



DEVELOPMENT OF WEB BASED GIS APPLICATIONS USING ESRI PRODUCTS, CARTO, MAPBOX AND GOOGLE MAPS

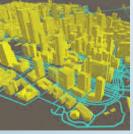
ONLINE TRAINING







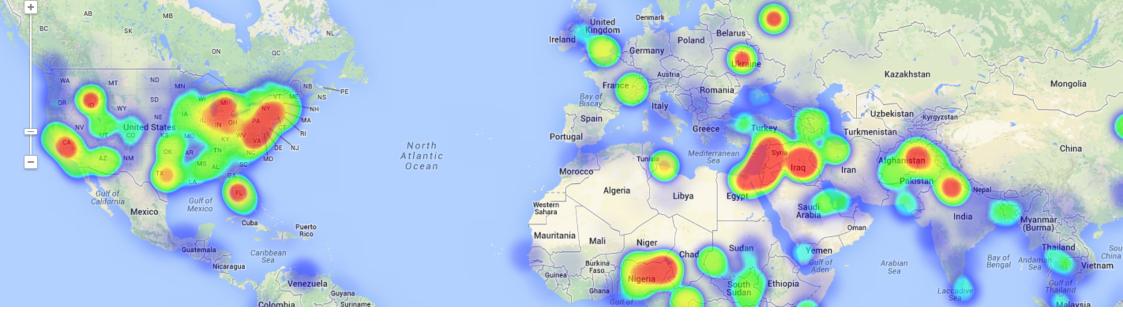












COURSE



The course offers a complete introduction to web programming for GIS applications. The training material its focused on the latest commercial tools and services like ESRI products, Carto or Mapbox.

Throughout the course the student will learn to create complex cartographic viewers using powerful visual tools. In the same time will learn how to build a WEB GIS application using different API tools, exploring the new functionalities and capabilities that they offer.

At the end of the course, students will acquire the necessary knowledge to create their own Web GIS applications which display and analyze geospatial information, in an accessible, intuitive and professional manner.









GOALS



- Offer an overview about the available tools used for the development of Web GIS applications without the need of programming skills.
- · Learn about the basics of Web programming, HTML, JavaScript and display your customized map applications.
- Initiate the students in the development of Web GIS applications using JavaScript programming language.

PERFILES



The course is aimed at professionals of the GIS world who, with knowledge or not of programming, want to know all the possibilities that programming with Open Source Softwares offers.



METHOLOGY

Our online courses, are distributed via Moodle, the world's most popular learning platform. It is a highly flexible Learning Management System that can be used to conduct and access courses, accomplish tasks of practical exercises, interact face-to-face to the teaching staff or benefit of support and resources at any time.

The online platform can be accessed 24 hours a day, in which the student will be able to ask for help at any given moment. The instructors will act as supervisors during all the training process, offering support for any possible difficulty encountered by the students along the course.

The course is structured in different modules, making it easy for the student to search for training material, download information, complete practical exercises and take assessments in order to verify their new gained abilities. The instructors will assist the students throughout all the course period, offering progressive help and information according to their evolution.

INSTRUCTORS



Isaac Perez

holds a Bachelor Degree in Geology at University of Granada and has more than 14 years of experience in the field of GIS and groundwater studies. His Master Degree in Web GIS applications and abilities in handling tools like JavaScript APIs, Open Layers, Google, Python and ArcGIS recommend him as one of the best expert in web programming and development for GIS applications.



Beatriz Ramos López

Beatriz holds a Bachelor Degree in Biology at University of Sevilla, a Master in Geographic Information Systems and another one in Geographic Information Technologies, both of them at the University of Alcala. She has experience in the execution of Web GIS related projects, in the usage of open source software products and in the development of cartographic viewers.



PROGRAMA



INTRODUCTION TO WEB GIS

What is a cartographic viewer? What is Web GIS?

Evolution of Desktop GIS to Cloud GIS. Examples

Different types of applications for the development of cartographic viewers. Examples

Download free spatial data from different sources

How to integrate and process this data in a GIS: QGIS

Evaluation

WEB PROGRAMMING

Basic concepts of HTML, CSS and JavaScript

Getting familiar with Web GIS development environment

How to develop your own application

Debugging tools

Notions about Responsive Web Design

Evaluation

CARTO PLATFORM

What is CARTO?

CARTO Builder installation

Guidelines for the development of a viewer using CARTO Builder

How to upload and use the data. Different types of analysis

Create a viewer using CARTO (CARTO Builder)

Introduction to CARTO.js library

Programming a viewer with CARTO.js library

Examples and API documentation

Evaluation

MAPBOX PLATFORM

What is Mapbox

Introduction to Mapbox Studio

Guidelines for the development of a viewer using Mapbox Studio

How to upload and use the data. Different types of analysis

Create a viewer using Mapbox Studio

Introduction to the Mapbox API GL JS

Programming a viewer with the Mapbox API GL JS

Examples and API documentation

Evaluation

ESRI PLATFORM: ARCGIS ONLINE AND WEB APP BUILDER

What is Web App Builder?

Working with ArcGIS Online. Loading data and services. Functionality

Guidelines for the development of a viewer using Web App Builder

Add and configure widgets

How to use templates

Generate and modify templates

Create a viewer using Web App Builder

Practical exercise

Evaluation





USE GOOGLE MAPS

Introduction Google Maps JavaScript API

Create a basic viewer using Google Maps

Apply styles in a map

Map interaction: controls and event management

Data visualization

Geocoding service

Evaluation

HOW TO DEVELOP A 3D CARTOGRAPHIC VIEWER

How to implement a 3D viewer

List of applications used for the development of 3D cartographic viewers

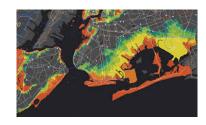
Create and display a 3D cartographic viewer

Practical exercise

Evaluation

FINAL PROJECT

Final practical exercise





Courses.



Calle Fuencarral 158, Entreplanta, Oficina 16-17 28010 Madrid TYC GIS MÁLAGA Avda. Pintor Joaquin Sorolla 137, 1° D 29017 MÁLAGA

TYC GIS MÉXICO Tequesquitengo 4, Fracc. Cuaunáhuac C.P. 62450, Cuernavaca, Morelos. TYC GIS PANAMÁ
Calle Eusebio A. Morales
El Cangrejo
PH Neo Plaza Oficina 2015