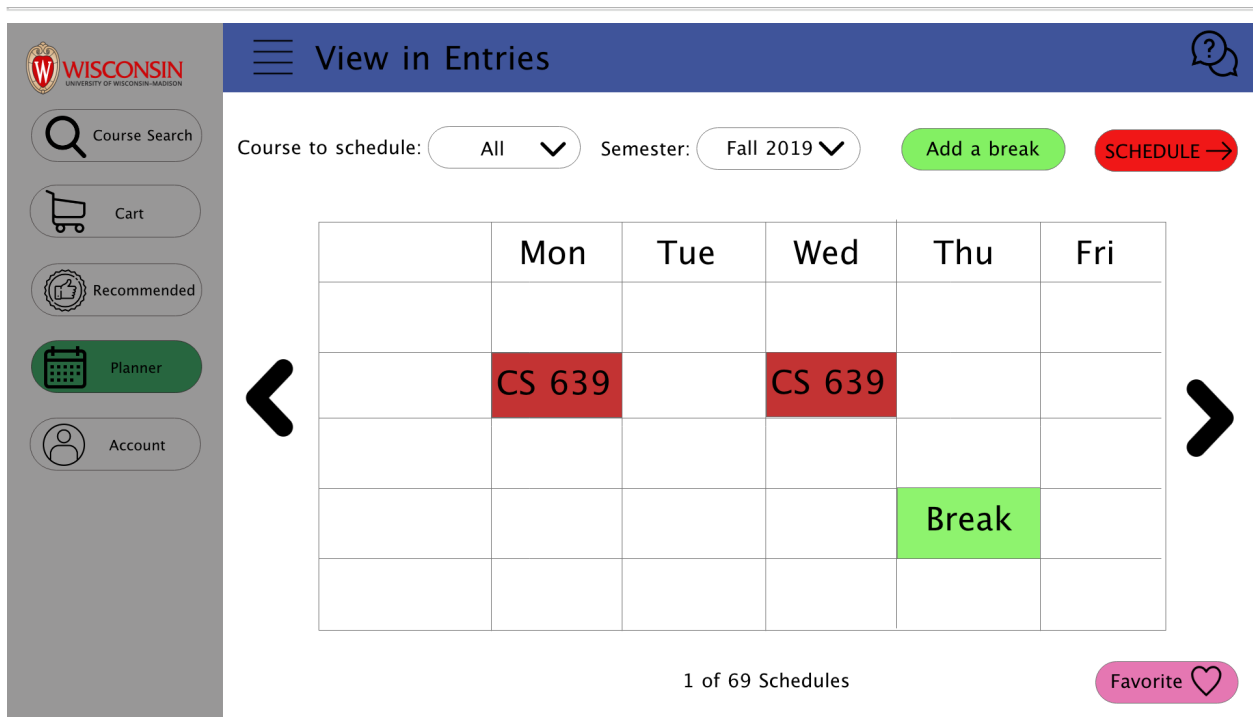


## Assignments — Week 06 | Design | Designing for the Web

This assignment is designed to help you start making design decisions toward the final product you will build in Module 1. In the *React 3* assignment, you will have the option to build a *course recommender application* or a *course planner application*. The course recommender application will recommend the new courses to take based on user ratings of the courses they have taken in the past and the user's general areas of interest. The course planner application will construct schedules based on a tentative list of courses, enabling the user to plan a course schedule for a given semester. Review the [React 3 assignment README](#) for the specifications of each application. In this assignment, you will choose one of these options and make design decisions regarding what content you will include in your application, how the content will be organized within the application canvas, what navigation aids you will provide your user with, and what component hierarchy will result from your design.

**Step 1. Conceptual Design.** Choose one of the options for your application: *recommender* or *planner*. After reviewing the design specifications in the React 3 README, ideate on how it will work and sketch a conceptual design of the application. Your conceptual design can be hand-drawn or in the form of a digital wireframe (e.g., created in Adobe XD). Annotate your design to describe how the application will work and its main sections. Provide a photo or screenshot of your annotated design below.



This is the main page of my **planner** function which is the part I'm focus on for this assignment. The left side function bar will provide user with different functions that are helpful for enrolling their courses including the recommender, the course search and

some login options. The top bar provides different utilities that I will discuss more on part 2. The user could check the box for the course they need on drop-down menu and then add some breaks that they may need. After that, they can click “schedule” button. All the possible schedules will be generated on the screen. It also provide a function that a schedule to user’s favorite list.

**Step 2. Information Structure.** Make a list of all the *content* that will be included in your design and displayed to the user, including content necessary to obtain user input, the output that your application will provide to your user, and other content that the user will need to effectively use your application. You can refer to previous lectures for discussion on Information Structure and Design Patterns for what kinds of elements/content your application might include. For each item in your list, provide a brief (2-to-3-sentence) description of the content, including the type of information included and its form (e.g., textual course description, shape that represents a class, a card that contains course information).

