Battle of Homestead Foundation

Executive Summary

Community Partner
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Background

The Battle of Homestead Foundation (BHF) is a nonprofit organization based in Homestead, Pennsylvania, dedicated to preserving the legacy and relevance of labor struggles, especially the 1892 Battle of Homestead. Founded in 1989, the BHF promotes public awareness of labor history through educational programming, digital media, and community engagement. The organization is managed by a volunteer board, and all technical operations are handled by our main stakeholder, Lawrence McCullough, who also leads the Communications Committee. With limited technical resources and capacity, BHF uses WordPress for web presence, Excel for member tracking, and local file storage for archival material.

Project Description

Project Opportunity

BHF publishes educational content through multiple formats, including podcasts and a printed handbook titled *Labor History Sites in the Pittsburgh Region*. This handbook, while rich in content, is only available in limited physical copies and lacks an effective digital distribution mechanism. Our project presented the opportunity to transform this exclusive print material into an accessible, engaging digital resource that can reach broader audiences without geographic or economic barriers.

Project Vision

Our vision was to create a visually engaging, user-friendly, and content-rich WordPress site that transforms the labor history handbook into an interactive digital experience. The site includes individual pages for each historical location, categorized routes (e.g., Women's Rights Trail), high-quality images, and concise narratives. It enables global users to freely explore Pittsburgh's labor history, while linking back to BHF's main site for donations and membership, supporting the foundation's sustainability and outreach.

Project Outcomes

From a people perspective, we established a close, collaborative relationship with Lawrence, who was directly involved throughout the development lifecycle. From a process perspective, our team created a content management framework that Lawrence

can maintain without external help, reducing dependency and operational friction. Technologically, we implemented a fully functional, navigable WordPress website containing dozens of structured pages, embedded images, interactive map features, and predefined trip plan routes, all in a modular, update-friendly format. In addition, we coordinated with RedTree Web Services, the third-party web hosting provider contracted by BHF, to ensure a smooth handoff of our implementation for ongoing hosting, maintenance, and scalability support.

Project Deliverables

- A fully implemented WordPress.com website with 50+ historical location pages and thematic trail navigation
- High-fidelity mockups and a redesigned logo developed in Figma
- User story documentation, usability testing results, and user feedback summaries
- Future recommendations on how to improve website interactivity and user engagement
- Project planning materials including meeting agendas and timeline documentation
- Final presentation materials and project report
- Client context analysis and initial proposal

Recommendations

We recommend the Battle of Homestead Foundation continue expanding the digital handbook with additional site content as new locations are discovered. We also suggest BHF cross-promote the site via social media and the *Essential Work* podcast. Based on user feedback, we recommend further improvements in interactive features, such as embedded video content or geolocation-based recommendations. Given BHF's ongoing collaboration with CMU, we also suggest exploring augmented reality (AR) as a future direction to enhance the site's interactivity and create a more immersive historical learning experience. Long-term, a donation tracking plugin and periodic usability testing would further increase engagement and functionality.

Student Consulting Team

Terry Li served as project manager and developer. He is a senior majoring in Information Systems with a minor in computer science. He has passion in software engineering and will join Meta as a software engineer after graduation.

Emily Yu was the team's project manager and a developer. She is a junior majoring in Information Systems and minoring in Computer Science and Language Technologies. She will be interning at Google this summer and hopes to pursue a career in software engineering.

Patrice Bortey was the team's UI/UX designer and developer. She is a senior majoring in Information Systems and minoring in Human-Computer Interaction. She is passionate about designing engaging and accessible user experiences and hopes to pursue a career in technical project management or UX design.