

CMU Athletics

Executive Summary

Community Partner

Christine Scalise

Student Development Team

James Jameson

Hyun Hee Clara Kim

Andrew Wang

Background

CMU Athletics oversees the athletics department at Carnegie Mellon University. They are in charge of maintaining the equipment and facilities, organizing different sporting events, and fostering the wellness of students through recreation and physical activities. Their goal is to inspire leadership, teamwork, and resilience through their various programs and have a positive impact on the CMU community. Our community partner, Christine Scalise, is the Administrative Coordinator at CMU Athletics. She oversees the student employees at the equipment desk and fitness center in the Cohon Center.

Project Description

Project Opportunity

The equipment desk in the Cohon Center allows students, staff, faculty and guests to rent equipment for use in the athletics facilities. Currently, CMU Athletics manages their equipment rental with Google forms and an excel sheet. Student employees fill out Google forms with basic information identifying the customer and what equipment is checked out. This information is then stored in an Excel sheet and includes fields such as the customer's name, Andrew ID, email, and the equipment they have checked out. The equipment rental process has been identified as a potential area for improvement.

Project Vision

Our vision is to implement a web application that will increase the reliability and efficiency of the equipment rental process. With the planned web application, CMU Athletics will be able to reliably track who rents out what equipment and when the equipment is rented out. This will allow the organization to ensure that the equipment is returned and customer rental information is tracked. The student employees working at the equipment desk will also be able to improve the efficiency in which equipment is checked out and checked in. This will be done by reducing the human input and automating much of the information tracked in the system.

Project Outcomes

Our team has developed an equipment management system with the capabilities to check in, check out, and manage inventory in a reliable and efficient manner. The checkout process is now automated so that only available equipment is listed and have all customers with an Andrew ID pre-registered in the system. Also, to ensure efficiency, we've made it so that the check-in process can now be completed with just one click and the inventory process helps determine whether or not the equipment being rented is in fact in stock. Our team worked with both CMU Athletics and the IT department for Student Affairs during the process of development to ensure that the implemented solution would be sustainable. Capacity building with the people of the organization interacting with the application (administrators and student employees) also took place in the forms of user testing and training.

Project Deliverables

Our final deliverable is the equipment management system web application deployed on the development server for CMU Student Affairs. A private GitHub repository will also be delivered to the Student Affairs IT team. Documentation for the system and a manual on how to use the system from the employee and administrative sides will be delivered as well.

Recommendations

The next step in the process towards deployment of the application is to transition from the development server to the production server. Once the application is moved to the production server, it will be ready for use by the student employees. In the future, this application can be expanded further to incorporate other processes at the equipment desk in the Cohon Center. This could include a locker rental system as well as tracking of payments for desk services. Integrating all these different aspects and functions for the equipment desk can ensure that the organization is able to provide its services to customers reliably and efficiently.

Student Development Team

James Jameson served as project manager. He is a third-year Information Systems major and Business Administration minor. He will be interning at Applied Predictive Technologies as a Database Analyst in the summer of 2017.

Hyun Hee Clara Kim served as the Front-End Developer and designer. She is a fourth-year student majoring in Information Systems and Human Computer Interaction. She will be interning at Next Jump this summer and is looking toward a career in UI/UX design and web development.

Andrew Wang served as the Technical Lead. He is currently a third-year Information Systems major minoring in HCI and Media design. He will be doing full stack work during the summer, and is looking forward to gaining more experience working with web technologies.