

Best of the Batch Foundation: Project C.H.U.C.K.

Executive Summary

Community Partner

Latasha Wilson-Batch

Student Development Team

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Background

Best of the Batch Foundation is a nonprofit organization located in Munhall, PA (near Homestead and the Waterfront). It focuses on building character, self-esteem, and appreciation for education among children and families. Moreover, the Best of the Batch Foundation endeavors to unlock the potential in children and families in the western Pennsylvania area by providing them with a physically safe space and venue for supplementary/alternative education and recreation. In practice, this mission manifests itself in two main ways. First, the Best of the Batch Foundation serves as a clubhouse for children in the community; that is, children in the community can come to the Best of the Batch facilities while not attending to other, obligatory commitments. Second, the Best of the Batch Foundation offers numerous programs to build confidence, teamwork, and leadership skills and additionally to foster academic development for community youth.

Project Description

Project Opportunity

Project C.H.U.C.K. is one of the many programs Best of the Batch offers to serve children in the local community. It is a summer program which allows children of various ages to participate in a basketball tournament. The event has over 300 children register every year and as such requires an automated information management system. Over the past two years, Best of the Batch has worked with Carnegie Mellon students to produce such an application. However, the application could be improved by increasing security, providing additional analytics, enabling data persistence, and providing team management systems.

Project Vision

Our vision for this project was threefold: enabling data persistency, enhancing security, and building admin features. To enable data persistence, we created accounts for guardians and volunteers so that they could access and edit their information from year to year. For enhancing security, we established that satisfying brakeman tests and removing data once it has been signed off on, are appropriate security measures for this project. In terms of building admin features we provided additional analytics and a revised team management system.

Project Outcomes

The major outcomes of this project are: a redesigned user experience, added administrative features, and improved security measures. Our redesigned user experience includes a new registration process, guardian and volunteer account creation, guardian and volunteer portals and public team standing and schedule pages. We added administrative features such as notifications, analytics and team management systems. We improved security measures by running brakeman tests and by removing sensitive data once it had been signed off on.

Project Deliverables

The final deliverable is a web application (projectchuck.herokuapp.com) deployed on Heroku linked to a Postgres database with Amazon S3 being used to store images.

Recommendations

With regard to recommendations for our client partner's organization, our predominant recommendation is that they bring some sort of technology expertise in-house. The advantages for bringing technology expertise in house are, namely, that you have a technology expert who can provide better service, because (s)he understands, more deeply than a consultant, your business processes, and that you always have someone working on the technology portion of your business processes, even when you have no imminent technology needs.

With regard to recommendations for a future team, were able to lay the groundwork for data persistence in our application by implementing the username/password system. Through this, users can access their previous years' information and documents. Given that we laid the groundwork for it, we would recommend to future team to continue development on this feature, as it is of a high priority to the client. Additionally, to future teams, we recommend heavily involving the client partner throughout the development process, utilizing the expertise their of faculty advisor(s), and quickly becoming familiar with the existing system, as these were all practices of ours that helped us to produce a successful project.

Student Development Team

Benjamin Junker is a Junior majoring in Information Systems with potential minors in a handful of fields. He served as the Project Manager, Client Advocate, and Lead Rails Developer on the project. This summer, he will be working with the Financial Intelligence Unit in the Republic of Palau.

Shreeyagya Khemka served as the Technology and Deployment lead. He is a third-year student majoring in Information Systems with a minor in Computer Science. He will be interning at Credit Suisse this summer and is looking forward to a career in financial technology.

Sung Jin Kim served as the security lead. He is an Information Systems major and Computer Science minor. He will be interning at Big Switch Networks in Santa Clara, California this summer as a software engineer. He led the discussion on how to best mitigate security risks.