

# **Handprinter.org**

## **Executive Summary**

### **Community Partner**

Gregory Norris

### **Student Development Team**

Alex Frazier

Serene Gao

Meghana Valluri

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## **Background**

Handprinter seeks to instill a sense of environmental consciousness and influential power in individuals and organizations by allowing them to generate and monitor their positive contributions on the planet, also known as their handprint. To implement its mission, Handprinter creates an online community that allows users to work together to generate ideas for improving handprints and to evaluate their current individual handprints. By creating such a community, Handprinter harnesses the power of crowdsourcing to initiate a global movement for change.

## **Project Description**

### **Project Opportunity**

Since Handprinter is still in its early stages of development, our team has the opportunity to make a significant impact on the progress of the organization's primary product – the Handprinting Community. Through this community, individuals submit action ideas that they believe can increase their handprint. These ideas are then be upvoted by other users of the community. Simultaneously, highly-skilled users trained in life-cycle assessment or environmental science contribute by choosing to model action ideas into numerical equations. These models, similar to action ideas, can be graded based on accuracy and validity by other expert users. This creates opportunity for an eventual global suite of mobile applications to access the most upvoted action ideas and best corresponding models. Users of these outside applications can choose an action item they have completed, input in their specific usage or consumption statistics into the model, and calculate their individual handprint. Thus, while Handprinter is a social initiative targeted at increasing environmental consciousness, the mission, at its core, is driven by technology. Rather than focusing on systems that address potential organizational or information management issues, our team has determined that working to develop this Handprinting Community will create the most value for our client.

### **Project Vision**

Our team's project vision is to build a seamless crowd-sourcing platform that allows submission of action ideas and includes a model generation interface that allows expert users to create a report detailing the description, variables, equation and documentation for an action idea. The primary users of our proposed project are both environmentally-conscious users as well highly-skilled individuals with necessary backgrounds in life cycle assessment and sustainability.

## **Project Outcomes**

We have successfully developed a crowd-sourcing platform in the form of a Ruby on Rails web-based application that achieves our initial project vision and matches our client's requirements. Users can register into the Handprinter Community and submit action ideas. These action ideas can be commented and voted on. Users can train to become modelers, and then can model action ideas using a comprehensive form. Various versions of models are stored per action idea so that a detailed history of models is kept and easily navigable. Administrative users have the ability to change model statuses from 'complete' to 'ready to use', indicating that a model is sufficiently detailed to implemented in a calculation of a person's handprint.

## **Project Deliverables**

We have live hosted our application at [www.handprinter2.herokuapp.com](http://www.handprinter2.herokuapp.com). We have turned over a private GitHub repository to our client, as well as trained our client in use of the system. We have created a video that walks through all the functionality of the system, including the various user roles and capabilities. We have compiled a list of potential bugs and issues that developers might run into and recommendations for how to fix them. We have also detailed out all creative decision points and explained the justifications for them. Finally, we have compiled a project roadmap that explains the desired functionality of all future pieces of the Handprinting process. Lastly, we have documented our application code extensively for future maintainers of our project.

## **Recommendations**

We recommend that Handprinter user-test the current application on their desired user-base and incorporate feedback as changes to the system. Following that, we recommend that functionality is added to the model-generation form to guide users to create clearer, well-formatted models. Finally, we recommend Handprinter perform a detailed assessment and functionality roadmap of their overall pipeline to guide their future work on this system.

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## **Student Development Team**

**Alex Frazier** was the technical lead. He is a third-year student majoring in Information Systems with an additional major in Statistics/Machine Learning. He will be interning as a cyber consultant for Deloitte this summer and is looking forward to exploring the depths of New York City.

**Serene Gao** served as design lead. She is a third-year double major in Information Systems and Statistics. She is currently working on her independent study about communal coping and diabetes management and is searching for a career in data analysis and visualization.

**Meghana Valluri** served as project manager and client advocate. She is a third-year student majoring in Information Systems with a minor in Business Administration. She will be interning as a Technical Project Manager at Apple this summer and is hopeful for a product management career.