

Phipps Conservatory

Executive Summary

Community Partner

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Student Development Team

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Background

The Phipps Conservatory is located in Schenley Park of Pittsburgh. The historical landmark continues to be an active part of the Pittsburgh community, educating and entertaining the public with various exhibitions and garden shows. Phipps Conservatory has been and continues to be a leader in Pittsburgh's sustainability efforts, with two of its building receiving platinum LEED certifications.

The mission statement of Phipps Conservatory is *“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.”*

Project Description

Project Opportunity

Our project opportunity is to provide the visitors of Phipps Conservatory an interactive and low pressure experience in climate change education. Through a technological solution, our team believes that we can engage various visitor demographics in this pressing issue. One crucial component of the mission of Phipps Conservatory is to promote human and environmental well-being through action and research. Therefore, given the current political climate and recent global environment changes, it is imperative to provide visitors with tangible ways to sustain our earth's well-being.

Project Vision

Our team's goal is to create an interactive, well-designed, and sustainable experience to educate visitors about climate change. Specifically, this experience is a environmental trivia game. The game includes an interactive map of Pittsburgh; this design choice relates to the primary demographic of the visitors of Phipps Conservatory, Pittsburgh natives. This game is visually impressive, with custom designed graphics. Additionally, the game follows the Phipps style guide to coexist cohesively within the conservatory. This game is accessible to various ages, targeting specifically the seventh grade level. Furthermore, this game will be stationed at the halfway point of the typical visit, ensuring the adequate amount of attention from the player.

Project Outcomes

The most important outcome is the climate change knowledge-base of the general Phipps visitor. After gaining environmental knowledge from our game, our program will store the accuracy and time of each trivia question answered. Eventually, our program will have the ability to determine if the climate change knowledge based of the general visitor has improved over time. Secondly, our team comprehensively tested our game's interactivity and engagement level with over fifty people. We hosted one round of employee visitor tests to engage the Phipps staff base in our project. Afterwards, we conducted three rounds of on-site visitor tests to see our solution in context. These tests were crucial in our development and perfected our game's user experience. Furthermore, another outcome is our game's sustainability. Through our thoroughly collaborative process, our clients at Phipps have a firm grasp on how to continue to expand our team's creation. There are opportunities for more trivia questions and visual graphics to account for the growing climate change research.

Project Deliverables

Our team will provide our client the fully deployed game. We also will provide full access to the repository, currently located on GitHub and Heroku. This access will allow our client to sustain the long-term relevance of our program. Lastly, our team will provide a clear and detailed tutorial on how to sustain our program, including how to create and edit content for the game.

Recommendations

In the future, our team recommends Phipps to maintain the relevancy of the trivia game with periodically updated content. Additionally, there are opportunities to expand the interactivity and the gamification of the program with new features. These features may include motivational gamification strategies and further external incentives. We recommend that our client maintains our deployed application by regularly checking the condition of the repository to ensure positive game experiences.

Student Development Team

Natalya Buchwald served as the client manager and designer. She created the customized graphics for the trivia game and general layout. She will be continuing her technology consulting experience at CapTech in Richmond, Virginia this summer. Natalya foresees a career in socially conscious technologies, design, and consulting.

Korrawat Jianthanakanon served as the project manager and front-end developer. Last summer he interned at DBS Vickers Securities. Korrawat looks forward to a career in application development and user experience design.

Ally Sorge led the front-end design and development. She will be finishing her degree at CMU this summer while job searching. Ally hopes to continue working on similar social and environmentally conscious projects in the future.

Johnny Wu led the back-end development and oversaw all quality assurance in the project. He will be a software engineer at Wayfair in Boston, Massachusetts this summer.