UC Blackboard Prototype

<u>Needfinding Assignment summary</u>: In the Needfinding assignment, I had created a survey in which UC students, professors, and assistant professors were participated. Based on the survey analysis reports, I concluded that most of the users found 'Calendar' and 'Discussion Board' as a problem in UC Blackboard.

Based on the above information, I have suggested three different conceptual models for this system.

<u>Conceptual model 1</u>: In this model, users will interact with the UC Blackboard in the same way as they do at present.

- ❖ <u>Interface Metaphor</u>: This model requires the knowledge already known by the users. There is very little scope of requirement of additional knowledge by the users.

    - ▪ <u>Evaluation</u>:
        - ➢ How much structure does it provide?
        - • The model provides the structure very like that as structure provided by UC Blackboard.

        - ➢ How much is relevant to the problem?
        - • The model mainly focuses on problems like Calendar & Discussion Board.

        - ➢ Is it easy to represent?
        - • This model represents few extra options like discussion board on myUC page of UC Blackboard and Google calendar on calendar page. Rest everything is same as UC Blackboard.

        - ➢ Will the audience understand it?
        - • Since, audience are already much familiar with the traditional UC Blackboard. They will find this model very easy. Moreover, solutions to problems were incorporated on myUC page itself. So, audience can easily identify and work with it.

- ❖ <u>Interaction Type</u>: Users will perform same actions as they perform on UC Blackboard. But, the actions are limited to Login, Calendar, Discussion board, myUC, and Logoff.

    - ➢ In order to access discussion board in the traditional blackboard, users need to click on any particular course under my courses tab and then, click on discussion

board under a particular course. Finally, they can create a thread or reply to a thread.

➢ However, in this model, users will click on discussion board option under tools tab on myUC page. Then, they can see the posts statistics related to courses enrolled in by the users. Finally, if they click on any course, they will be directed to discussion board of a particular course and then, users can create a thread or reply to a thread.

➢ I consider the interaction type of this model as exploring from user's perspective.

❖ Interface Type: The model facilitates tangible interface type. Users will perform actions either by touch with the finger or click with the mouse on the desired options.
  ➢ For example, users will touch with the finger or click with the mouse on the calendar option under tools tab on myUC page to view the calendar.

  ➢ The interface of the model looks good on any screen resolution. Hence, users can access blackboard on any device of any resolution.

❖ Activities: This model supports some activities which are also supported by the traditional UC Blackboard.
  ➢ For example, users can connect UC calendar to Google calendar in order to get notifications of the events.

  ➢ Additionally, users can view the statistics related to posts in all the courses under discussion board page.

❖ Functions: The model has the same interface type as UC Blackboard and displays all the options as provided by UC Blackboard. However, this model supports very few functions focusing on the problems found in UC Blackboard. Functions supported by this model:
  ➢ There is an additional option like connect to Google calendar on calendar page which is not found in UC Blackboard. When users touch, or click on the above option, UC Calendar is directly integrated into the user's Google calendar. The product will do the background work of integration. Whereas, user just needs to touch or click on the option.

  ➢ Moreover, there is an option like UC Blackboard on calendar page. If a user click or touch it, they will be re-directed to myUC page. Similarly, same above option is available on google calendar page of the model which does the same function of redirecting user to myUC page.

- There is an option like discussion board on myUC page where if user touch or click on it, they will be directed to discussion board page where user can see the statistics of posts related to all the courses enrolled by the user. After this, user can click or touch on any particular course which opens a new page, where user can find all the threads of a course. Here, user can create or reply to a thread.

- Additionally, user can touch or click on myUC option on discussion board page to go back to myUC page.

- Finally, there is an option 'Logoff' on myUC and discussion board page where if a user click or touch it, they will be logged off from the UC Blackboard and redirected to UC Login page.

- ❖ Relation between Functions: In this model, all the functions are parallel to each other.

  - Since, there are multiple options on a single page, users can perform them in any order rather than sequential.

- ❖ Information Requirements: There is not much prior information needed by the users to perform the task. Since, this model uses the traditional UC Blackboard interface.

