The Blackboard Learning Management System at the University of Cincinnati: Discussion Board & Calendar Problems

Project Drivers

1. The Propose of the Report

Many students, professors and teaching assistants in the University of Cincinnati who use Blackboard system to submit their assignment, discuss difficulties of Bb system. To know the actual problems faced by students of Blackboard system, I created a questionnaire using Survey Monkey and sent the web links to students at UC in order to gather data. After the data analysis, I found that many students faced difficulty with the discussion board threads and blackboard calendar. So, the purpose of this report is to come up with possible solution to the above stated problems.

2. Stakeholders

In this report, students, professors and teaching assistants in the University of Cincinnati are the stakeholders who face various problems while using Blackboard system. They think that Blackboard system is generally a not good looking and unreliable system. Students who gave responses to the survey, are between 18- 21 ages. I asked them some questions related Blackboard system. For instance,

- How satisfied are you with the reliability of Blackboard?

- How satisfied are you with the look and feel of Blackboard?

- How satisfied are you with the ability to submit assignments on Blackboard?

- How satisfied are you with the discussion board threads on Blackboard?

- How satisfied are you with the usage of Blackboard Calendar?

Constraints

As we mentioned first section, students, professors and teaching assistants are able to reach to submission page/ discussion board after they passed six steps. The features are not convenient for students in the Blackboard system. In this section, we demonstrate login in and submission processes which is inconvenient for students that it will be in use case analysis.

1. Login

Use case section	Comment
Use case name	Login_user
Actor	Student
Purpose	Accessing the BB system in order to explore the system
Overview	A student in the UC connects to the BB system using username (6+2) and password

2. My UC page

Use case section	Comment
Use case name	Login_user
Actor	Student
Purpose	A student can access to all of the resources available on blackboard in My UC page.
Overview	A student in the UC connects to the BB system tools, courses, etc. through My UC page.

3. Blackboard Calendar

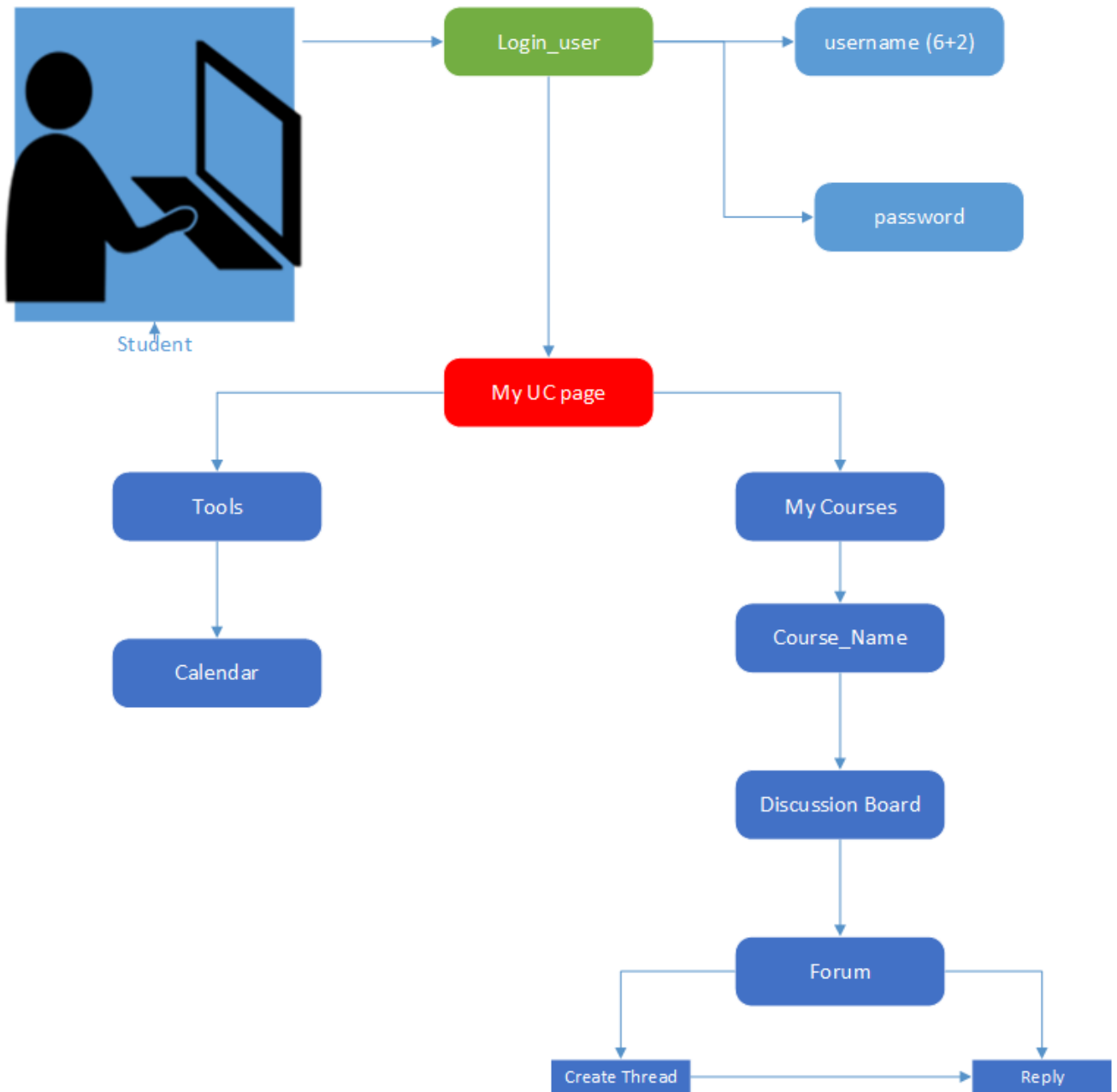| Use case section	Comment
Use case name	User_calendar
Actor	Student
Purpose	A student clicks on tools to reach Calendar in My UC page
Overview	When it is reached to learning modules, students can see modules weekly

