

Project Tender

Project: Real-time Geospatial Data Processor and Visualiser

Client: Werner Raath, Software Developer at AFIS, TerraNexus

Team: Ambitious Designs

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The Team

Killian Ferdinand Noel Kieck



Interests

- Programming.
- Reading.
- Sports.
- Technology.
- Space.
- Gaming.

Technical Skills

- Information Technology.
- Coding / Programming (Java, C, C#, C++, JavaScript / jQuery, HTML / css, android).
- Database design and management.
- Software design and development.
- Computer networking.
- Testing.

Past experience

- Web design.

Non-technical strengths

- Quick Learner.
- Communications skills.
- Initiative.

Why I want to do the project:

I have a good knowledge on web-interface design and is an opportunity to improve my skills and learning to visualize the data on the site will be an interesting and rewarding experience. This project also has the potential to help people.

Stephen Swanepoel



Interests

- Programming.
- Nature and wildlife.
- Sports.
- Technology.

Technical Skills

- Information Technology.
- Programming (Java, C, C#, C++, JavaScript, PHP, jQuery, HTML, CSS).
- Database design and management.
- Software design and development.
- Computer networking (beginner).

Past experience

- Web design.

Non-technical strengths

- Quick Learner.
- Good communications skills.
- Initiative.
- Team player.

Why I want to do the project:

From a developers aspect I am interested in this project as I feel it will push me out of my comfort zone and become an interesting learning outcome. This project will appeal to two large factors in my life: software development and nature so there will be no lack of interest in the project and the software desired can be incredibly helpful to some.

Dian Veldsman



Interests

- Programming
- Reading
- Technology
- Gaming
- Watching Movies
- Snooker
- Surfing the Internet

Technical Skills

- Information Technology
- Coding / Programming (Java, C, C#, C++, JavaScript / jQuery, HTML / CSS, Android, Python)
- Database design and management
- Software design and development
- Computer networking
- GoF Design Patterns
- Concurrent Systems
- Testing

Past experience

- Web design
- Android development

Non-technical strengths

- Good coding habits
- Active participation
- Problem solving
- Willingness to learn
- Team player
- Hard working

Why I want to do the project:

Huge amount of live data is now available and accessible via the internet. This information could provide vital assistance to rescue services responding to these disasters. This project will allow rescuers to warn a community of incoming natural disaster. The project will also allow me to develop new and diverse skills in the form of real-time data processing and visualizing of data.

Tim Kirker



Interests

- Sporting activities (both spectating as well as participating).
- Computing whether it be programming or online gaming.
- Music (both listening to it as well as playing musical instruments).
- Reading and keeping up to date with current affairs.

Technical Skills

- Programming (Java, C++, JavaScript, Microsoft access, PHP and android development).

Past experience

- Free-lance web developer, mathematics tutor and various promotional jobs in the retail sector.

Non-technical strengths

- Outgoing
- Good communications skills.
- Hard working.
- Diligent.
- Work well under pressure.

Why I want to do the project:

Natural disasters are incredibly detrimental to natural and urban environment, as well as agriculture. Being involved in this project would assist in timely awareness of threats to the surrounding area and allow for rapid response. It would be an enriching experience being involved in a project with such potential to prevent devastation. This project would also act as an opportunity for me to improve my skill set and increase my knowledge in computing.

Project Execution

Development methodology:

We have decided to use the agile methodology as it allows us to deliver working segments frequently to you (the client), allows for regular adaption to changing circumstances and forces us to continuously look over the software with each new feature release to ensure continuous attention to technical excellence as well as a good design.

How we intend to keep you informed about the status of your project:

Scheduled meetings with the client and correspondence via email.

Initial ideas for solving some of the technical challenges:

Researching and locating all important data needed from the source of data early on will be a priority in order to ensure messages can be small and effectively increase the performance. Due to large amount of data, effective database design is a must. Research into REST API's, Time-series data and how to animate the data will be needed, team effort and hard work will be the success of this project.

Technologies we plan on using:

JavaScript, NodeJS, AngularJS.

We have extensive knowledge on JavaScript related tools so working with these will be most optimal.

What you (the client) will receive at the end of the project:

- All source code related to the project.
- Deploy scripts.
- Concerned Documentation.