  - However, this model requires user to give permission to authorize their Google account to which UC Calendar synchronizes.
  - So, the above google account data is processed by the model and performs the synchronization task.
  - Once the above task is completed, model will transform the data into google calendar and will be displayed to the user. This is how the data is transformed by the model using user data [Google account details].
  - Later, user can create, edit, and delete an event on google calendar. Hence, user gets notifications for the events.

Conceptual model 2: In this model, users will interact with the brand new application with limited functions that solve UC Blackboard problems.

- ❖ Interface Metaphor: This model requires the knowledge already known by the users. There is a requirement of additional knowledge by the users.

  - ▪ Evaluation:
    - How much structure does it provide?
      - The model provides the structure very different to UC Blackboard. It features new interface.

> ➢ How much is relevant to the problem?
> - The model mainly focuses on problems like Calendar & Discussion Board.
>
> ➢ Is it easy to represent?
> - This model represents only few functions like Calendar & Discussion board and rest of the functions are linked to UC Blackboard.
>
> ➢ Will the audience understand it?
> - Since, audience are already familiar with the functions provided by traditional UC Blackboard. They will find this model somewhat easy. However, this model provides only few functions and not all the functions provided by UC Blackboard.

- ❖ <u>Interaction Type</u>: Users will perform same actions as they perform on UC Blackboard. But, the actions are limited to Login, Calendar, Discussion board, and Logoff.

  > ➢ To access discussion board in the traditional blackboard, users need to click on any course under my courses tab and then, click on discussion board under a course. Finally, they can create a thread or reply to a thread.
  >
  > ➢ However, in this model, users will first login to the application and have two options to explore like calendar & discussion board.
  >
  > ➢ I consider the interaction type of this model as exploring from user's perspective.

- ❖ <u>Interface Type</u>: The model facilitates tangible interface type. Users will perform actions either by touch with the finger or click with the mouse on the desired options.
  > ➢ For example, users will touch with the finger or click with the mouse on the calendar option to view the UC calendar.
  >
  > ➢ The interface of the model looks good on any screen resolution. Hence, users can access this model application on any device of any resolution.

- ❖ <u>Activities</u>: This model supports very few activities which are also supported by the traditional UC Blackboard.
  > ➢ For example, users can connect UC calendar to Google calendar to get notifications of the events.

➢ Additionally, users can view the statistics related to posts in all the courses under discussion board page.

❖ Functions: The model has the simple interface type unlike interface of the UC Blackboard and displays very few options like calendar & discussion board. However, this model supports very few functions focusing on the problems found in UC Blackboard. Functions supported by this model:

➢ There is an additional option like connect to Google calendar on calendar page which is not found in UC Blackboard. When users touch, or click on the above option, UC Calendar is directly integrated into the user's Google calendar. The product will do the background work of integration. Whereas, user just needs to touch or click on the option.

➢ There is an option like discussion board on home page of the model where if user touch or click on it, they will be directed to discussion board page where user can see the statistics of posts related to all the courses enrolled by the user. After this, user can click or touch on any course which opens a new page, where user can find all the threads of a course. Here, user can create or reply to a thread.

➢ Finally, there is an option 'Logoff' on calendar and discussion board page where if a user click or touch it, they will be logged off from the UC Blackboard and redirected to Login page.

❖ Relation between Functions: In this model, all the functions are parallel to each other.

➢ Since, there are multiple options on a single page, users can perform them in any order rather than sequential.

❖ Information Requirements: There is not much prior information needed by the users to perform the task. However, users find this model to have limited functions like calendar and discussion board.

➢ However, this model requires user to give permission to authorize their Google account to which UC Calendar synchronizes.
➢ So, the above google account data is processed by the model and performs the synchronization task.
➢ Once the above task is completed, model will transform the data into google calendar and will be displayed to the user. This is how the data is transformed by the model using user data [Google account details].
➢ Later, user can create, edit, and delete an event on google calendar. Hence, user gets notifications for the events.

Conceptual model 3: In this model, users will interact with the UC Blackboard in the same way as they do at present.

- ❖ Interface Metaphor: This model requires the knowledge already known by the users. There is very little scope of requirement of additional knowledge by the users.

