

INSPECTORATE OF GOVERNMENT

TERMS OF REFERENCE RAPID SMS PROGRAMMER

6 MONTH CONTRACT

1 PURPOSE

This Terms of Reference is for a Rapid SMS Programmer who will be responsible for programming an SMS Corruption Reporting Hotline for the Inspectorate of Government (IG). The Hotline will serve as a system through which citizens in Uganda can immediately report grievances to the IG's office at no cost. During the preliminary months of the contract, the Programmer will be based out of the UNICEF offices in Kampala, Uganda, after which, the programmer will be based from the offices of the Inspectorate of Government. The Corruption Reporting Hotline will be built off of existing UNICEF software; the programmer will be responsible for adapting this software to suit the particular needs of the IG, modification programming based on real use/user feedback, and providing ongoing technical support and maintenance of Rapid SMS projects that involve ICT elements (mobile, web and hardware devices.)

2 OBJECTIVES

- Implement and adapt software for use by IGs office for receiving and analyzing complaints, allowing citizens to report cases of corruption at no cost via an SMS corruption reporting hotline, based on requirements documents, functional specs and user stories
- Provide modification programming, based on real use/user feedback
- Provide ongoing maintenance and technical support for the Inspectorate of Government Rapid SMS projects that involve ICT elements (mobile, web and hardware devices)
- Oversee QA and user acceptance testing
- Produce documentation and automated tests
- Participate in training sessions with senior Rapid SMS consultants at the World Bank and UNICEF, gaining a deep understanding of the software and how to customize it

3 SPECIFIC ACTIVITIES AND DELIVERABLES

Tasks	End Product/deliverables	Time frame
1. Participate in Training sessions with UNICEF, the World Bank and the IG. Undertake any other activities as required.	1-3 page executive summary of ongoing project goals and technical explanations of the remaining work.	End of month 1
2. Establish internal documentation and maintenance checklist for ongoing monitoring of the system. Undertake any other activities as required	A one-page summary of the resources developed, shared with all stakeholders. Supporting scripts or code available at www.github.com	End of month 2
3. Establish internal software development plan and methodology and record user feedback from the system. Undertake any other activities as required	A detailed scope of work for additional features and customization of the Base RapidSMS system.	End of month 3
4. Plan and implement high-priority features based on user feedback. Undertake any other activities as required	All code available at www.github.com and deployed to the live system. A brief one-page summary of the features implemented during this time.	End of month 4
5. Plan and implement an automated test process for continuous integration and implement test coverage (including unit tests) for new features developed. Undertake any other activities as required	All code available at www.github.com and a brief one-page summary of the test processes in place, shared with key stakeholders	End of month 5
6. Develop a plan to ensure ongoing stability of the software for the life of the project, including training materials and necessary automated alarm systems. Undertake any other activities as required.	A 3-5 executive summary of initial scope of work, user feedback, features developed and processes in place, final recommendations and lessons learned	End of month 6

7. Respond to system issues, develop new features and provide feedback to . Undertake any other activities as required stakeholders on software development progress		Ongoing
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4 WORK PERIOD AND PAYMENT

The preliminary work period is for six month. The contract may be extended for up to 6 additional months, depending on outstanding quality of work during this period. It is expected that additional activities and deliverables will be required of the Consultant, and that they will also complete any other work or activities as required to ensure the success of the SMS hotline. Payment will be made based on successful delivery of monthly reports to the IG Office documenting the successful completion of the above listed deliverables, as well as any other activities required by the project.

5 REQUIRED QUALIFICATIONS

Required:

- Experience in at least one modern object-oriented programming language, especially Python
- Experience collaborating with a large team of software developers using some form of revision control software, especially git
- Experience with relational databases
- Experience with Linux Server setup and familiarity with web services setup and maintenance
- Capable of deploying and maintaining software remotely on a Linux or UNIX-like server.
- Knowledge of environment, and understanding of the constraints of working in a developing-world environment. This should include experience developing low-bandwidth applications in challenging work environments.
- Ability to align technical goals with IG organizational strategic goals – that always will mean prioritizing IG’s mission over any particular technology
- Willing to travel (sometimes on short notice) and develop software in the field, directly with end-users
- Residence in Kampala, Uganda

Desired:

- Experience contributing to an open-source project, especially Django, Kannel, or RapidSMS
- Experience with Django web application framework and RapidSMS framework
- Experience developing software using agile methods