4. My Courses

Use case section	Comment
Use case name	Courses
Actor	Student
Purpose	A student clicks on my courses to reach all the courses he/she enrolled for the semester.
Overview	When it is reached to the particular course, students can see all the resources available in that course.

5. Discussion Board Page

Use case section	Comment
Use case name	Discussion Board Page
Actor	Student
Purpose	When it is clicked on discussion board in any course, students can reach Discussion Board page.
Overview	A student reached to Discussion Board after he/she followed four steps

Students can reach to discussion board page after they passed four steps. These steps are seen difficult by the students. Therefore, I found out a solution to solve students' problem. When a student access to the My UC page to submit the discussion board thread or reply to his fellow classmates posts, he/she have to connect five pages. It will be explicitly demonstrated in the diagram below.

Blackboard System

As seen in the diagram, first of all, students have to login into the Blackboard system. Then, they have to access particular course under my courses on My UC page. Then, they need to click on discussion board page under a particular course. Finally, they can create a thread or reply to other posts by clicking under any forum title on discussion board page.
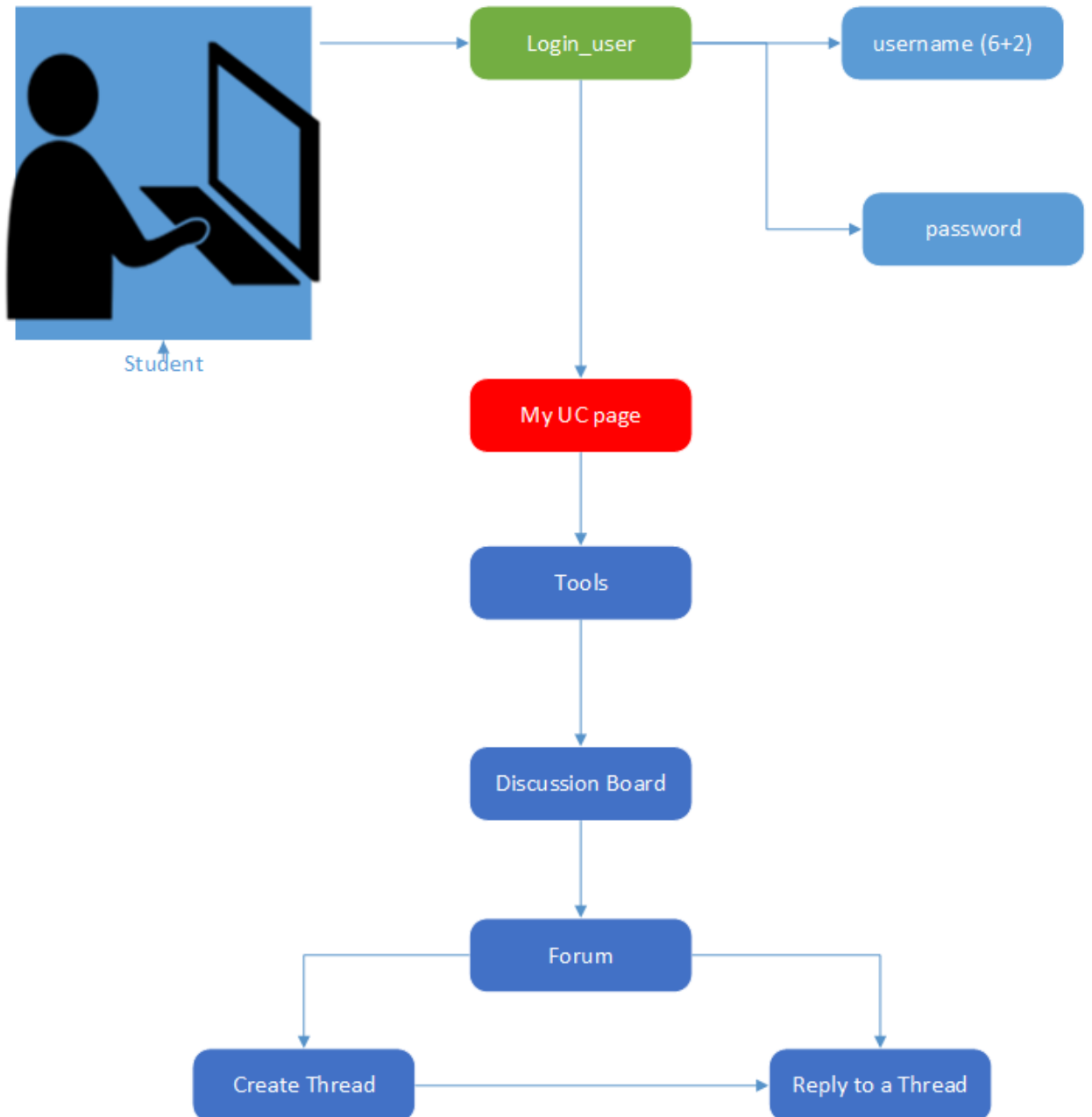
Functional Requirements

Blackboard is an interactive learning management system for University of Cincinnati. We are interested in improving look, feel, reliability and evaluating the Blackboard system, because education professionals think that it affects their education in educational institutions. Therefore, improving the system is significant issue to use it efficient and easy-to-use. The most significant problem about the Blackboard system is that students have to click five steps to submit their thread in discussion board forum. Moreover, students were not able to use blackboard calendar in order to get email notifications about course assignment/tasks deadlines. It is not efficient and convenient, so it should be made easier-to-use for students, professors and teaching assistants.

In the diagram below, we demonstrate an example how to use easier Blackboard system for students who complain difficulties of creating threads on discussion board. They were reaching previous case with clicking five steps.

In our solution, it is enough that students log in to the Blackboard System and they can see dedicated "Discussion Board" in My UC page. This way is easier for students.

Blackboard System

Student

Login_user → username (6+2)

→ password

My UC page

Tools

Discussion Board

Forum

Create Thread → Reply to a Thread

In these charts, we demonstrate use case analysis about solution diagram.

1-Login

Use case section	Comment
Use case name	Login_user
Actor	Student
Purpose	Accessing the BB system and submitting assignment
Overview	A student in the UC connects to the BB system using ID and password