    - ▪ Evaluation:
        - ➢ How much structure does it provide?
        - • The model provides the structure very like that as structure provided by UC Blackboard.

        - ➢ How much is relevant to the problem?
        - • The model mainly focuses on problems like Calendar & Discussion Board.

        - ➢ Is it easy to represent?
        - • This model represents few options like discussion board on myUC page of UC Blackboard and Google calendar on calendar page. Rest everything is excluded from UC Blackboard.

        - ➢ Will the audience understand it?
        - • Since, audience are already much familiar with the traditional UC Blackboard. They will find this model easy. Moreover, solutions to problems were incorporated on myUC page itself. So, audience can easily identify and work with it.

- ❖ Interaction Type: Users will perform same actions as they perform on UC Blackboard. But, the actions are limited to Login, Calendar, Discussion board, myUC, and Logoff. There are no further options are available like in UC Blackboard.

    - ➢ To access discussion board in the traditional blackboard, users need to click on any course under my courses tab and then, click on discussion board under a course. Finally, they can create a thread or reply to a thread.

    - ➢ However, in this model, users will click on discussion board option on myUC page. Then, they can see the posts statistics related to courses enrolled in by the users. Finally, if they click on any course, they will be directed to discussion board of a course and then, users can create a thread or reply to a thread.

    - ➢ I consider the interaction type of this model as Instructing from user's perspective.

❖ Interface Type: The model facilitates tangible interface type. Users will perform actions either by touch with the finger or click with the mouse on the desired options.
  ➢ For example, users will touch with the finger or click with the mouse on the calendar option under tools tab on myUC page to view the calendar.

  ➢ The interface of the model looks good on any screen resolution. Hence, users can access blackboard on any device of any resolution.

❖ Activities: This model supports few activities which are also supported by the traditional UC Blackboard. However, this model excludes all the other activities supported by UC.
  ➢ For example, users can connect UC calendar to Google calendar to get notifications of the events.

  ➢ Additionally, users can view the statistics related to posts in all the courses under discussion board page.

❖ Functions: The model has the same interface type as UC Blackboard and displays only few options as provided by UC Blackboard. This model supports very few functions focusing on the problems found in UC Blackboard. Functions supported by this model:
  ➢ There is an additional option like connect to Google calendar on calendar page which is not found in UC Blackboard. When users touch, or click on the above option, UC Calendar is directly integrated into the user's Google calendar. The product will do the background work of integration. Whereas, user just needs to touch or click on the option.

  ➢ Moreover, there is an option like UC Blackboard on calendar page. If a user click or touch it, they will be re-directed to myUC page. Similarly, same above option is available on google calendar page of the model which does the same function of redirecting user to myUC page.

  ➢ There is an option like discussion board on myUC page where if user touch or click on it, they will be directed to discussion board page where user can see the statistics of posts related to all the courses enrolled by the user. After this, user can click or touch on any particular course which opens a new page, where user can find all the threads of a course. Here, user can create or reply to a thread.

  ➢ Additionally, user can touch or click on myUC option on discussion board page to go back to myUC page.

➢ Finally, there is an option 'Logoff' on myUC and discussion board page where if a user click or touch it, they will be logged off from the UC Blackboard and redirected to UC Login page.

❖ Relation between Functions: In this model, all the functions are parallel to each other.

➢ Since, there are multiple options on a single page, users can perform them in any order rather than sequential.

❖ Information Requirements: There is not much prior information needed by the users to perform the task. Since, this model uses the traditional UC Blackboard interface.

➢ However, this model requires user to give permission to authorize their Google account to which UC Calendar synchronizes.
➢ So, the above google account data is processed by the model and performs the synchronization task.
➢ Once the above task is completed, model will transform the data into google calendar and will be displayed to the user. This is how the data is transformed by the model using user data [Google account details].
➢ Later, user can create, edit, and delete an event on google calendar. Hence, user gets notifications for the events.

