Project Tender

Project Name: Online Neighbourhood Watch Digital Forensic Tool.

Client Name:
Prof. Hein Venter - University of Pretoria

Team Name:
IT Admirals

Team Members:
Mr Sboniso Masilela
Mr William Seloma
Miss Martha Mohlala
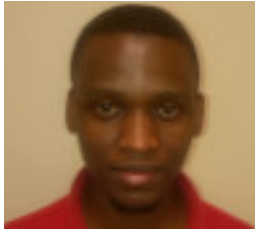

Tender submission Date: 4 May 2015

Contents

1 The Team

1.1 Mr W. Seloma

William Seloma   **May 3, 2015**

                                                                                                          E-mail Adress
Phone Number   selomawill@gmail.com
074 259 3912

Education

-
  Vukuzame F.E.T School   Empumalanga, South Africa
  Grade 12   *2009*
-
  University of Pretoria   Pretoria, South Africa
  Final year Bis Multimedia   *2015*

Objectives

- I am a dedicated Person who seeks to Use my skills and education to develop good Software that would simplify life for people, I am eager to learn and to be challenged in order to develop my problem solving skill and my programming skills and also to grow as a person.

Experience

1. Web development using HTML, CSS, jquery and Javascript

2. Game development using Unity and C

Skills

1. WEB DEVELOPMENT (LANGUAGES BELOW)

    - HTML 5
    - CSS / CSS5
    - Javascript, Jquery and Ajax
    - PHP

- XML, XSLT, XML Path
- SQL, noSQL
- DB4O

2. PROGRAMMING (LANGUAGES BELOW)

- Java
- C/C++
- C
- python

1.2   Mr S. Masilela

Sboniso Masilela   **May 3, 2015**

                                                                                    E-mail Address
Phone Number   keskor.pro@gmail.com
072 164 4766

Education

- **Tinhlonhla High School**   Mpumalanga, South Africa
  Grade 12   *2008*

- **University of Pretoria**   Pretoria, South Africa
  Final year BSc Computer Science   *2015*

Objectives

- I am person who is willing to consider new ideas, dedicated on what I do, I've acquired good technical and non-technical skills over the years I spent with the varsity, I am willing to utilize my previously gained skills and new ones' I am going to acquire through this project to give the client results that are more than expected and grow professional in this field.

Experience

1. Web development using HTML, CSS, Jquery,PHP, and Javascript

2. Developing an agricultural application that farmers use to improve the growth of their crops,it gives them personalized tips and agile methods based on what they have planted(not yet fully completed).

Skills

1. WEB DEVELOPMENT (LANGUAGES BELOW)

   - HTML 5
   - CSS / CSS5
   - Javascript, Jquery and Ajax

- PHP
- XML, XSLT, XML Path
- SQL
- NoSQL
- DB4Objects

2. PROGRAMMING (LANGUAGES BELOW)

- Java
- C/C++
- C

Martha Mohlala **May 3, 2015**

E-mail Adress

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Education

-
  Mang Le Mang High School Limpopo, South Africa
  Grade 12 *2008*
-
  University of Pretoria Pretoria, South Africa
  Final year Bsc(IT) Information and Knowledge Systems *2015*

Objectives

- I am an open minded person whose career focus is on software and web development and computer networks. I like to take on new challenges and see to it that I create easy and cost effective solutions. I enhance my problem-solving skill by learning fast and as much as possible. I am hoping one day I will put what I have learned to help in developing the world wide solutions.

Experience

1. I taught computer literacy as a community based project(April 2011).

2. I am currently teaching assistant for imperative programming.

3. Web development using HTML, CSS, jquery and Javascript.

Skills

1. WEB DEVELOPMENT (LANGUAGES BELOW)

   - HTML
   - CSS
   - Javascript, JQuery and Ajax
   - PHP

- XML, XSLT, XML Path
- SQL/MySQL

2. PROGRAMMING (LANGUAGES BELOW)

- Java
- C++
- C
- Assembly

3. FRAMEWORKS (BELOW)

- Java EE
- .NET
- Node js

2 Project execution

2.1 Development Methodology

Agile software development methodology.

We intend on releasing new software at the end of every iteration and only Agile software development is best suited for this and the reviewing of software priorities at the end of every iteration will keep us focused on the bigger picture(Online Neighbourhood Watch).

2.2 Informing the client about the project

We plan to meet the client once a week and we will ensure to keep in touch via email.

Providing feed back to our client is essential to the type of development methodology we have chosen, and this we feel ensures a fully functional software which is in line with the clients liking at the end of the development of the software.

2.3 Solving technical challenges

The system will be:

- secure
- Cost effective
- encrypted

This will make the application interacting with our data system able to adhere to the following usability goals:

1. Effectiveness - make the product good at what its supposed to do.

2. Efficiency - help to increase productivity.

3. Utility - provide the functionality that the users want/need.

4. Learnability - Make it easy for user to learn and use the product.

5. Intuitive - Make it easy to use and understand the application.

2.4 Technologies we will used

Technologies we see are suited for the building of the system:

1. Java EE - is good for securing web applications, since security is one of the core quality of the uWatch.

2. OO Databases - for storing images,audio and video clips.

3. SSL - for establishing encrypted link between web server and web browser/web application

   Methods/Protocols for accessing the uWatch

1. HTTPS - for accessing the web application

2.5 Implementation plan

This aims to outline the System Development Life-Cycle (SDLC) of the proposed project solution. The project team will be submitting the following documents (further documentation to be included at a later stage):

Requirements Specification document

- This document will provide a comprehensive description of the uWatch digital forensic tool.
  This requirement specification document will give a detailed description of the purpose of the system, system features and interfaces and formally stipulate the systems functional and non-functional requirements, its data requirements, quality requirements and the constraints under which it should operate.

Architectural Specification Document

- This document will provide a comprehensive description of uWatch digital forensic system. This architectural specification will give a detailed view of the purpose of the uWatch digital forensic system with regard to its overall architecture and architectural features. This will then formally stipulate the subsystem views, policies, its data requirements, as well as the constraints under which the system operates.

Design Specification Document

- This document will provide a design specification for the uWatch digital forensic system, which will specify the design and layout of the system as specified in the related documents below. This design specification should help with the planning and implementation of a product which adheres to the following usability goals:

  - Effectiveness - is the product good at what its supposed to do?
  - Efficiency - does the product help to increase productivity?
  - Utility - does the product provide the functionality that the users want/need?
  - Learnability - is it easy to learn to use the product?
  - Intuitive - is it easy to use and understand? etc.

Included in all the above stipulated documentation will be:

1. Unified Modelling Language (UML) diagrams to further illustrate the flows, operations, sequences etc. that form part of the system's operation.

2. Database Entity Relationship (ER) diagrams to illustrate the system entities that will form part of the system's persistent data.

Users and installation manual

These documents will provide detailed instructions of the installation and the use of the system to ensure effective and efficient use of the system.