2. My UC page

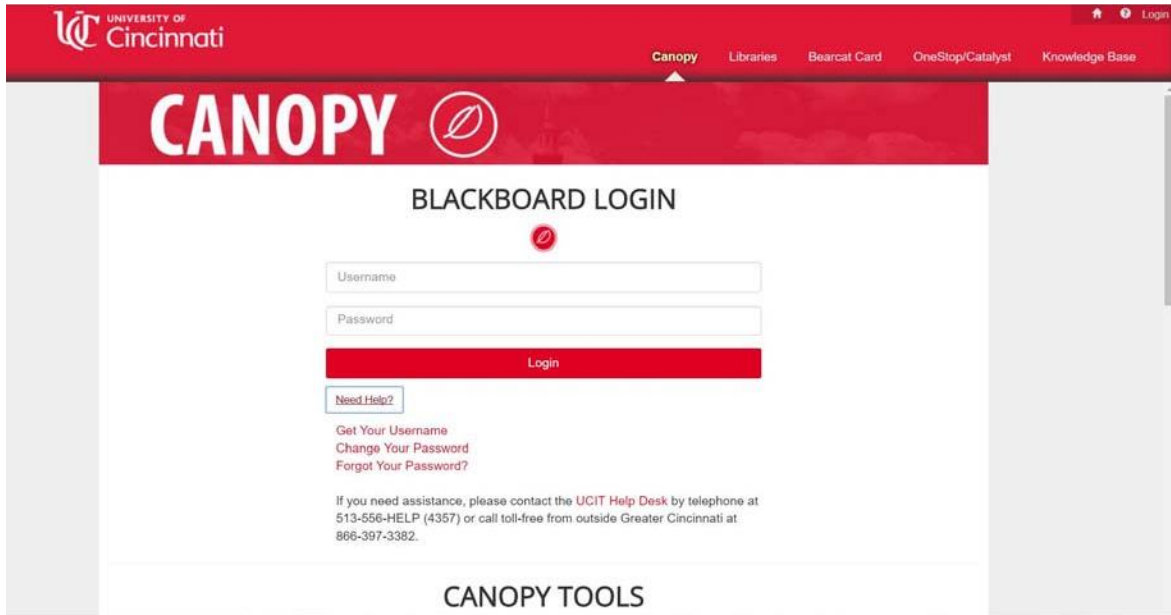| Use case section	Comment
Use case name	Login_user
Actor	Student
Purpose	A student can access to all of the resources available on blackboard in My UC page.
Overview	A student in the UC connects to the BB system tools, courses, etc. through My UC page.

3. Discussion Board

Use case section	Comment
Use case name	Discussion Board
Actor	Student
Purpose	A student can directly connect to discussion board page under tools on My UC page.
Overview	Students can access to the discussion board page without clicking four steps

As seen in these charts, students can access to the discussion board page without clicking four
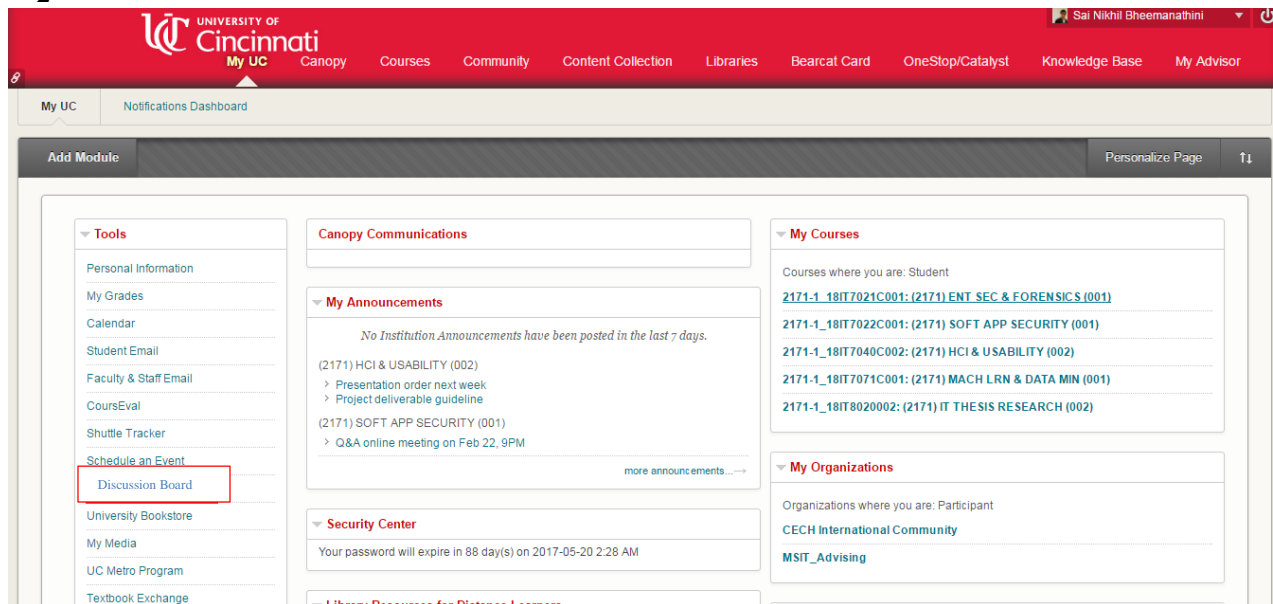
steps.

