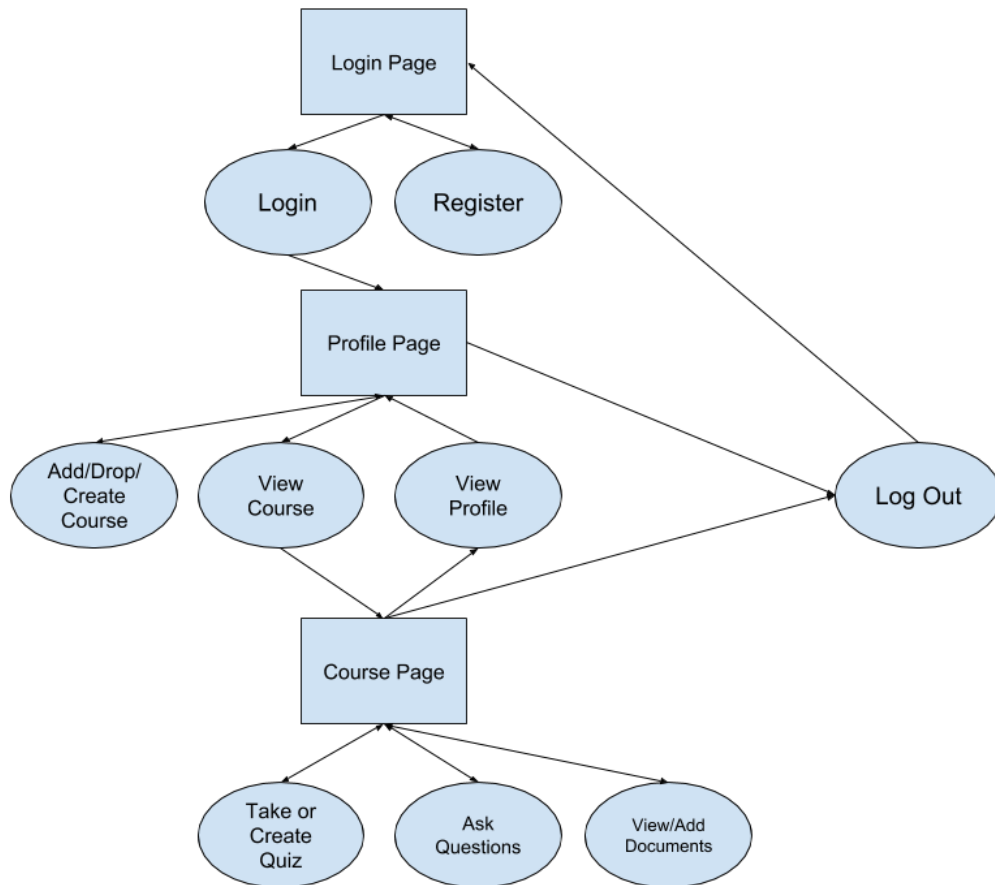




# InClass

**Team 17 - Incremental Testing and Regression Testing**  
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## Classification of Components



**Login Page:**

Input: N/A

Output: N/A

Dependent Components: Login, Register

**Login:**

Input: Email, Password

Output: Incorrect Password, Profile Page

Dependent Components: Login Page, Profile Page

**Register:**

Input: Name, Email, Password

Output: Pass/Fail Registration

Dependent Components: Login Page

**Profile Page:**

Input: N/A

Output: N/A

Dependent Components: Login, Add/Drop Courses, View Course, View Profile, Logout

**Add/Drop/Create Courses:**

Input: Course Name, Add/Delete/Create Button

Output: N/A

Dependent Components: Profile Page

**View Course:**

Input: Course

Output: Course Page

Dependent Components: Profile Page, Course Page

**Log Out:**

Input: Button

Output: Login Page

Dependent Components: Profile Page, Course Page, Login Page

**Course Page:**

Input: N/A

Output: N/A

Dependent Components: View Course, View Profile, Take Quiz, Ask Questions, View Documents

