

# Treasure House Fashions

## Executive Summary

### Community Partner

Sally Power

### Student Consulting Team

Om Patel

Peter Lu

Ryan Wong

## Background

Treasure House Fashions (THF), established in 2001 by former schoolteacher Sally Power, serves as a discounted clothing outlet for women while promoting dignity and self-esteem among those undergoing significant life changes or crises. Operating from an 8,000 square-foot facility at 7607 McKnight Rd, Pittsburgh, PA, THF employs two full-time staff members, Sally and Tracy, supported by 40 volunteers.

### THF's Mission Statement -

*"To promote the dignity and self-esteem of women, especially those who have gone through a significant transition in their life or an impactful crisis."*

They fulfill their mission by offering to women in need "retail therapy" – improving their self-esteem by clothing these women in outfits that lead them to a better outlook about themselves and their future.

## Project Description

### Project Opportunity

THF's scale of impact – measured by the quantity of women they are able to serve as well as magnitude of impact on each individual – was severely bottlenecked by the ways in which they were managing a primary business process: generating, distributing, and tracking gift certificates given to agencies that served women in need. The bottleneck came from excessive time spent operating manual Excel spreadsheet management and human data input errors that came as a result of that.

### Project Vision

Our team's vision is to develop a user-friendly web application for THF that automates the end-to-end gift certificate management system used by THF. By automating as many steps as possible, our application aimed to, and has, significantly improved the efficiency of these core business processes. This leads to more bandwidth for other crucial, "bottom-line" operations run by THF – primarily to raise the self-esteem of these women through clothing.

## Project Outcomes

- **Full-stack application** - A functional application targeted at THF's needs
- **Data migration and management** - Automated, real-time data Integration with THF's Customer Relationship Management (CRM) tool

- **Community Partner Capacity Building** - An overview of information delivered to Community Partner for sustainability of solution
- **Project Sustainability** - Mitigation of a comprehensive list of expected issues that might arise
- **Top Level Outcomes** - Overview of positive outcomes that resulted from our solution

## Project Deliverables

- **GitHub Repo** - Link to GitHub Repository containing source code for notification system.
- **Google Cloud Hosting Platform** - Link and access to the hosting platform console where the full-stack application is deployed
- **Google Firebase Console** - Link and access to the database console used for authentication and data storage of the full stack application
- **Entity Relationship Diagram** - An ERD containing the key models and fields that our solution pulls for future developers to reference.
- **Figma Wireframes** - The Figma wireframes of the original design for the GC management system
- **User Guide** - An intuitive walkthrough of the solution for first time users and reference for old users.
- **Developer Guide** - Includes all the documentations for future developers to get started
- **Meeting Notes** - Taken during community partner meetings for developer reference. -
- **Project Proposal** - Details the initial ideas and research conducted by the team

## Recommendations

- **Invite third-party auditors to do a code review or technical audit** - *Ensuring security and maintainability*
- **Monitor Google cloud console and Firebase console** - *Preventing unexpected costs*
- **Regular backups to local systems in event of cloud service outage** - *Guarding against data leaks and unexpected operational outages*
- **Major use case (QR code scanner) not implemented due to time constraints** - *Nice-to-have use case that CP expressed great excitement about, but team was limited by bandwidth*

## Student Consulting Team

**Om Patel:** Om is a junior studying Information Systems and Software Engineering at Carnegie Mellon University looking to pursue a career in software engineering. Om worked as the Backend engineer.

**Peter Lu:** Peter is a junior studying Information Systems and Software Engineering at Carnegie Mellon University looking to pursue a career in software engineering. Peter worked as the Frontend engineer and Technical Project Manager.

**Ryan Wong:** Ryan is a senior studying Information Systems and Decision Science at Carnegie Mellon University looking to pursue a career in management consulting. Ryan worked on non-development related tasks and was the Client Relationship Manager.