## CS408: Design Inspection, Code Inspection and Unit Testing

## 1. Design Inspection

Product	Login/Register Page Design Inspection
Date	9/22/2017
Author	Team 13
Moderator	Marlo Delatorre
Inspectors	Peter Farmer, Vincent Jiang, Pranav Shekar
Record	Aneesh Vempaty

Defect #	Description	Severity	How Corrected
1	Can Login with no credentials	1	Ensure username password matches a user in the database
2	Can Register with no credentials	1	Ensure fields aren't empty
3	Can Register with 2 different passwords	1	Ensure "reenter password" matches "enter password" value
4	Can Register with a username that already exists	1	Ensure username doesnt match a username in the database

Product	Profile Page Design Inspection
Date	9/22/2017
Author	Team 13
Moderator	Pranav Shekar
Inspectors	Aneesh Vempaty, Vincent Jiang, Marlo Delatorre
Record	Peter Farmer

Defect #	Description	Severity	How Corrected
1	Cannot Logout from profile page	2	Add route back to Login page when Logout is pressed
2	Cannot click social media links	3	Add hyperlinks to social media things
3	Cannot change profile picture	2	Create upload profile option
4	Says "Show Modal" instead of "QR Code"	1	Implement QR Code
5	Clicking "Show Modal" and "Close Modal" highlights black	3	Remove unnecessary highlights

Product	Data Access Service Design Inspection
Date	9/22/2017
Author	Team 13
Moderator	Pranav Shekar
Inspectors	Aneesh Vempaty, Vincent Jiang, Peter Farmer
Record	Marlo Delatorre

Defect #	Description	Severity	How Corrected
1	UPDATE on array-type attributes should append to the array not replace it	1	Create own POST endpoint for such fields
2	Server does not handle errors very gracefully (i.e. only prints stack trace, error codes)	2	Server sends back useful error messages in JSON format
3	Server does not validate any input before interacting with database	1	Input validation added

## 2. Code Inspection

Product	Login Component Inspection
Date	9/22/2017
Author	Team 13
Moderator	Peter Farmer
Inspectors	Vincent Jiang, Pranav Shekar
Record	Aneesh Vempaty

Defect	Description	Severity	How Corrected
1	On Login press - no check for empty username/password	1	Add if statement to check for empty strings
2	Keyboard doesn't disappear after logged in unless you hit "return"	2	Dismiss keyboard after hitting "login" or "register"
3	Logging in keeps a return to login screen button when changing views	1	Remove login from views stack after successful login
4	onPressButton test method still there	3	Remove unnecessary method
5	Placeholders for username and password input are blank	3	Add placeholder or remove, don't have unnecessary code
6	No Authentication	1	Add a call to database to check login information

Product	Register Component Inspection
Date	9/22/2017
Author	Team 13
Moderator	Peter Farmer
Inspectors	Vincent Jiang, Pranav Shekar
Record	Aneesh Vempaty

Defect	Description	Severity	How Corrected
1	On Register press - no check for empty username/password	1	Add if statement to check for empty strings
2	Keyboard doesn't disappear after logged in unless you hit "return"	2	Dismiss keyboard after hitting "register"
3	onPressButton test method still there	3	Remove unnecessary method
4	Placeholders for username and password input are blank	3	Add placeholder or remove, don't have unnecessary code
5	No Authentication	1	Add a call to database to check login information
6	Enter password field and reenter password variable names too similar - could cause future errors	2	Make two variable names distinct

Product	Profile Component Inspection
Date	9/22/2017
Author	Team 13
Moderator	Peter Farmer
Inspectors	Vincent Jiang, Pranav Shekar
Record	Aneesh Vempaty

Defect	Description	Severity	How Corrected
1	Profile.js has main class named "Login"	3	Change name to Profile
2	doStuff test method still there	3	Remove unnecessary method
3	Images not locally stored - can improperly load if site goes down	2	Save a local image and use that
4	All views have set width/height - can cause problems on different sized screens	2	Set to variable % instead of set width/height
5	Dummy data not set through props	2	Change to variables for future use
6	Unused commented code with no description - can cause confusion or errors if uncommented	3	Delete if unused, add description if for later use

Product	Data Access Service Code Inspection	
Date	9/22/2017	
Author	Team 13	
Moderator	Peter Farmer	
Inspectors	Vincent Jiang, Pranav Shekar	
Record	Aneesh Vempaty	

Defect	Description	Severity	How Corrected
1	In the case that the database connection cannot be established, server will keep waiting for database to return an object instead of sending a internal server error	1	Check for error on database interaction and send appropriate response on errors
2	Deleting a user doesn't remove the reference in other Mongo collections	1	Check if the user reference is in other collections and remove those as well
3	Passing an id that does not exist in the database just returns back null on GET	2	Check what the database returns first and send a response that the id queried for does not exit
4	Passing an id that does not exist in the database crashes the server on DELETE, PUT	1	Check what the database returns first before accessing properties of objects

## 3. Unit Testing

Product	Profile Page Unit Test
Date	9/20/2017
Author	Team 13

Defect	Description	Severity	How Corrected
1	Clicking "Logout" does nothing	1	Add a route to the login page when clicked
2	Clicking "Show Modal" should show the user's QR code	1	Add QR code generation by calling API
3	"Show Modal" should be "QR Code"	3	Change text
4	Clicking any social media should redirect to its associated application, but does nothing	2	Add application switching to each button
5	Clicking profile picture should allow to change profile picture, but does nothing	2	Add functionality
6	Clicking description should allow you to change description, but does nothing	2	Add functionality

Product	Register Page Unit Test
Date	9/20/2017
Author	Team 13

Defect	Description	Severity	How Corrected
1	Register with no username/password/reenter password should not be allowed, but takes to profile page	1	Add check against database if username already exists, make sure passwords match
2	Register with no username or password, but with reenter password should not be allowed, but takes to profile page	1	Alert shows up saying passwords must match
3	Register with no username should not be allowed, but takes to profile page	1	Alert shows up saying username is required
4	Register with username/reenter password but no password should not be allowed, but takes to profile page	1	Alert shows up saying passwords must match
5	There is no limit on username or password length, but there should be	2	Limit password/username length to 25 characters.
6	Register with a username that already exists should throw error, but takes you to profile page	1	Check against database if username already exists
7	After clicking Register, you can swipe back to register screen from profile screen, but you should have to click Logout button	1	Remove register route from navigation stack

Product	Login Page Unit Test
Date	9/20/2017
Author	Team 13

Defect	Description	Severity	How Corrected
1	Login with no username/password should not be allowed, but takes to profile page	1	Add check against database if username exists, make sure passwords is correct
2	Register with no username but with password should not be allowed, but takes to profile page	1	Alert shows up saying password is required
3	Register with no username should not be allowed, but takes to profile page	1	Alert shows up saying username is required
4	Register with username that doesn't already exist should throw error, but takes you to profile page	1	Check against database if username exists
5	Register with wrong password should throw error, but takes you to profile page	1	Check against database if password is correct
6	There is no limit on username or password length, but there should be	2	Limit password/username length to 25 characters.

Product	Data Access Service Unit Test	
Date	9/20/2017	
Author	Team 13	

Defect	Description	Severity	How Corrected
1	Does not guard against arbitrary code attacks in Mongo queries	1	Create validations on HTTP request parameters
2	Strings with large lengths in fields crash the server	1	Add validation on string lengths
3	Anything that causes the database to throw an unhandled error crashes the server	1	Add error handlers that do more than just print the stack trace