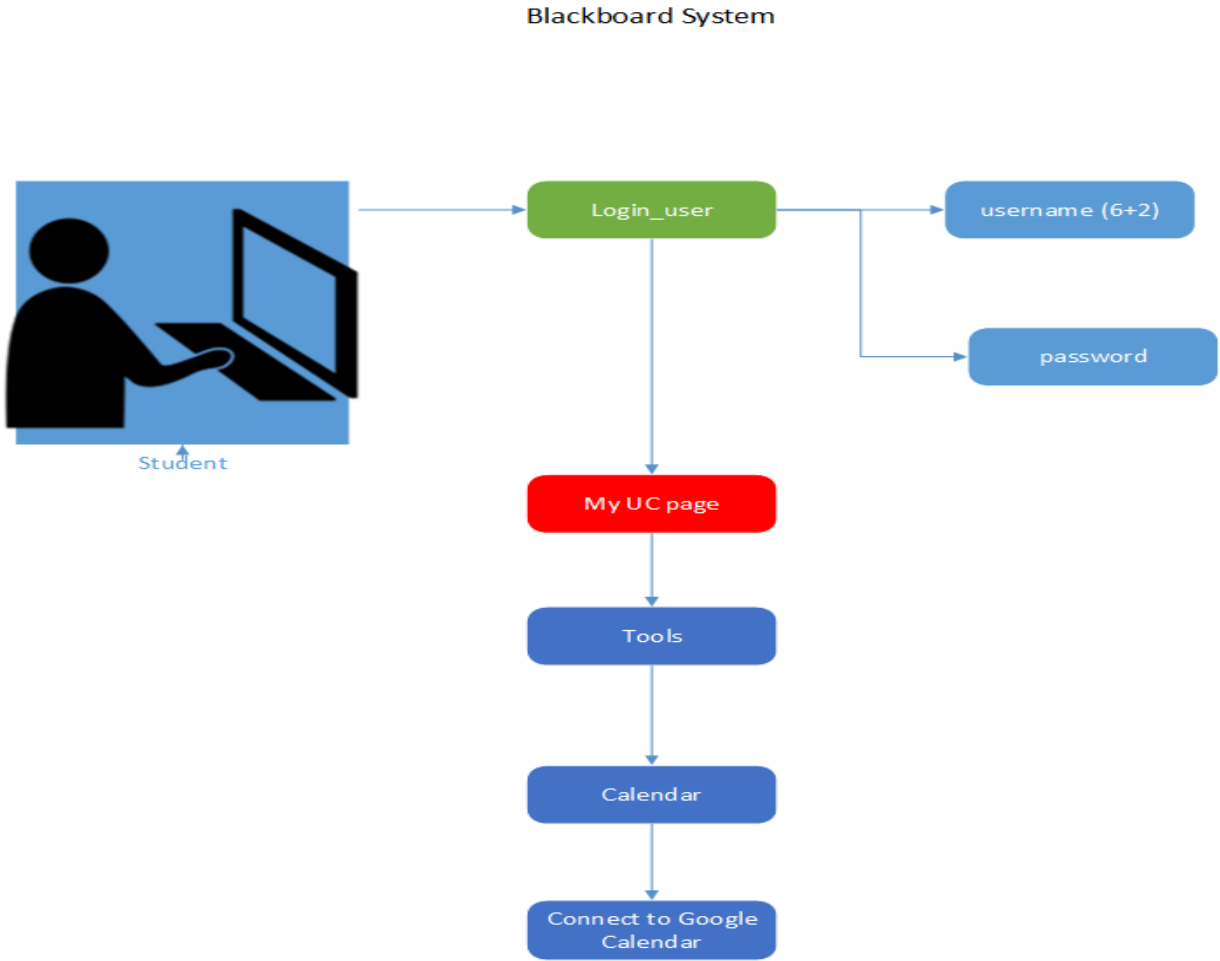**After Our Solution Assignment Submission Page Steps (Task-1)**

1

2

We can improve the design of Blackboard system. In our first case, we added "Discussion Board" under tools in My UC page.