Conclusion: Finally, I have selected the conceptual model 1 from the above models. Since, users are familiar with UC Blackboard they find this model very easy to follow and explore. Moreover, this model displays all the options provided by UC Blackboard unlike model 3. Even though, this model provides few functions but displays all the functions provided by UC Blackboard, users will not find any difficulty. Additionally, in future all the functions provided by UC might be supported by this model. Hence, this model has got user interaction and usability as the primary consideration and have future scope, which make this model stand out from other models described above.

Storyboard for the conceptual model:
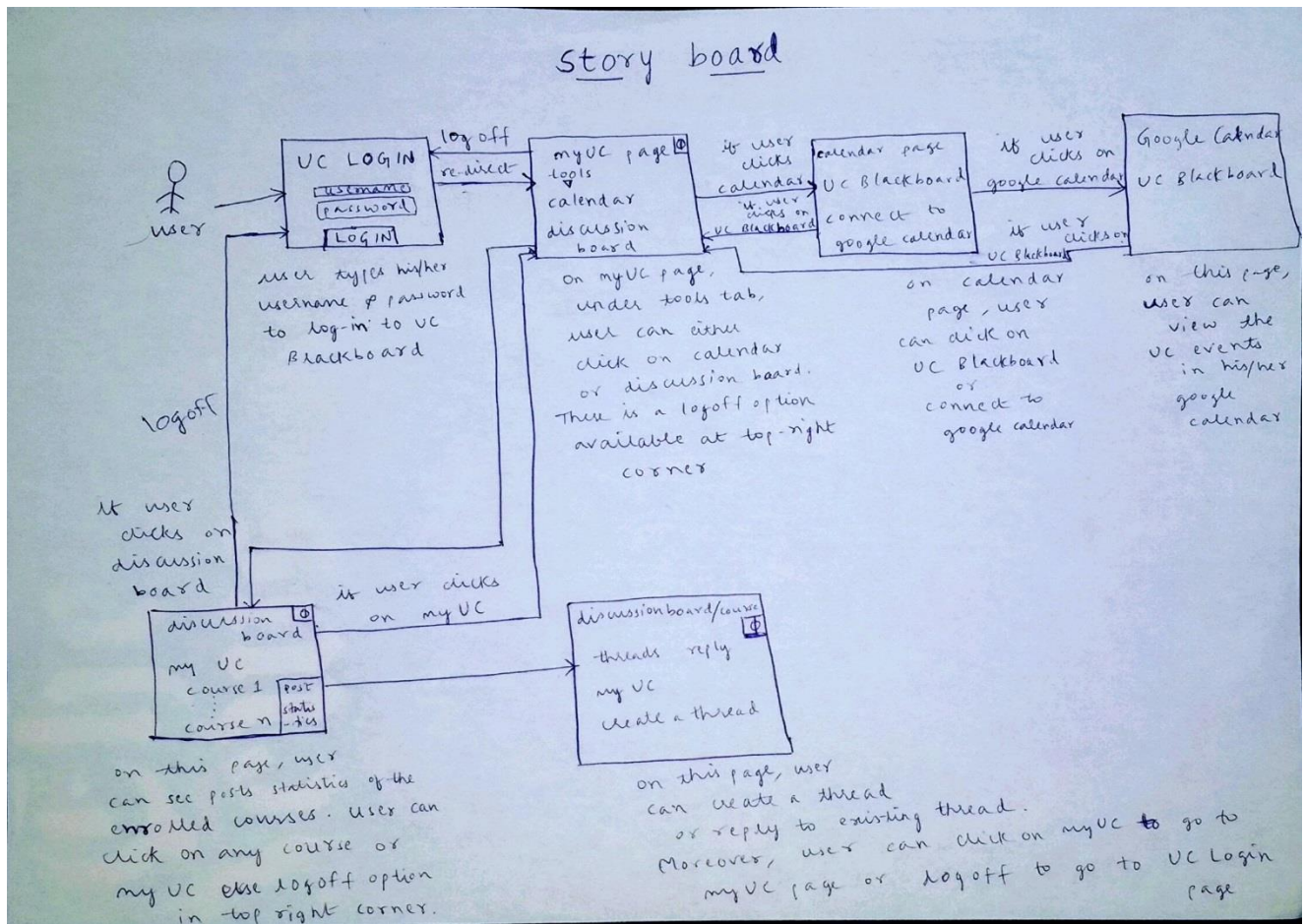
Informal Feedback:

➢ User 1: The storyboard is good and I am expecting the same concept in the prototype.

