeatherForecast.class	24/04/2018 22:08	PHP File	15 KB

Image 7: files structure.

III- Improvements:

III-1 Server

A secure web server is needed so that the application can work properly via distant access. In fact, I tested only on my local server who is considered as secure. JavaScript localization function who helps to retrieve the latitude and longitude do not work on non-secure server.

III-2 Data manipulation

Data manipulation must be improved. In fact, it takes time to create a common function for all the locations. Data retrieved from Google Api have different structure for different location Example:

- Address for Russia, USA, Europe, UK, Africa, Emirates Arabs and so on Are sent differently from Google Api.

IV- Files and references:

Files are available on Github and Google drive:

IV-1 Files

-Github: <https://github.com/armand1git1/weather-forecast>

- Google drive: <https://drive.google.com/file/d/1vnuMdiJXkCvYvv89cTZwURWuSoDILUSf/view?usp=sharing>
On Google drive, we have the complete folder structure as tested in the development environment.

IV-2 References

References	
[1]	Weather api, http://developer.worldweatheronline.com/ ; retrieved: 18.04.2018
[2]	JavaScript locate position, https://www.w3schools.com/html/html5_geolocation.asp , retrieved 20.04.2018
[3]	Geocoding Lookup, https://developers.google.com/maps/documentation/geocoding/ , retrieved 23.04.2018
[4]	https://stackoverflow.com/
[5]	http://php.net/manual/en/

Table 5: List of references.