

AN APPLICATION INFRASTRUCTURE TO SUPPORT THE TRIO UPWARD BOUND PROGRAM

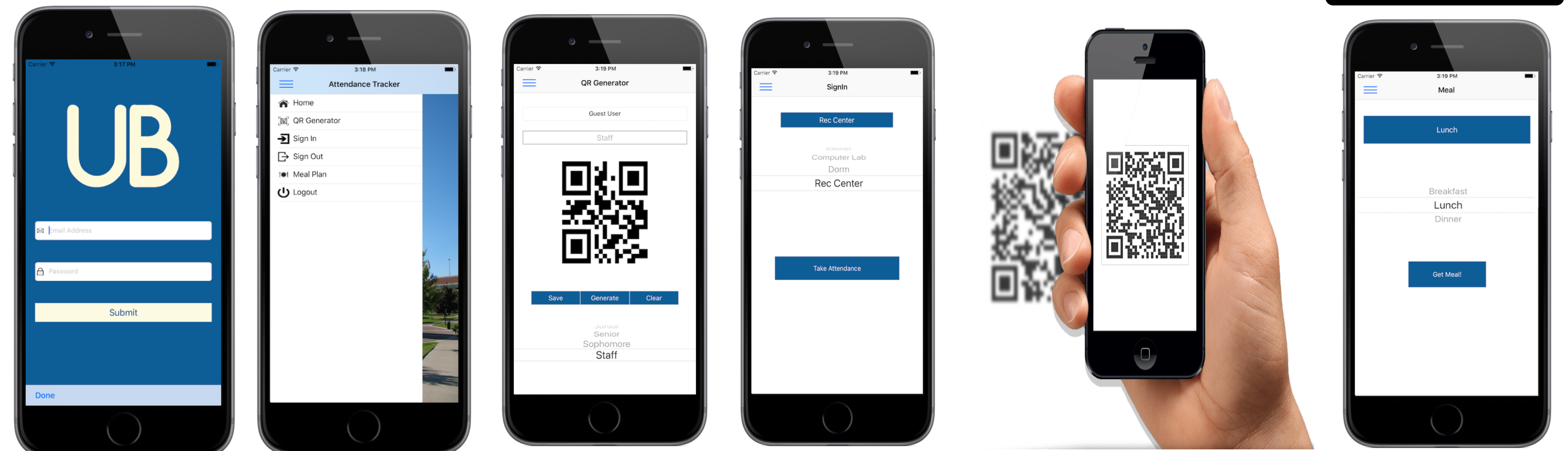
RAKESH NEELA, DR. ROBERT ADAMS

COMPUTER INFORMATION SYSTEMS, PADNOS COLLEGE OF ENGINEERING AND COMPUTING

Problem

The TRIO Upward Bound program helps high school students from underserved backgrounds reach their potential by building their academic skills, motivation, and self-confidence necessary for success in a college. Upward Bound staff are responsible for tracking attendance for students by carrying separate files to each location and recording information in them. This is extremely cumbersome and error-prone. Staff members have the additional burden of counting the number of hours each student spent on a location, meals ordered on each day, placing a food request order, and preparing a manual report for scholarship purposes.

How it works?

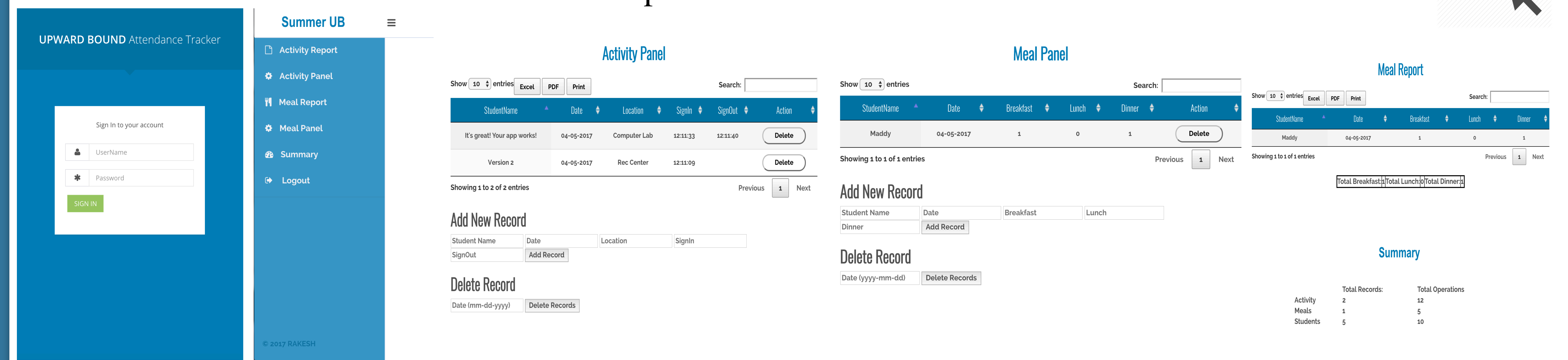


Solution

Summer UB makes it easier for a staff member to track any student if they get separated at any location during the tour. The mobile app also makes it easier for staff members to track the number of meals served per day and make an appropriate decision in placing food services orders the next day. The Summer UB application also provides a web dashboard for staff that produces detailed historical student activity and meal reports, it also helps staff members to modify and update student activity if necessary

Results

<http://www.summerub.com>



Technologies

- Bootstrap, HTML, JavaScript
- iOS Swift, Xcode
- Firebase, Amazon AWS

Conclusion

- The Upward Bound staff will pilot test the Summer UB app in Summer 2017, and planned to use for daily purposes.
- This project has been planned to be scalable for other schools and universities.

Thank you

I would like to thank GVSU Upward Bound staff, especially Josh Brandsen, Magarita Chappel and Bonnie Peterson. I would also like to convey my thanks to all my professors and my friends who encouraged me in my education. A Special thanks to my professors Dr. Robert Adams, Dr. Jonathan Englesma, Prof. Yonglei Tao and my friend Amith.