➢ User 2: The storyboard is bit complex to understand and needs minor improvement.

➢ User 3: Sketches are good and the flow of direction arrows, tasks, etc. are well depicted in the storyboard.

Card based Prototype for the conceptual model:

Card Based Prototype   * All the actions are parallel not sequential

UC LOGIN
where do you want to go? [my UC]
what if, you are unable to login? [forget password]

myUC
where do you want to go? [calendar] [discussion board]
what if, you want to return to the UC LOGIN? [Log off]

Calendar
What do you want to do? [view]
what else can you do? [my UC] [log off] [connect to google calendar]
what happens if click connect to google? [Google calendar]
what else can you do on google calendar? [my UC]
what happens if you click my UC? [re-direct to myUC page]

Discussion Board
what do you want to do? [view post statistics]
what else you can do? [course] [create a thread] [Reply] [myUC] [Log off]
what happens if you click on course? [threads] [Reply] [create thread]
what happens if you click myUC? [re-direct to myUC]
what if, you want to return to UC login [Log off]

Informal Feedback:

➢ User 1: The storyboard is good and I am expecting the same concept in the prototype.

➢ User 2: The storyboard is bit complex to understand and needs minor improvement.

➢ User 3: Sketches are good and the flow of direction arrows, tasks, etc. are well depicted in the storyboard.

Mockup of the product prototype: I created the mockup using Marvelapp with edited UC Blackboard pictures incorporated with actions.

URL: https://marvelapp.com/7ha5fej

<div align="center">UC LOGIN</div>
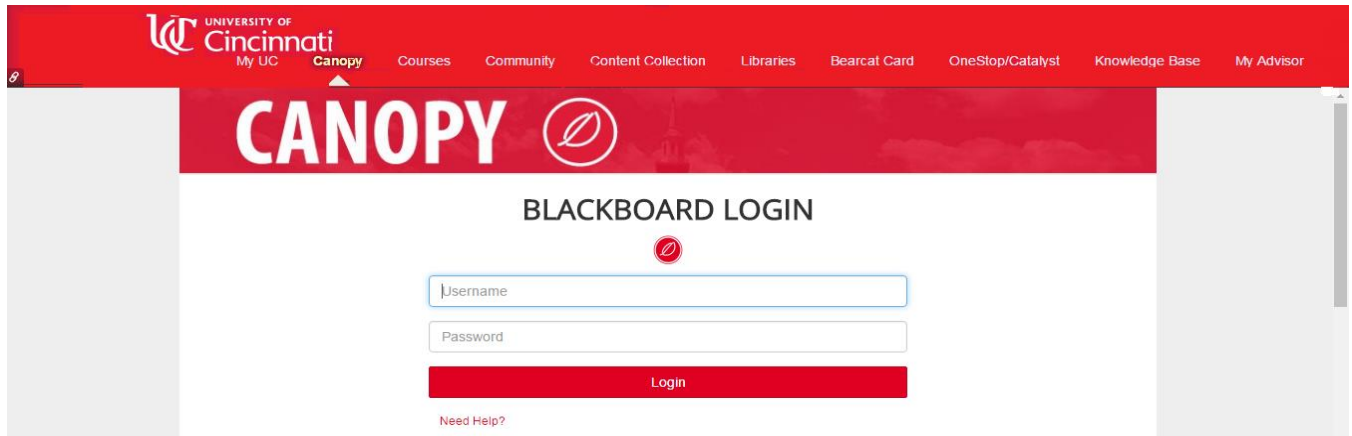
In this page, user needs to enter his/her username as well as password to log into UC Blackboard. This choice is a usability consideration.

