

Social Impact Statement

Child Sponsorship and Analytics for AMG Guatemala

To be submitted to the Department of Mathematics and Computer Science
Gordon College
in partial fulfillment of the requirements for the degree of
Bachelor of Science in Computer Science

by

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According to the World Bank, Guatemala is currently suffering from severe and widespread poverty with over 75 percent of the population living below the poverty line. This disparity has a huge negative effect on children who rarely get their nutritional, educational, and spiritual needs met. This is a problem, but with the help of AMG Guatemala over 8000 children are now getting the help that satisfies these basic human necessities through the donations of sponsors.

Our project will open a new branch of donated income via AMG Guatemala's own website. This website will be in Spanish and will cater to Guatemalans who wish to better the lives of their country's children. By creating this functionality for AMG Guatemala we hope to quicken the process of fund distribution and support the children AMG Guatemala in the process.

While there are no predicted negative impacts for this project when successfully completed, there are some potential negative impacts if the project is not completed successfully. If the project is not completed, Guatemalans will still be unable to support children through AMG Guatemala. If there are any issues with our project after its completion it may lead to mismanagement of donations or potential lost data, both of which would harm AMG Guatemala's donors and the children they are responsible for.

To mitigate these risks we will be following very strict milestones throughout the course of this project and we will be in constant contact with the team in Guatemala. We will also be utilizing a suite of automated tests to help catch issues early on in the development process and ensure the quality of our end product. To minimize the risk of inaccurate financial transactions or lost data, we will implement transaction logging and we will work with AMG Guatemala to set up a system of backups for their data as they see fit. To further reduce the risk of lost or corrupted data we will rollout our system in stages so as to reduce the risk to AMG's data while allowing us to test our system to ensure proper functionality.

The stakeholders for this project are AMG Guatemala, donors to AMG Guatemala, and the children AMG Guatemala supports. The interest of the stakeholders in this project is to allow Guatemalans to support children in their own country. Furthermore, AMG Guatemala would like to better utilize the data they currently have to help them better plan and direct their aid efforts in Guatemala. The stakeholders for this project would like to also ensure the privacy of the children and the donors, as well as the accuracy of financial transactions processed by AMG Guatemala. By providing Guatemalans the ability to support children through AMG Guatemala and creating analytics for AMG Guatemala to help them better understand the data they currently have, we will enable them to help more children and provide more assistance across Guatemala.