Another major problem faced by many Students/Professors/Teaching assistants is the usage of blackboard calendar.

In our solution, it is enough that students log in to the Blackboard System and they can see dedicated "Connect to Google Calendar" in Calendar page.. This way is easier for students.

Blackboard System

In these charts, we demonstrate use case analysis about solution diagram.

1-Login

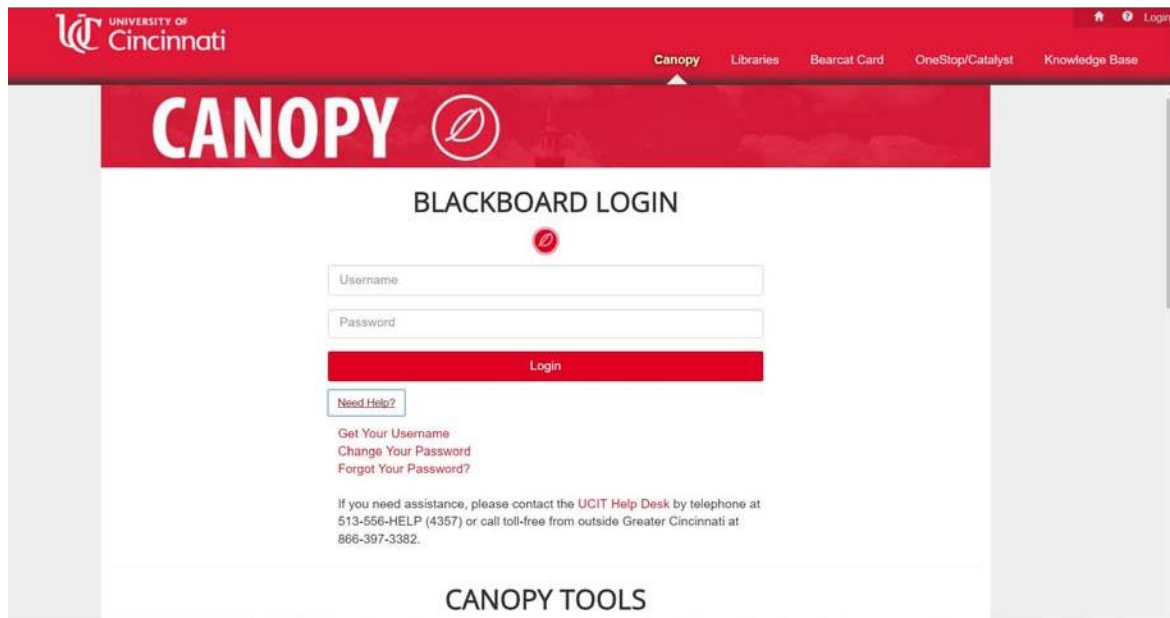| Use case section	Comment
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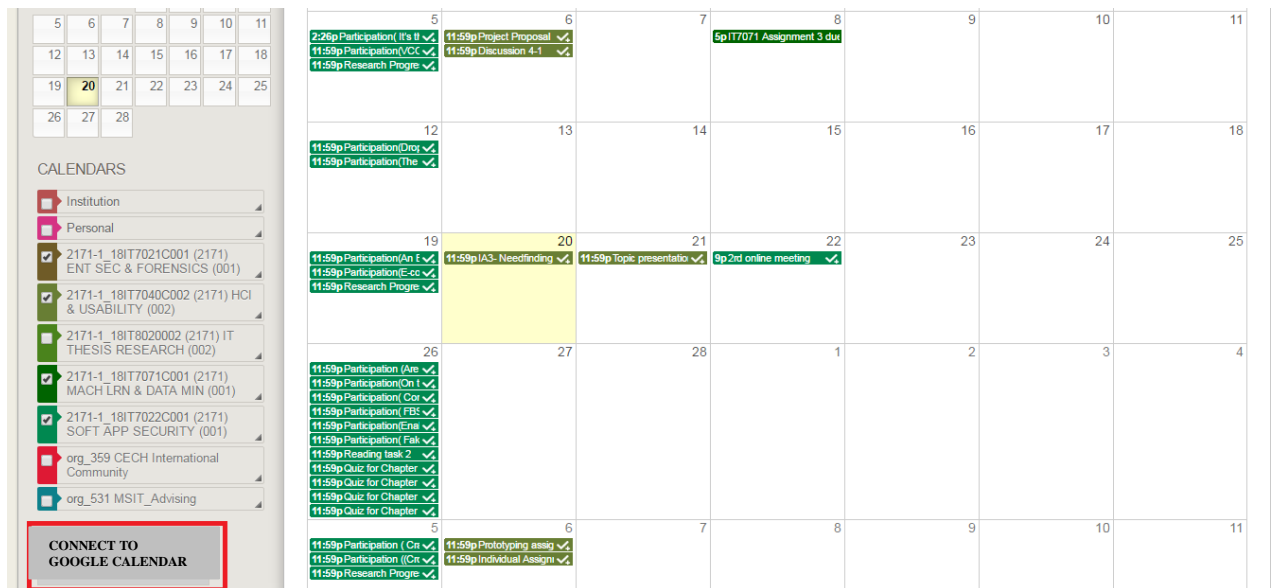| Use case section	Comment
Use case name	Login_user
Actor	Student
Purpose	A student can access to all of the resources available on blackboard in My UC page.
Overview	A student in the UC connects to the BB system tools, courses, etc. through My UC page.

