



WEB DEVELOPER (SERVICE CONTRACT)

Organization: iMAP
Mailing Address: 10, Rue Stanislas Torrents, 13006, Marseille, France
Program Title: Developing the River Basin Monitoring System for Tigris and Euphrates Rivers in Iraq

BACKGROUND

iMAP is an international nongovernmental organization that provides information management services to humanitarian and development organizations. Through information management, we help our partners target assistance to the world's most vulnerable populations. Our core philosophy is that better data leads to better decisions and that better decisions lead to better outcomes. iMAP's critical support to information value chains helps to solve operational and strategic challenges of our partners in both emergency and development contexts by enabling evidence-based decision-making for better outcomes.

With our Developing the River Basin Monitoring System for Tigris and Euphrates Rivers in Iraq project, iMAP has identified key information needs of National Center for Water Resources Management (NCWRM) to support the design and development of new information management and geospatial tools to centralize information and improve data capture, processing, analysis and visualization for timely dissemination of information to key decision-makers. Through the IM tools developed, iMAP will support the creation of interactive maps, dashboards, charts, infographics and other information products to improve access to information.

A web developer proficient in UI development (front end) will be working closely with the program lead, software developer and IM officer on a Water System Information Management platform that enables easy access for NCWRM of river basin information monitoring facilitating streamlining of data and methods of hydrological data monitoring.

DESCRIPTION OF DUTIES

Design and Tool Development

- Work with program lead to define product design and feature requirements of IM platform
- Perform front-end and back-end coding (as required) and ensure the code can deliver features like automated water data validation, GIS based and graphical visualizations which are specified by project lead.
- Implement best practices in water information system design compatible with desktop and mobile phone environments.
- Design high quality web UI dashboards and UI graphic contents
- Perform constant performance optimizations, fix bugs and test system following agile process
- Write development progress documentation during development stage and assist in preparing a user manual upon completion of platform development

REQUIREMENTS

Education

- Masters/bachelor's degree in computer science, information systems, computer engineering or Software engineering

Experience

- 2 (MSc) / 3 (Bachelor) years of work experience in web development
- Experienced in working on web-based applications and database management
- Proficient understanding of web markup, including HTML5, CSS3
- Experienced in using CSS frameworks such as Bootstrap 5
- Proficient in using client-side scripting and JavaScript frameworks
- Proficient in using asynchronous request handling, partial page updates, and AJAX
- Proficient in using RESTful API, JSON
- Experience in GIS development using QGIS/ArcGIS is an asset
- Detail oriented with excellent problem solving skills
- Strong teamwork and communication skills with the ability to collaborate in a multicultural team
- Having an experience in web platform development for Natural Resources/Environmental management is a plus

DELIVERABLES

All deliverables are to be dynamic on the web page

1. **Map Display:** location of gauging stations, based on the following display extents [40 %]
 - Stations all over Iraq (Dynamic map: Hosted either in open source or Enterprise GIS)
 - Basin based Gauging station display on a separate tab (Dynamically integrated with main display)
 - Different symbology for [Dam, Barrage, Lakes, River]
 - Including USGS FEWS rainfall data with separate tab
2. **Graphical and tabular/chart Display:** Dynamically integrated with maps showing status of gauging stations in terms of fluctuations in water level, discharge and reservoir storage [20 %]
3. **Decision maker summary:** Summary on water availability, automatic report generating button, Data entry form mobile interface customization [30 %]
4. **Customizing Display for different users:** System Admins, Office experts, Data collectors and Decision makers [10 %]