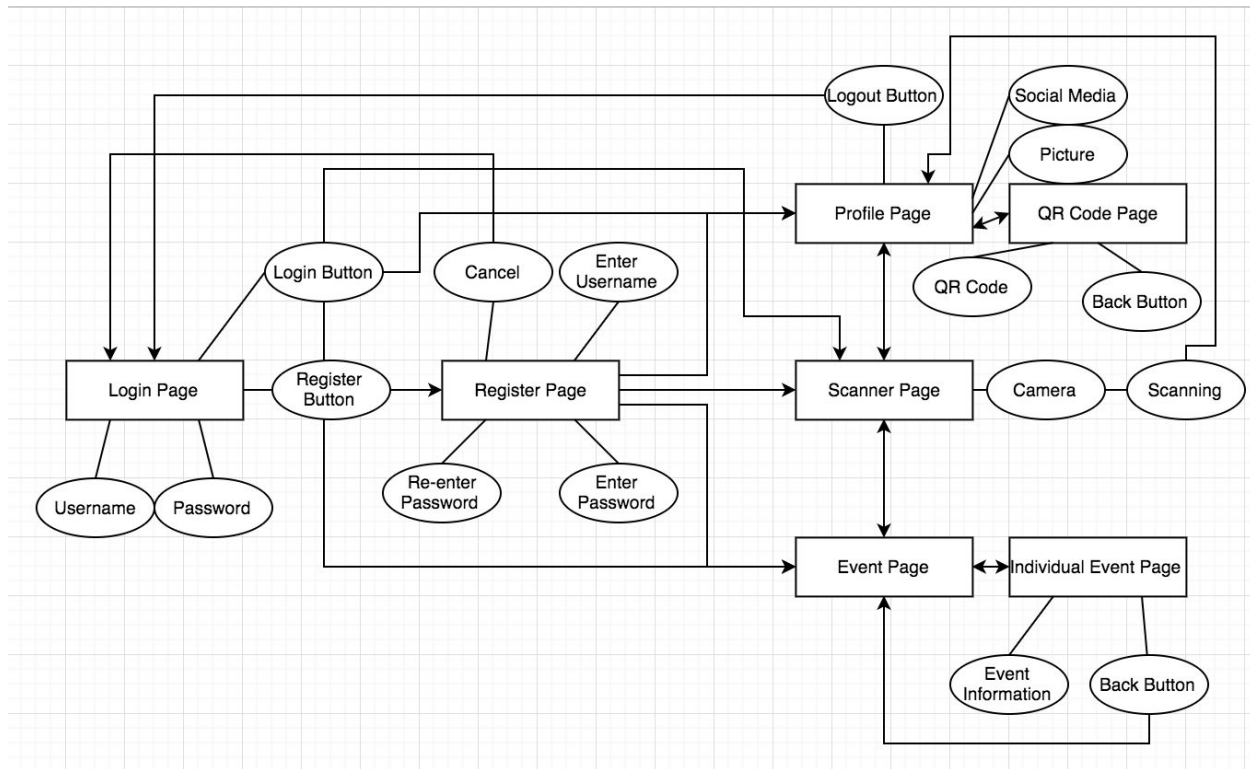


CS 408: Incremental Testing and Regression Testing

1. Classification of Components



Main Components	Input, Output + Dependent Components
Login Page	User enters username and password. Gets logged in if successful, stays on same page if not successful. Takes user to Scanner Page. If user clicks on Register button
Register Page	User enters new username, password, and re-enters password. Gets a registration success if username not taken, else asks for user to enter another username. Gets taken to Login Page.
Profile Page	Has information about user, their social media and a button to logout at the top left corner.

	Clicking that will take user back to Login Page. Also a QR Code button on the top right corner. Clicking that will take user to their unique QR Code.
Scanner Page	Scanner will open up camera to scan for QR Code. After scanning another qr code, page will open up to profile page of another person's information.
Event Page	List of Events that user is going to attend/has attended. Clicking on any event will open to the individual event page.
QR Code Page	Has user's qr code dependent of their username and a back button to go back to the profile page.
Individual Event Page	Has information contain details about the event such as the date and time of the event as well as a description. Selecting the back button would take you back to the user's Event page. Dependent component is the Event Page.

We used **bottom up testing** to test each of our main components because it was more appropriate for our project. Each page is build to be dependent on each other so it was easier to work from the bottom of the hierarchy. Initially, we tested the Scanner Page, the Profile Page, and the Event Page because those components are all individual and don't require the need of other components. Then we tested the pages within the Profile Page, which is the QR Code page and whether hitting Logout would take us to another page. The last two tests were for the login and registration page and seeing if they had a link together and that the login page linked to the profile, scanner and event page.

2. Incremental and Regression Testing

Module	Login Button
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Incremental Testing

Defect No.	Description	Severity	How to Correct
1	When clicked, app would not go to the correct main page and crash	1	Created a method that would specifically go to the first page
2	When logging out, the view would alternate between the Login view and Profile view	1	Using redux, added a stack to keep track of screen movement so after logging out, stack would pop and freeze movement from Login view unless "Login" or "Register" buttons were pressed

Regression Testing

Defect No.	Description	Severity	How to Correct
3	Fixing chronology of app caused other pages to fail loading at the start of the app	2	Realized that making app go to main page made other pages fail to load. Edited method to fix page fail error, having them load upon clicking on the page in navigation bar, but making app specifically load the first page.

Module	Register Button
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Incremental Testing

Defect No.	Description	Severity	How to Correct
4	When clicked, app would stay at the login page	1	Created a method that would specifically go to the Register

			page
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Module	QR Scanner
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Incremental Testing

Defect No.	Description	Severity	How to Correct
5	When adding camera to qr scanner page, camera got a permission denied error.	2	Had to create a method to give camera special permissions in order to open it within app.

Module	Navigation Bar
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Incremental Testing

Defect No.	Description	Severity	How to Correct
6	When adding new page, navigation bar would still direct to old page	1	Added a method checker to navigate to a specific page

Regression Testing

Defect No.	Description	Severity	How to Correct
7	Excessive switching between pages caused application to crash	3	We realized this was a problem with the page stack and to solve this we waited for the page to load before sending another request.

Module	QR Code Generation and Display
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Incremental Testing

Defect No.	Description	Severity	How to Correct
8	QR code would send in the wrong format and was not scannable	2	Forced URL GET request to encode image as “null” and specified response type as “PNG”
9	QR code wasn’t holding any information upon being scanned	2	Changed our API to take in an account id that would be added to the QR code upon generation

Regression Testing

Defect No.	Description	Severity	How to Correct
10	When QR code was returned as a PNG, the display page would crash since it couldn’t render the result as an image	1	Rendered the result as an image directly instead of trying to embed it into a textfield

Module	Social Media
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Incremental Testing

Defect No.	Description	Severity	How to Correct
10	Pictures of Social Media icons weren’t loading locally.	3	Did a Get request from google images to get the pictures for social media.