**Take/Create Quiz:**

Input: Button

Output: Quiz

Dependent Components: Course Page

**Ask Questions:**

Input: Text

Output: Question Log updated

Dependent Components: Course Page

**View Profile:**

Input: Button

Output: Profile Page

Dependent Components: Profile Page, Course Page

**View/add Documents:**

Input: Button

Output: Document

Dependent Components: Course Page

**Which form of incremental testing did we use?**

We took a bottom up approach for incremental testing, with our primary reasoning being that many of our components build on each other. For example, most of our primary features are based on top of the course components. By initially testing the add, drop, and create courses, we could then focus on the 'View Courses' component of the app, which has features such as quizzes, documents, questions. Courses sits on top of the user and profile components, so by starting at those lower level, more boilerplate elements we were able to efficiently test each individual component to make sure that it interfaced with the components that sat on top of it effectively.

# Incremental and Regression Testing

Module	Login
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## Incremental Testing

Defect No.	Description	Severity	How To Correct
1	If a user inputs an incorrect username password combo they should not be taken to their profile.	2	Add a check for an incorrect input and if incorrect do not redirect.

## Regression Testing

Defect No.	Description	Severity	How To Correct
1	If a user's username/password combo is incorrect then they should receive an error alert.	1	Add a check for an incorrect input and if incorrect display a error message.

Module	Register
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## Incremental Testing

Defect No.	Description	Severity	How To Correct
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1	Users should not be able to use emails already in the database.	2	Add a check to search the database for a matching email and display alert if one is found.
2	Passwords should match when password is retyped.	2	Compare both passwords and if incorrect display error message.

### Regression Testing

Defect No.	Description	Severity	How To Correct
1	Error messages are the same and do not say what information is incorrect.	1	Create a distinct message for each error.

Module	Add/Drop/Create Courses
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### Incremental Testing

Defect No.	Description	Severity	How To Correct
1	Users should not be able to add courses that do not exist.	1	If course is not found in db then an error should be returned.
2	Dropping a class should remove it from a user's course list.	2	Delete course from the database.
3	Users should not	2	Run a check for

	be able to create courses that already exist within the database.		duplicate course with database.
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### Regression Testing

Defect No.	Description	Severity	How To Correct
1	When a user dropped a class it also deleted it from the databases course list.	2	Only remove the course from User's table.

Module	View Course
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### Incremental Testing

Defect No.	Description	Severity	How To Correct
1	Should not redirect users to first course in their course list. Should redirect to course name they clicked on.	2	Store course name and use stored name to redirect.

### Regression Testing

Defect No.	Description	Severity	How To Correct
1	What the course page should display should depend on status of user.	2	Check to see if user is a professor or a student.

Module	Log Out
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### Incremental Testing

Defect No.	Description	Severity	How To Correct
1	Logging out did not delete user's sign in information.	2	Delete user sign in information.

### Regression Testing

Defect No.	Description	Severity	How To Correct
1	Log out message did not broadcast to header, so links to pages that should not be available to non-logged in users were available	2	Refresh page and redirect to home on log out

Module	Take/Create Quiz
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### Incremental Testing

Defect No.	Description	Severity	How To Correct
1	User should not be able to submit a blank quiz	2	Alert the user if no radio button is chosen
2	Student should not be able to take an inactive quiz	2	Disable the take quiz button to ensure that they cannot access any

			quiz
3	When a quiz is created, notification notified all users rather than just the users in that particular course	2	Change the broadcast channel to the 'CoursesChannel' so that no data is transmitted to unauthorized users

### Regression Testing

Defect No.	Description	Severity	How To Correct
1	Admins can send a quiz out that has a blank answer that can still be selected by users	2	Mandate text in all answers, make sure form can't submit without
2	'Create Quiz' button does not disappear when a quiz is created, so admins can still create quizzes even though we only allow 1 active quiz at any given time in a course	2	Disable 'Create Quiz' button and make 'Close Quiz' button that doesn't go away until quiz status is set to false