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**1. Course Search Tool Bar**

This is the button that will help user navigate to the course search section. Using a magnifying lens icon is severed as metaphor to tell user that it will direct user to the find the things they need.

**2. Cart Tool Bar**

This is a button which user will be directed to the course cart. Using a shopping cart as icon will help user to have an easy understanding about what it will happen after clicking the button.

**3. Recommended Tool Bar**

After clicking the button, the user will have the chance to access the course recommended page. It used a thumb up icon as a metaphor to show the meaning of this function.

**4. Planner Tool Bar**

The major function that we are designing this time. After push the button, the user will access to the course planner and find a schedule fits their needs. It used the calendar as an icon to represent the meaning of planning

**5. Account Tool Bar**

After clicking it, the user will have the chance to login/sign-up. It uses a head as icon which means the identification of the user.

**6. View in Entries/List change bar**

After clicking it, the user will have the chance to choose to view the course in entries or list. The four lines represent the more options for user which give the user the chance to explore.

**7. FAQs/Question button**

Located on the top right corner, the FAQs/Question button allow the user to ask questions and find the concerns or instructions for certain functions. Since the icon

has a question mark, it will make user have an easy understanding about the meaning the button.

**8. Course to schedule drop-down option:**

User will have the chance to select the course that they want to schedule. It gives more flexibility to users since they can add as many as they can to the cart but only schedule few courses.

**9. Choose semester drop-down option**

By using this drop-down option, the user will have the chance to choose the semester that they want to schedule. This happens when the time that registration for two semesters are opened.

**10. Add a break button**

It will allow user to add a break to the schedule which they may not have time to go to the class. It's because that not all the time will work for users. It will help user to filter out the schedule that will not work for them.

**11. Schedule button**

After clicking the button, the user will start to receive a schedule from the system. It may generate more than 1 schedule for the users.

**12. The schedule viewing window**

The main schedule is located on the center of the screen. In addition, the user can click left or right arrow to view the previous or next possible schedule. The total number of schedules on the bottom of the screen helps user to track which schedule that they are looking at.

**13. Favorite Button**

After clicking this button, the user will have the chance to mark certain schedule as their favorite. Then they can compare their favorite schedule and find the best one.

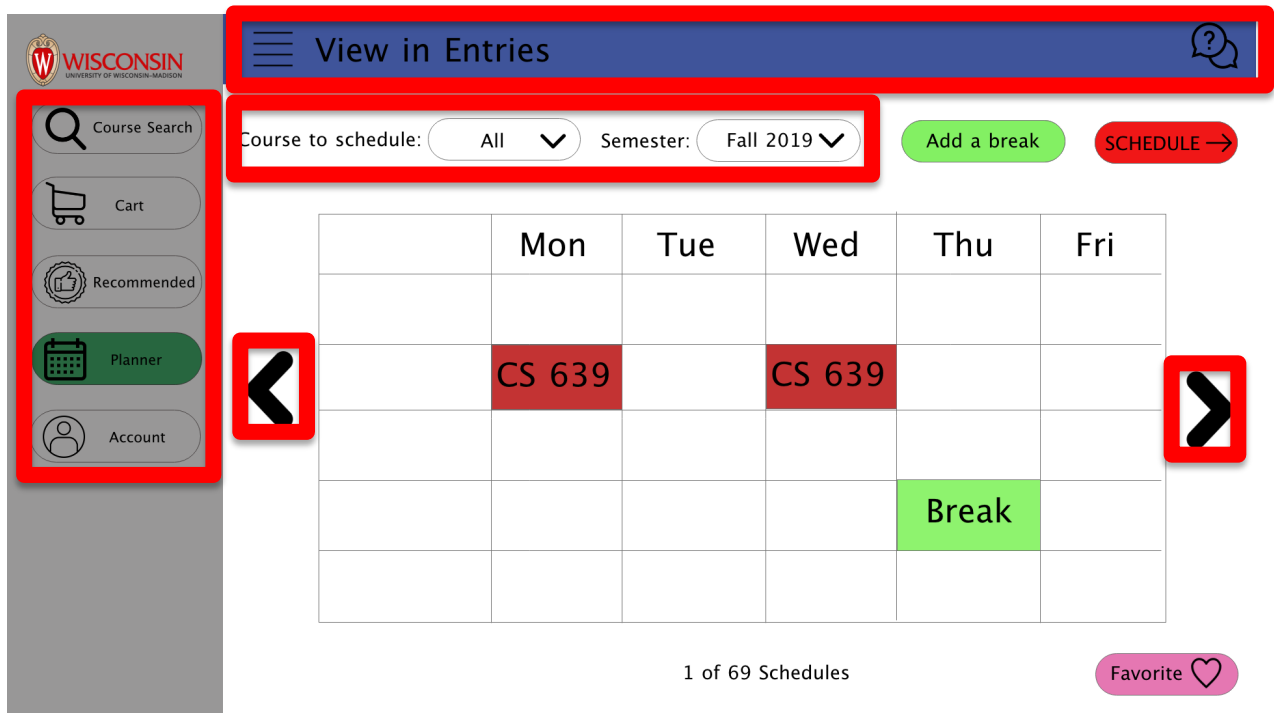
**Step 3. Content Organization.** In this step, make decisions about how you will organize the content you described in the previous step on the application canvas. Specifically, make decisions about what will appear above and below the fold, whether there will be any content below the fold, whether the application will include multiple pages or a single page, and whether content that may not fit within a single page will be paginated or loaded using infinite scroll. For example, do you plan to show all recommended courses on a single page or show one on each page. If all courses are shown on a single page, will some of them be below the fold? If you are showing one course at a time, will you paginate the recommended courses or load more on the page as the user requests them? Provide a narrative description of your decisions and their justifications below.

