

BC106 - Introduction to GIS Web and Online Mapping Course

Course Duration: 4 Days

Training Fee: KSH 32,000 | USD 320

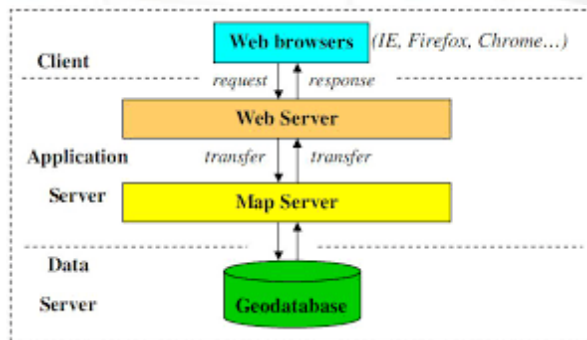
Course Registration: [Register Here>>](#)

1.0. Introduction

Web mapping is basically designing, implementing, generating and delivering maps on the World Wide Web. Putting spatial data on a web map as opposed to an offline map has the great benefit of having the map be seen and its message sent to a much wider audience. You can just spread out the URL of your web map and have people explore your beautiful maps because just like any website, web maps can be reached by anyone from any device that has an internet browser and an internet connection. Web mapping is an invention that has enabled geographical information to be shared, visualized, and edited in the browser in real-time.



1.1. Course Overview



This course introduces learners to processing and distributing of geographic information through the Internet by the use of Geographic Information Systems (GIS). Learners will be introduced to both the theoretical and practical issues related to the dissemination of map and geographic content on the web as well as the development of map mashups and geospatial web services.

1.2. Course Objectives

- To introduce basic concepts of web mapping
- To build and publish basic web maps

1.3. Course Content/Outline

i. Introduction to principles and concepts of GIS and Web mapping

- Desktop GIS versus Web GIS; Types of web maps; Uses of Web maps;
- Understanding OGC web mapping Standards; OGC Web Services
- Web GIS components: Database, Web Services, Web Applications
- Web GIS Platforms: Open Source and Proprietary; Basics of MapBox, QGIS, Google Maps API and LeafletJS
- Web GIS development cycle;
- Evolution and types of web mapping Technology;
- System architecture for web mapping;



ii. Create and Share Web maps on CartoDB

- Getting started with CARTO Builder
- Creating an account and signing in
- Importing data in Carto Builder using supported geospatial formats
- Creating web maps: Change basemaps, adding map layers, apply custom styling, apply analysis elements, enable map elements
- Publishing and sharing your web map

1.4. Case Study: Developing an Interactive web mapping application for Mombasa City

1.5. Expected Outcomes

By the end of this module, learners should be able to:

- Be able to independently build and publish basic web maps
- Be proficient in using CartoDB to create simple web maps
- Gain an understanding of how the web works, as a starting point for learning more

1.6. Training Material

- A laptop/PC
- Access to CartoDB

