Executive Summary

Community Partner

Treasure House Fashions (THF)

Student Consulting Team

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Background

Treasure House Fashions (THF) is a nonprofit organization in the Pittsburgh area that provides free professional clothing through a boutique-style shopping experience for women navigating crisis situations such as domestic violence, homelessness, or financial hardship. This organization partners with over 60 local agencies who refer clients and distribute gift certificates, which can be redeemed at THF for clothing items. To address inefficiencies in THF's manual certificate tracking process, our consulting team designed and implemented a secure, web-based Gift Certificate Management Platform. The goal of this project encompassed the streamlining of operational workflows, the reduction of administrative burden, and the improvement of overall transparency across the certificate management lifecycle. Overall, this platform not only enhances day-to-day efficiency but also positions THF for sustainable growth and future technical scalability as it continues to expand its community impact as a whole.

Project Description

Project Opportunity

At the beginning of this project, THF lacked an electronic infrastructure to process gift certificates. There was no centralized system to generate, distribute, or redeem them. This resulted in challenges with partner agency coordination, tracking utilization, and positioning the organization for growth.

Project Vision

We aimed to create a secure, scalable, web-based Gift Certificate Management Platform that simplifies certificate creation and redemption and provides improved operational visibility. We planned to make it easy to use for both THF staff and agency partners, with QR-based workflow and real-time usage transparency.

Project Outcomes

- **People**: Reduced manual labor for staff and enabled agency-level autonomy through secure logins.
- **Process**: Streamlined certificate lifecycle with digital QR codes, redemption tracking, and usage reports.
- **Technology**: Built a Firebase-hosted web app (thf-gc.org) with Google Cloud integration and admin controls.

Project Deliverables

- Live web application for digital certificate management
- QR-based redemption system
- Admin and agency training documentation
- Slide deck and walkthrough video for future use
- GitHub source code and technical documentation

Recommendations

- **Schedule regular check-ins** with agency partners to ensure smooth adoption and identify early issues.
- Onboard new agencies gradually using the training materials and walkthrough guides.
- Explore data dashboards to generate insights into usage trends and optimize certificate distribution.
- Maintain billing access to ensure uninterrupted Firebase/Google Cloud service.

Student Consulting Team

Veronica Benedict contributed to frontend development, UI design, and user testing. She is a junior Information Systems major planning to pursue product development roles.

Ruiming (Alysson) Gu helped with backend feature planning and project coordination. She is a senior Information Systems major graduating in May 2025, and will continue to work in software engineering.

Katelyn Zheng led technical implementation including Firebase integration, authentication, and deployment. She is a senior Information Systems major graduating in May 2025, and is pursuing roles in software engineering.

Veronica Pimenova focused on documentation and assisted with project coordination. She is a senior Information Systems major graduating in May 2025, planning on pursuing a PhD in Information.