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**There are many information will be hide in this case, since the major component for my design this time is planner. First, since we cannot show all the function pages, such as course search, cart, recommended, so on, I just make them as a tool bar button on the left side and user could switch between different function pages and it also looks very concisely and clearly. In addition, for viewing option about entries or list, I did not use icon for it; instead I used the negative space on top of the screen which also makes the page less monotonous. In addition, it will also provide a space for finding the FAQs since the user may have the problem on using some functions and it's an easy place for them to find it.**

**For the major course planner, it shows on the right side of the screen and takes about 75% of the space of the screen. Since I want to give user a great experience on getting to know the full schedule, each time it only shows one schedule on screen. And user could user scrolling option to switch back and forth to find the best schedule they need. In addition, since there may have courses in the cart for users, I used a drop-down option that user could select the course that they need to schedule. This avoid showing a ton of courses on the screen but at the sometime, it could also help to fit the needs for users. I used the same design concept on the semesters. In addition, there also an adding break, and schedule button located on the same row as course to schedule and semester. This help the user to provide proper input and generate a better result. Then the schedule showing on the center of the screen which will become a focus point of this function and we want the schedule showing in the focus area above the fold.**

**Step 4. Navigation Aids.** Determine what navigation aids will be necessary for the user to effectively use and navigate through your application. For example, if the user is reviewing multiple recommended courses or multiple course plans, how you envision the user to navigate through them? Do you need a menu that reflects the main sections of your application or the steps of the process users must follow? Create a hand- or digitally drawn mock-up of your application that illustrates the decisions you made in Steps 3 and 4 and annotate pieces of content and navigation aids.



There are three major navigation aids that I used in this design. The first one is left-hand navigation that will help user to find the function/information including course search, cart, recommended, account, and planner that user may need. This navigation aids not only provide a space for user to find the different functions, but also make sure all the buttons are showing concisely and clearly.

The second navigation aid is located on top of the screen. User could access to change the view of the course schedule based on their needs. In addition, the FAQs and question asking chatting room is located on the right top of the screen which provide an easily way for user to find it and use them. Thus, this navigation is more likely provide a convenient action or option for users.

The third navigation aid is on both side of the course calendar and top of the calendar. The user could click the arrow on both sides to view different schedules. This helps user to have a clear view on each of the schedule, since every schedule takes about a whole screen to show. In addition, it will make our layout less complicated compared to showing all schedule at once. The drop-down navigation aid on top of the schedule helps the user

**find the course information more correctly. Thus, I believe this navigation helps to show the information more clearly and detailly.**

**Step 5. Component Hierarchy.** In this final step, review the mock-up you created in the previous step and describe the component hierarchy that you expect your application will have in its implementation. Review React 2 lecture for example hierarchies. An example/template is also provided below. Include a one-sentence description of each component. The output of this step will be the input into your React 3 assignment and guide the development of your application.

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**Component Left Side Navigation Bar**— *This is a left-hand navigation menu that will provide navigation. options for user to find the functions that they need for course search and enrollment*

**Course Search Button** — *To access the course search and find the course to add to cart*

**Cart Button**— *To access the cart and add or delete course*

**Recommended Button**— *To access the page with recommended course by the system*

**Planner Button**— *To access planner and find the best course works for the schedule*

**Account Button**— *To login/logout the system*

**Component Right Top Navigation Bar** — *Provide a navigation for changing view and accessing FAQs*

**Component changing the view button** — *Change the view of the schedule display*

**Component FAQs Button**— *Button that will provide support with the technical difficulties of the user*

**Component Schedule View** — *Provide a place to view the course schedule with different criteria*

**Component Course to Schedule List**— *Drop down list that will have the check box for each course from cart*

**Component Check Box** — *the check box that user could have the chance for the course that they want to schedule*

**Component Semester List** — *Drop down list that will have the semester available to choose*

**Component Add a break button** — *The button to show up the add break function*

**Component Schedule Break** — *The user could add a list of time that they need to have a break*

**Component Schedule Button** — *The button to start showing up the available schedule.*

**Component Schedule Window**— *Showing the available schedule that user could switch back and forth.*

**Component Move Backward Button** — *The button to show previous schedule*

**Component Move Forward Button** — *The button to show next schedule*

**Component Like Button** — *The button to add the current schedule to the favorite list*