<div align="center">MyUC</div>
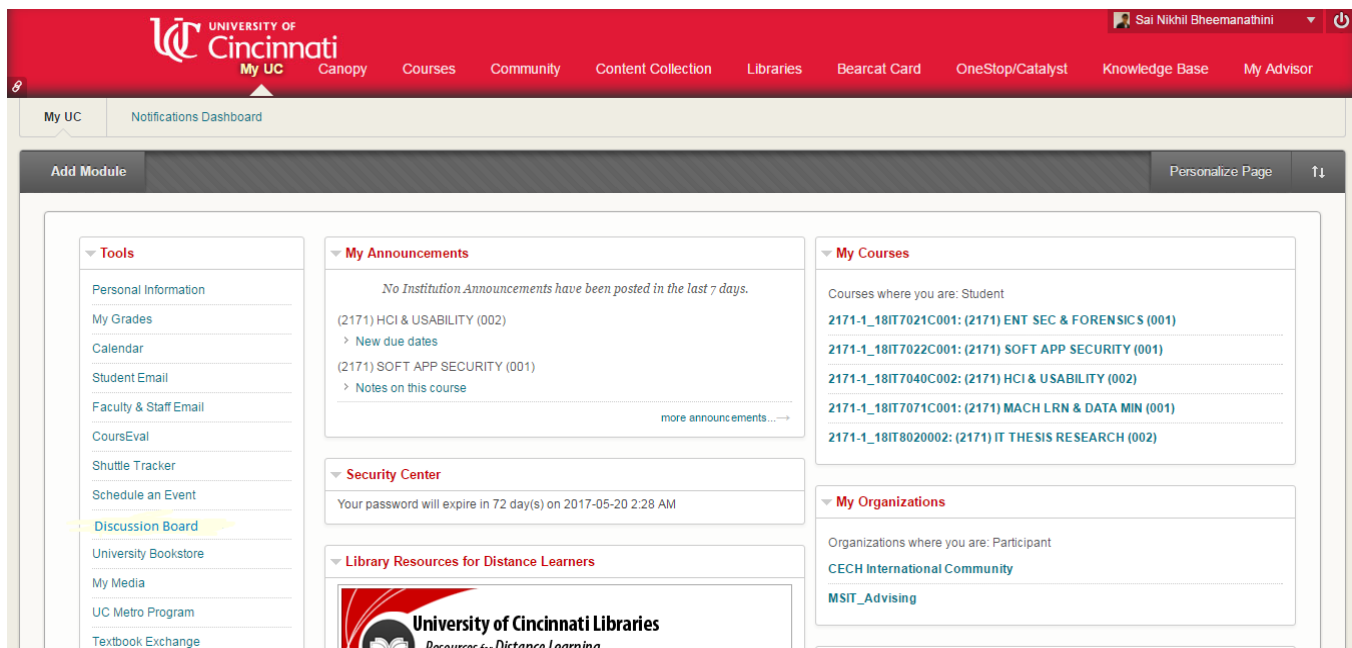
In this page, user can click on calendar or discussion board under tools tab. Users can click on the power button in the top right corner of the page to log-off the UC Blackboard.

Calendar

In calendar page, user can view the schedule of the course events. Users can click on Google calendar or UC Blackboard. If users click on Google calendar, they will be directed to their Google calendar view. Users will be re-directed to the myUC page if they click on UC Blackboard. Here, I made a choice which is a user experience consideration.

Google Calendar

In this page, users can able to create, edit, and delete events to get notifications. Users can even click on UC Blackboard to get re-directed to myUC page. Here, I made a choice which is a usability consideration.

Discussion Board

In this page, users can view the statistics of the posts related to the enrolled courses. Users can click on the course or myUC or Logoff. Here, I made a choice which is a user experience consideration.

Discussion Board Course

In this page, user can view the posts related to individual course where he/she can create a thread or reply to an existing thread by clicking on a particular forum. Here, I made a choice which is a user experience consideration.

