

Phipps Conservatory and Botanical Gardens

Executive Summary

Community Partner

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Student Development Team

Ashvin Niruttan

George Yao

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Background

Phipps Conservatory and Botanical Gardens, located on Schenley Drive in Pittsburgh, Pennsylvania, opened in 1893. One of the few remaining public gardens in the U.S. to produce full-scale seasonal flower shows year-round, it has expanded to be a center for the education of sustainable practices in recent years. Phipps operates with the mission statement:

“To inspire and educate all with the beauty and importance of plants; to advance sustainability and promote human and environmental well-being through action and research; and to celebrate its historic glasshouse.” It offers its approximately 20000 members and the local Pittsburgh community the chance to experience flora from around the world, while also teaching the public on environmental stability.

Project Description

Project Opportunity

The client was faced with a situation where they had unclean data regarding members of the organization in their database. This leads to inconsistent reporting, duplicate, incomplete and unformatted data. These data issues lead to difficulty in getting an accurate picture of the membership program and contacting these members.

Project Vision

We propose a web application that has the capability to generate reports on usable and unclean data, and visualize useful metrics in the form of a dashboard. This would enable the client to make use of their data with the knowledge that it is accurate, and use the reports on unclean data to repopulate their database with sanitized data.

Project Outcomes

Our team built a web application that has enabled the client to sanitize and use their member data. The application has a dashboard where key metrics used by the membership team on a regular basis are displayed in an interactive manner. The application also has the capability to generate reports on

unclean and duplicate data entries for the client to use in reviewing their database to remove unusable data.

Project Deliverables

We will be providing the client with a zip file containing development documentation(ERD, wireframes etc.), training resources (How to guides), and source code repositories. We will also be providing them with access to a GitHub repository and a server where the application is currently hosted.

Recommendations

For this solution to make a difference in the client organization, it is imperative that they use it as much as possible so that workflow processes can build around this new source of clean data and visualized metrics. They would need to use the reports on unclean data to address the inaccuracies in their database so that over time the data integrity of their system improves.

In addition to this we recommend that future projects address the issue of data entry in their online portal. This is the source of their data problem, which we were unable to address this semester due to the prohibitive cost of gaining a license to access the database of their CRM. Fixing the problem of inaccurate data at its source, through strict data validations when a client creates their account. Will ensure that no unclean data enters their database.

Student Development Team

Ashvin Niruttan served as Project Manager/Ruby on Rails Rails Developer. He is a Junior majoring in information Systems with a minor in Economics. This Summer he will be interning as a Business Analyst with McKinsey and Company in their Pittsburgh office.

George Yao served as Lead Backend Developer/ Quality assurance manager. He is Junior majoring in Information Systems with a minor in Computer science. This summer he will be interning as a Software Engineer with MediaMath in their New York office.

Minnie Wu served as Front End Lead/ Client Liaison. She is Junior majoring in Information Systems with minors in Human Computer Interaction and Business Administration. This summer she will be interning with a company in Taipei.