***1. Overview***

With the 2011 - 2015 five year plan complete, Advancing the Ministries of the Gospel (AMG) Guatemala, a Christian non-profit based in the country of Guatemala, begins a new five year marathon focusing on utilizing local resources. Among the many ideas for leveraging Guatemalan resources, none is more ready for implementation than providing child sponsorship through AMG Guatemala instead of through the larger group, AMG International. Right now, child sponsorship is only available to English speaking, domestic donors through AMG Guatemala’s parent group, AMG International. This will allow native Guatemalans to support children in their own country, instead of having the support entirely outsourced to domestic donors.

Our client and contact is Brian Dennett, President of AMG Guatemala. Brian is in charge of all aspects of the Guatemalan division of AMG, a worldwide company operating in 30 countries around the world.

As we build this new child sponsorship component, we expect there to be several potential risks involved with the development of this system. The first and potentially most damaging of these risks is the difficulty in developing communication and collaboration across teams that is both blatantly clear and strictly concise. Because we will need to bridge geographic, language, and cultural gaps with our client organization and their contacts, frequent communication will play a vital role in the success of our system.

The second possible risk will be handling financial transactions, because we will have to collect, manage, pay, and maintain secure financial transactions without any room for error. This will require us to securely communicate with bank APIs while dealing with any infrastructure challenges that Guatemala presents.

***1.1 Project summary***

Our primary objective is to provide child sponsorship functionality to AMG International’s website and provide local Guatemalan donors the opportunity to support children in their own country. In order to do this, we will need to establish a reliable and secure system for handling donations from local Guatemalans to AMG Guatemala. Finally, we will need to provide AMG Guatemala with reports based on computed analytics with data of children currently within the organization is the third objective.

***1.2 Evolution of the plan***

This section will be updated throughout the project to keep track of changes made to the development plan.

***2. References***

Brian Dennett - President of AMG Guatemala, project sponsor

Carlos Rios - Web Developer located in Guatemala who developed AMG Guatemala’s Spanish website

Alex Orellana - Technical Director for AMG Guatemala

Russell Tuck - School Advisor and Consulting Professor.

***3. Definitions***

*AMG Guatemala*- division of AMG International which focuses specifically on missions in Guatemala.

*AMG International* - parent non-profit of AMG Guatemala encompassing all of the countries that AMG supports.

*Woord en Daad* - Dutch, Christian, non-profit relational database provider that AMG Guatemala uses to store child, school, and donor information.

*Gordon Team* - Jacob Buettner, Joshua Richard, Dane Vandenberg

*Guatemalan Team* - Brian Dennett, Carlos Rios, Alex Orellana who maintain the current database and website for AMG Guatemala, they are located in Guatemala

***4. Project organization***

***4.1 External interfaces***

Our client is located in Guatemala City, Guatemala and speak Spanish. This presents a number of communication issues we will have to overcome, such as the language barrier. We plan to travel to Guatemala to meet with the team there, once at the beginning of the project to help us acquire the information we need to start working, and once at the end to help them implement our changes. Outside of these trips we will be communicating primarily through email and occasionally through skype or over the phone.

***4.2 Internal structure***

Our team is composed of three individuals, Josh Richard, Jake Buettner, and Dane Vanden Berg. all of which will split the labor equally.

***4.3 Roles and responsibilities***

Analytics Lead - Josh Richard

Web Development Lead - Jacob Buettner

Donation Functionality Lead - Dane Vanden Berg

Liaison - Josh Richard

***5. Managerial process plans***

***5.1 Start-up plan***

1. Establish a project budget: Travel expenses, private GitHub accounts, payment handling companies, server to host test environment
2. Establish a timeline for achieving our goals and answering key questions

***5.2 Work plan***

This project began development with a proposal on October 12, 2015. We plan to terminate the project April 25, 2015. Participants of the project are expected to spend 4-7 hours a week working on the project.

1. Fulfill requirements of Start-up plan.
2. Set up a local test environment: possibly on Gordon servers, if that is not possible we will look into setting this up on an Amazon/Google/etc. server
3. Research using a 3rd party payment handling company (i.e. Square, Paypal, etc.) who operates both in the US and in Guatemala

***5.3 Control plan***

***5.4 Risk management plan***

Mismanagement of Donations:

Our most serious risk is mismanaging the donation that come in from Guatemala. To minimize this risk we will be using a 3rd party payment handling company (e.g. Square, Paypal, etc.)

Mismanagement of Information:

AMG Guatemala store sensitive information the children they support, the schools they run, and the donors they are supported by. Any lose of information could seriously hurt AMG Guatemala and the people they work with. While the work we will be doing does not directly affect information security, privacy will factor into the design of our website and analytics. To minimize this risk we will work closely with the team in Guatemala to ensure all of the work is done to the standards they require.

Poor Communication

Communication will be difficult between our English speaking team and AMG Guatemala’s Spanish speaking team. This coupled with the both teams being located in different time-zones will make communication difficult. To ensure good communication at the start of this project, our Gordon team will be traveling to Guatemala to meet with the Guatemala team in person. After that initial meeting the Gordon team will send weekly communication to the Guatemalan team updating them on new progress and relay any question that arose during that week.

***5.5 Closeout plan***

***6. Technical process plans***

***6.1 Process model***

***6.2 Methods, tools, and techniques***

Jenkins for Testing

Github for configuration management

(woord en daad)

***6.3 Infrastructure plan***

***6.4 Product acceptance plan***

The product will be presented to Brian after all of the milestones have been completed for him to review and accept.

***7. Supporting process plans***

***7.1 Configuration management plan***

We will be using GitHub as our configuration manager.

<https://github.com/>

***7.2 Verification and validation plan***

1. Test partial functionality on mock data by 12/18/15
2. Test partial functionality on real data
3. Test full functionality on mock data
4. Test full functionality on real data by 3/5/16

***7.3 Documentation plan***

All of our code will be commented according to accepted standards. Furthermore, we will create documentation for the overall project which will outline the general functionality of the project.

***7.4 Quality assurance plan***

Consistent and recursive feedback from our client will help solve quality concerns throughout the development of the system. Communication through e-mail and access to our code base on <https://github.com/> will allow for prolonged transparency and visibility with our client.

***7.5 Reviews and audits***

Each milestone will be presented to our client for them to review and to suggest changes to the current milestone under review or any other milestone.

***7.6 Problem resolution plan***

Require dated meetings in order to establish firm corrections where appropriate.

***7.7 Subcontractor management plan***

We would like to utilize a payment processing company to handle the donations from local Guatemalans. We will research potential companies to fulfill this role, taking into consideration cost, ease of use, support, and the regions they operate in. It would be ideal if the payment processing company operates in both the US and Guatemala, but at the end of the day the company we will choose ultimately depends on our budget.

***7.8 Process improvement plan***

***8. Additional plans***

We hope is to be as flexible as possible in order to ensure a satisfying conclusion to this project. That being said, we are prepared to make a plan B if some cataclysmal event prevents us from finishing our tasks.