Module	Ask Questions
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### Incremental Testing

Defect No.	Description	Severity	How To Correct
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1	A user should not be able to post blank questions.	1	Add a check for a blank input and display an alert if the input is blank.
2	Yeahing (Liking) or Unyeahing (unliking) should update the button without needing to refresh the page.	1	Update the backend to provide JSON data via REST when the button is clicked.
3	Questions should be sorted by the number of "Yeahs" they have instead of being randomly ordered.	2	Add sorting functionality to the array of questions.
4	Professors should have see a different button to answer questions instead of "Yeah" questions.	2	Add a check to see if the user is an admin or not and display the appropriate button.

## Regression Testing

Defect No.	Description	Severity	How To Correct
1	Adding the check for blank questions caused the "Answer Question" in Asking Questions button to fade after being clicked over and over again.	1	Overhaul the styling of the button.

Module	View Profile
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### Incremental Testing

Defect No.	Description	Severity	How To Correct
1	Should take user to their profile page	2	Refresh page and redirect to profile page.

### Regression Testing

Defect No.	Description	Severity	How To Correct
1	What the course page should display should depend on status of user.	2	Check to see if user is a professor or a student.

Module	View/add Documents
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### Incremental Testing

Defect No.	Description	Severity	How To Correct
1	Documents uploaded by professors were not displaying to students.	2	When displaying documents display to both students and professors.
2	Only users who are professors should be able to add documents.	1	Check user info and only display add button for users who are professors.

### Regression Testing

Defect No.	Description	Severity	How To Correct
1	Professors were able to add documents to courses not their own.	1	Only display add button to the professor who created the course.

## Updated Backlog

Backlog ID	Functional Requirement	Number of Hours	Status
1	As a user (student/professor) I want to be able to login to my account.	3	Completed in Sprint 1
2	As a user (student/professor) I want to be able to log out of my account.	3	Completed in Sprint 1
3	As a user (student/professor) I want to be able to sign up for an account.	3	Completed in Sprint 1
3	As a user (student) I want to be able to be marked present for a class using the camera on my phone.	10	Sprint 2
4	As a user (student/professor) I want to be able to view classes I have registered.	3	Completed in Sprint 1
5	As a user (student/professor) I want to be able to drop my class after the semester.	3	Completed in Sprint 1
6	As a user (student), I want to be able to marked present for a class using geolocation.	10	Sprint 2

7	As a user (student/professor), I want to be able to view leaderboards of other students in my class.	6	Sprint 2
8	As a user, I want to be able to view slides on my computer, and I want my slides to advance as my professor advances the slides.	10	Sprint 2
9	As a user (student), I want to take quizzes that my professor assigns.	10	Completed in Sprint 1
10	As a user (student) I want to be able to add a class to my roster.	3	Completed in Completed in Sprint 1
11	As a user(professor) I want to be able to create a new class for students to join.	3	Completed in Sprint 1
11	As a user (professor), I want to open attendance and show the QR code.	6	Sprint 2
12	As a user (professor), I want to assign quizzes to my students in class.	6	Completed in Sprint 1
13	As a user (professor), I want to share files that are used in class to my students.	10	Completed in Sprint 1
14	As a user (professor), I want to be able to display quiz results to students.	5	Completed in Sprint 1
15	As a user (student) I want to view the class average scores on quizzes.	5	Completed in Sprint 1
16	As a user (student), I want to be able to be able to use the application on my mobile phone and laptop.	10	Completed in Sprint 1
17	As a user (student) I want to see visual graphs of class grades.	10	Sprint 2
18	As a user (student) I want to be able to anonymously ask questions for the professor to answer in real time.	6	Completed in Sprint 1
19	As a user (professor/student) I want to be able to view questions of other students.	6	Completed in Sprint 1

20	As a user (student), I want “Yeah” (like) a posed question.	4	Completed in Sprint 1
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