Experience Map:

I created an experience map using 'Smaply' tool with "Tess COPY" user's experience in different steps and stages.
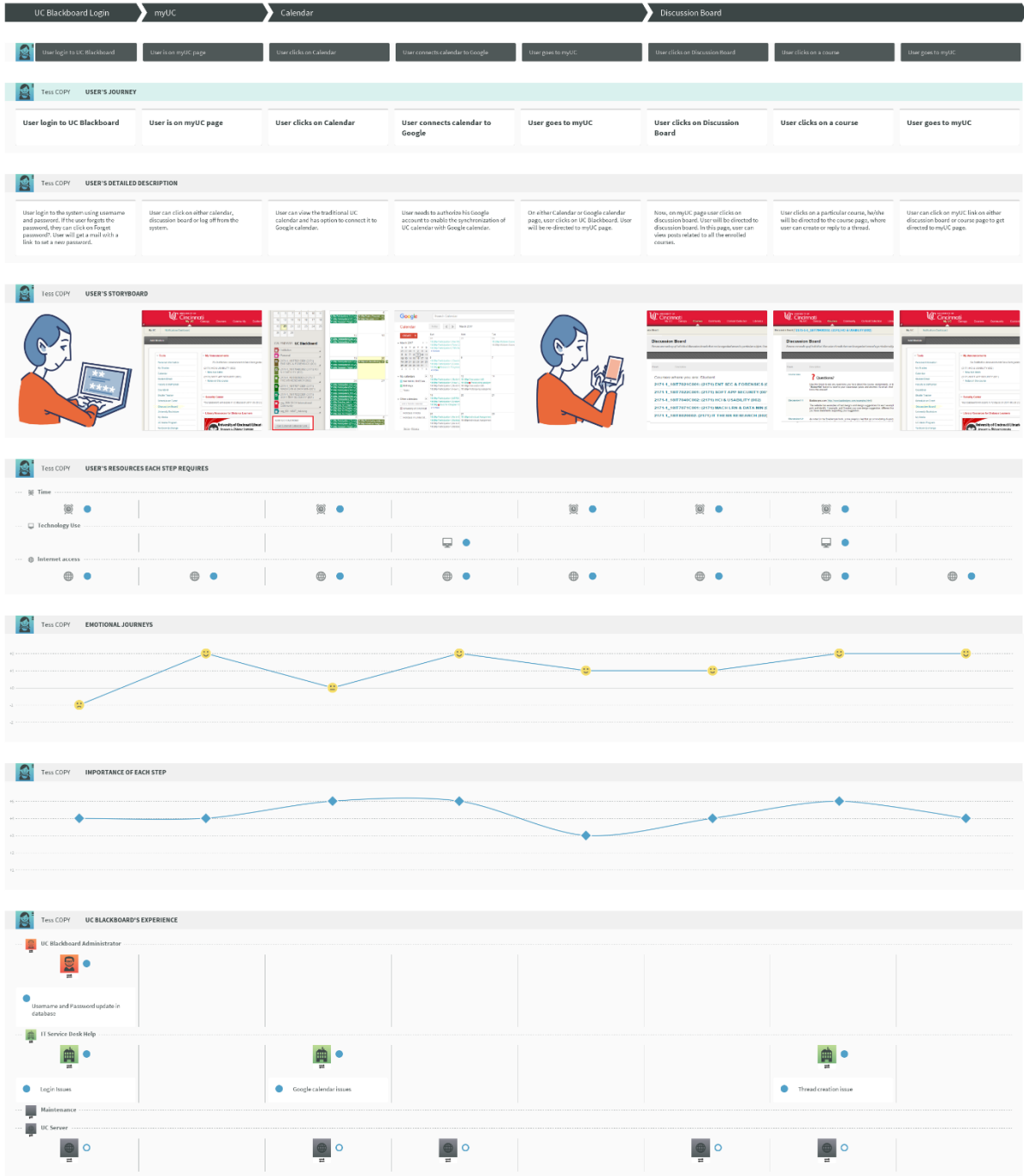
<u>Suggestions</u>:

From the above user's experience map, I found few interaction issues with myUC page. These issues I had not encountered before. I designed the product with user in mind thinking that, if they want to go to another page user should return to myUC. Then, they can perform their desired task.

I want to update the user interaction with myUC page more interesting, responsive, and free from confusion. Make the user experience more interesting and less time confusing by deleting re-direct links.

<u>Extras:</u>

<u>URL</u>: https://www.surveymonkey.com/r/9KGSZH2 [link to the survey created by me to collect user feedback on the prototype]

NOTE: To view the images in this document in an enlarged version, just click on the images. You will be redirected to google drive link.