3. Blackboard Calendar

Use case section	Comment
Use case name	Blackboard Calendar
Actor	Student
Purpose	A student can directly integrate the calendar with the google calendar.
Overview	Students can access to the course deadline/ calendar notification through google on their mobiles/laptops/PC.

As seen in these charts, students can directly integrate the calendar by exporting .ical format to google calendar on calendar page.

After Our Solution Blackboard Calendar Usage steps (Task-2)

1

2

We can improve the design of Blackboard system. In our first case, we added integration of "Blackboard Calendar" into Google calendar on calendar page under tools in My UC page.

TASK-1

Requirement #:   33   **Requirement Type:** 9   **Event/ Use Case #:** 3

Description: Students can access to the Discussion Board page without following four steps. For this, we will add a dedicated "Discussion Board" link under tools in the My UC page

Rationale: We are doing this to improve user experience relating to use of Blackboard system based on the feedback got through the survey

Source: Students

Fit Criterion: Blackboard will be more efficient and easier-to-use for students

Customer Satisfaction: 5   **Customer Dissatisfaction:** 4

Dependencies: None   **Conflicts:** None

Supporting Materials: Specification of Blackboard System

History:

TASK-2

Requirement #: 34   **Requirement Type:** 9   **Event/ Use Case #:** 3

Description: Students can connect the Blackboard calendar with Google calendar to get notifications regarding deadlines of course assignments/tasks

Rationale: We are doing this to improve user experience relating to use of Blackboard system

Source: Students

Fit Criterion: Each student can easily reach Assignment Submission Page so that Blackboard will be more efficient and convenient for students

Customer Satisfaction: 5   **Customer Dissatisfaction:** 5

Dependencies: None   **Conflicts:** None

Supporting Materials: Specification of Blackboard System

History:

Non-Functional Requirements

Blackboard is innovation in modern learning management systems which helps students, professors and teaching assistants adapt to new teaching techniques, personalize learning, and experience digital learning experiences. Students actively engage with the material and interact using Blackboard. Students and professors can customize the look of the Blackboard main page (My UC) to themselves, but these features are limited to changing color themes. It means that they are not able to develop their pages themselves. Thus, system UI developers continuously need to develop Blackboard system according to students and professors' needs. It needs to be practical and easy-to-use. These features increase its productivity. As mentioned, personalization is important for easy-to-use on the Blackboard System.

Another important thing is who is authorized to access to the Blackboard system, because a lot sensitive data is saved on the system. Privacy and integrity is significant issue for the Blackboard. Finally, Reliability of the entire system is important for an education system to enhance learning environment for Students/Professors/Teaching Assistants.

Project Issues

In this project we offered two ways to facilitate the work of students. One of them is that we added "Upcoming Assignments" link to submit their assignments easily on MyUC page. For this, it is enough to login in the Blackboard system. Upcoming Assignments link will be seen easily on the main page. Second way is that we added "Upcoming Assignments" link in each course section. Thus, when students access to their courses, they will see "Upcoming Assignments" link left side in the "Course Content" section. In the current system, students have to click to six steps to reach submission page. In our solution, students can access to the assignment submission page without clicking six steps.