

Project Tender

Project: Harvest

Client: Subtrop

Team: HTTP_418

Christiaan Saaiman, 12059138

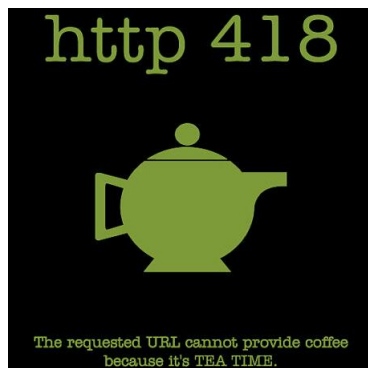
Michael Loosen, 14017254

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LC Meyers, 14024633

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1 The Team

1.1 LC Meyers

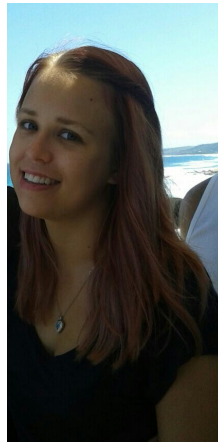


- **Full name:** Lodewyk Charles Meyers
- **My interests:**
 - Gaming
 - Computers
 - Music
 - User experience design
 - Website design
 - Anything new related to technology
- **My technical skills:**
 - Web development skills
 - Database design
 - Java
 - C#
- **Past experience that might help:**
 - I have collaborated in an Android app made using PhoneGap
- **Non-technical strengths:**
 - I have a high amount of patience
 - Hardworking
 - Eager to learn new things
 - Enjoy trying to solve complex problems

- **What makes me want to do this project?**

Doing this project sounds like it can be fun. It sounds like I might learn something new in the Subtropical industry. It will also be interesting to see how the service is being realised to help the farmers determine better yields. Finally it would be nice to learn how to create an app that uses GPS and other technologies needed for this project.

1.2 EF Bode



- **Full Name:** Elizabeth Fae Bode

- **My Interests:**

Puzzle Games (eg. Sudoku)

Computers

Art

Music

User experience design

Website design

Gardening

Reading books

- **My Technical Skills:**

Web development skills

Database design

Java

C#

C++

Good at writing

- **Past Experience that Might Help:**

I do not have much experience in terms of mobile development but I have always had an eagerness to learn it as it is becoming an increasingly fundamental part of our society. I have slight experience in the agricultural industry as I use to work as a manager at a plant nursery and I learnt a lot about growing plants, the conditions they require and the importance of monitoring the growth of plants in order to increase their success.

- **Non-technical Strengths:**

Good at decision-making

Good at problem-solving

Hardworking

Organised

Responsible

Eager to learn new things

Perfectionist

- **What makes me want to do this project?**

I have a passion for nature and growing plants in general which I believe will be of assistance in the implementation of this project. This passion also gives me the motivation and the desire to implement this project as I believe it will be an interesting experience that I would love to be involved in 100% in order to grow my knowledge in every respect.

1.3 C Saaiman



- **Full Name:** Christiaan Saaiman
- **My interests:**
 - Reading books
 - Piano playing
 - Gaming
 - Coding
 - Web Design
 - User Experience Design
 - Cooking and Baking
 - Anime
 - Languages
 - German
 - Italian
 - Japanese
 - Artificial Intelligence
 - Phones, Computer Hardware and Next-Gen Consoles
- **Technical Skills:**
 - Web Development Skills
 - Java
 - C++
- **Past experience:**
 - 6 Months intensive Java Training Course
 - 6 Month Internship at Accenture
 - Intense Oracle Systems Training
 - Leadership Training and meetings with the MD of Technology pitching an idea a colleague and I had.
 - Tiger Brands' System upgrade from Oracle Database 11g to 12c
 - Android App development using PhoneGap
- **Non-technical Strengths:**
 - Excellent Leader, not afraid of conflict
 - Excellent communicator
 - Curious and eager to take on challenges
 - Problem solver
 - Dedicated and hardworking
 - Creative and spontaneous

- **Reason for Project Tender:**

The project proposal peaked my interest in several ways. Firstly I was curious to extend my knowledge with regards to the subtropical farming that is present in South Africa and how it plays its role as a significant forex earner in our country. Secondly I was delighted to see that there is a need for an application, as I wish to further extend and broaden my knowledge in the field of Mobile Development. This project I believe I will tackle with enthusiasm and grit. Lastly I was also intrigued by the thought of helping farmers with an app to help them better their yield. I want to know more of how this could be further extended to help not only farmers, but other business owners as well.

2 Project execution

- **Development Methodology**

We plan to follow the Agile development methodology as it involves regular communication with the client to ensure the project results in exactly what they want. It also has a focus on the people system and their interactions with it which we believe is way more important than focusing on the processes and tools of the system. We strive to maintain a continuous attention to designing the system well and ensuring that all the technical aspects are coherent with the requirements. All of which makes the Agile development methodology perfect for our vision for your project.

- **Progress Communication Plan**

We plan on meeting up with you as the client on a regular basis, either face-to-face or via Skype, whichever is more convenient for you at the time, in order to keep you updated regarding the status of the project and to clarify requirements. We are also willing to communicate either via WhatsApp or email, whichever you prefer, in order to discuss the project and the progress of it, if face-to-face meetings are unable to take place for whatever reasons.

- **Technical Challenges & Possible Solutions**

Some of the technical challenges that we might face is our app development for iOS as none of us are experienced in this aspect. We have already made provisions for this by recruiting the help of another developer who's has experience in developing in the iOS environment. They will provide help by guiding us in development, referring us to websites that may improve our understanding and knowledge and by sharing their knowledge with us.

Any knowledge that we do not have with regards to the project specific calculations we are determined to study and master. One of us will be

appointed to research the problem area and gain as much knowledge as possible. They will then be responsible for a knowledge transfer session in order to share their understanding with the rest of the team.

- **Technologies we will use for the project:**

- For the front end we will use Cordova along with Ionic as these technologies makes creating hybrid mobile apps easier. This means minimal code will need to be changed to make the app compatible with both Android and iOS. Since this front end is in essence a website and therefore will go nicely with a client/server architecture.
- For the backend we will use PHP along with the Laravel framework for PHP. PHP is a very popular web language and is the language that most hired web servers run on. Laravel is a new and growing framework for PHP that makes abstracting the database and making RESTful services very easy.
- For persistence we will use MySQL. It is a very popular Relational Database Management System that is also included in a lot of hired web servers. Making setup very easy. We also do not anticipate that too much data will be persisted for MySQL to become unreliable.
- If no web server is provided we can subscribe to any web hosting service that is very cheap to subscribe to a shared Linux server.