

Caribbean Community Climate Change Centre (CCCCC)

Caribbean Climate Risk Management Framework development

Terms of Reference

Web developer / programmer

BACKGROUND

The Caribbean Community Climate Change Centre (CCCCC) is seeking to recruit a web programmer to implement an interactive, web-based tool ("the tool") that will support the use of a climate risk management framework being developed for the Caribbean (Caribbean Climate Risk Management Framework (CCRMF)).

The final characteristics of the CCRMf are currently being defined by project consultants through in-country consultations. Following the consultation period, a final technical specification document will be issued (March 2013) that describes the functionality and architecture of the online tool. A current draft of this specification is attached as Annex A.

DUTIES AND RESPONSIBILITIES

The successful candidate or company will work with the CCCCC Information & Communication Unit under guidance and supervision of the Clearinghouse Manager.

The candidate will be responsible for

- programming the tool's frontend, backend and interfaces according to the final specification
- adjusting and extending the existing PHP and REST based-software stack to accommodate the tool and its functionalities
- implementing the tool and its database on the CCCCC's server and software infrastructure
- testing and adjusting the tool towards a final online version
- delivering a final and approved online version

KEY DEVELOPMENT TASKS

- Install the M-Files API and the tool database on the new project servers
- Develop a scalable PHP based web application that accesses this REST-based API – allowing future changes / additions to be easily implemented
- Linking tool entry point to the existing Ammap mapping module (PHP / Flash)
- managing temporary session variables to parse user selections and influence dynamically driven web content
- Formatting, layout and images for static, dynamic or mixed content web pages
- Interactive web forms allowing user selections of single or multi-select options, driving changes to subsequent dynamic web pages
- Formatting, layout and imagery for output reports, generated as a downloadable PDF

- Search toolkits database to identify links to recommend to the user for given selections of intervention points
- Implement full-text search in Clearinghouse document database using the REST based API
- Controlled access to administrative back end - allowing changes to content and supporting databases, additional entries to toolkits database
- Change and enhance the tool according to project requirements in later phases and user feedback from training workshops
- Ensuring cross-browser compatibility where practicable (and / or browser check to notify user of recommended browsers). It is recommended that compatibility is ensured for the three most popular web browsers: Firefox, Internet Explorer, Google Chrome
- Pre-internal release system testing and bug fixing
- Post-internal release fixing of reported bugs and testing
- Ensuring smooth / error free migration from test to live environment
- Integrate new functionalities and other upcoming tools and data as required
- Give IT support to projects workshops and maintain a user forum if necessary
- add and presents results from the application of the risk framework and the use of the tool online to allow the users to learn from each other and share experiences and knowledge

QUALIFICATIONS

- The person must have relevant education (e.g. a bachelor degree in computer science or related)
- a minimum of 5 years of experience in web software development (HTML, CSS programming)
- A minimum of 3 years experience in PHP programming

KEY SKILLS

The key skills and availability requirements for the developer are presented below. These are based on the draft specification as well as the existing IT infrastructure and environment at CCCCC where the tool is to be hosted.

The developer may use their own environment and migrate to the CCCCC's environment at appropriate stages of the project (e.g. user testing of the beta release). All user testing will be conducted in the CCCCC environment to minimise the risk of introducing unforeseen migration-related errors.

- Flexible and able to work within the requirements of existing IT environment and IT staff at CCCCC
- Target and deadline oriented
- PHP website / software development
- Good knowledge of PHP / HTML / CSS mandatory
- Javascript and ODBC / REST an advantage
- Knowledge of front end web user interface design
- Image manipulation
- Knowledge of map driven web pages (e.g. Ammap) an advantage

- Knowledge of M-Files an advantage (the existing document management system that will connect to the MS Access based tool database and provide a desktop frontend and REST API to access it)
- Browser capabilities / cross-browser compatibility
- Generating reports (PDF outputs)

AVAILABILITY AND DURATION

The duration of the assignment is 12 months. Rapid availability is required – the development work is scheduled to commence in March, working to the following timetable:

- Week 2: basic web interface connected to supporting databases
- Week 5: website forms developed with basic queries implemented (alpha version)
- Week 8: refinement of database queries, implement output PDF reports, refine web pages, public beta release.
- Week 10: incorporating feedback / fix issues from external beta testers. Go Live of final release.

After a release of the first version and the closing of Phase 1 of the project, the developer / programmer will support project activities in phase 2 and 3 and further enhance the tool and integration of the clearinghouse platform.

It is expected that the consultant is required to be in the CCCCC office at about 50 % of CCCCC working days. The rest can be conducted in the home office as long as substantial progress is being witnessed. A desk will be provided.