CS 4063/5063
Homework: Design B
Due Tuesday 2022.02.15 at 11:00pm.

All homework assignments are individual efforts, and must be completed entirely on your own.

In this homework you will: (1) gather data about users' movie browsing preferences; (2) gain experience using advanced wireframe elements; (3) create a wireframe based on a reference sketch of a UI; (4) storyboard an interaction sequence for a typical task in the UI; and (5) document how the data you gathered from users informed your design.

Reminder: References for Using Wireframes

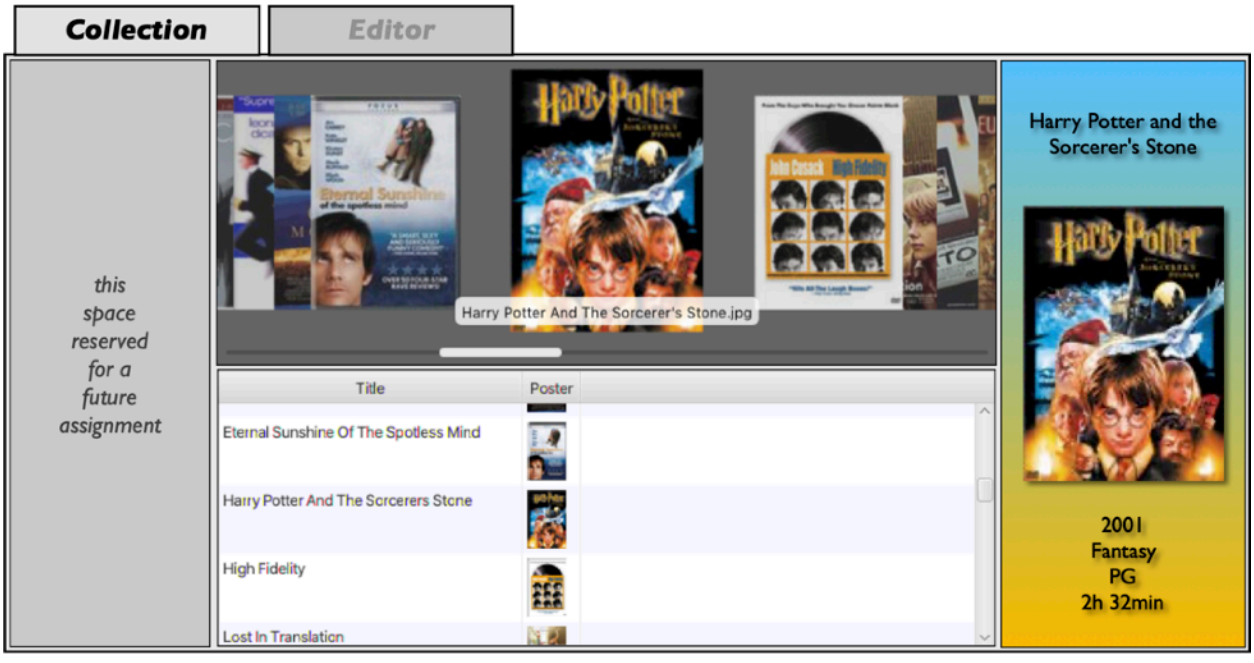
user guide: https://balsamiq.com/wireframes/desktop/docs/
tutorials: https://balsamiq.com/tutorials/
intro to wireframing: https://balsamiq.com/learn/courses/wireframing/

Wireframe an User Interface Sketch

In the previous assignments, you developed an *Editor* pane for editing the metadata of a single movie. In this assignment, you will wireframe a *Collection* pane for browsing an entire movie collection. Your team has provided you with a sketch of the *Collection* pane to start from. It includes a **table** (of movie metadata), a **cover flow** (of movie posters), a **summary** (of the currently selected movie), and a **space** reserved for future design.

The user will be able to select at most one movie at a time in the **table**. Whenever they select a movie, it will be centered in the **cover flow**, summarized with important details in the **summary**, and be editable under the *Editor* tab (which will hold your *Editor* pane).

In Wireframes, create a new project called DesignB. Name the wireframe Sketch. Build a wireframe that reproduces the provided UI as it generally appears in the sketch below. *Reproduce enough detail to give a clear sense of all UI structure, but otherwise keep*



the wireframe simple enough in style to allow easier prototyping later. You may use the ***Tab Bar***, ***Data Grid***, and ***Cover Flow*** elements for the major parts of the layout. You may also import a few small image assets to represent movie posters in your wireframe. (Feel free to use the images in `resources/example/fx/icon/` from PrototypeA.)

Create a second wireframe called Editor to show the UI when the *Editor* tab is selected. Inside the tab, recreate (or just copy and paste) your Refined design from DesignA. If you need to resize the tab content area to make your editor design fit, try to make it the same size in both of your wireframes. The size doesn't need to match the sketch shown above. You may further refine your Editor design if you like. Add a ***Comment*** element to briefly summarize what has changed (if anything) in your Editor design.

Gather Information about Browsing Preferences

Review the slides from class on *Discovery (Observation)* and *Discovery (Elicitation)*. Devise a quick and simple way to observe or elicit data about which metadata attributes people use the most when they browse movies. For example, you might briefly watch someone using Netflix or ask them a few questions about what they look for on IMDB. Recruit two people to watch or interview. They can be anyone except your classmates.

Use the information you gather to identify the most important attributes that people use to browse movies. Select three attributes, in addition to title and poster, out the 15 other attributes listed in the table in DesignA, to incorporate into your design. Some of the attributes that you identified as important may not be on the list. Choose the closest ones on the list that you can.

When you're ready, duplicate your Sketch wireframe and name it Collection. Refine the **table** to display those three attributes as additional columns alongside title and poster. Similarly refine the **summary** to show the title, poster image, and your chosen three attributes for the currently selected movie. (For the selected movie, pick one visible in a row of your **table** to use as an example.) Replace or modify the four attributes copied over from the Sketch wireframe, as needed. For this part of the UI, only display the attributes; design it such that users cannot edit the attributes from inside the **summary** itself. Add another ***Comment*** that briefly describes your observation or elicitation process and how you used the results to choose your three attributes.

Storyboard a Common Task

People perform a wide variety of tasks in collection applications. One common task is to find and correct errors in the names of things. Suppose that the interactions needed to perform this task in our app are as follows: (1) start in the *Collection* tab; (2) scroll over the set of movies; (3) spot one with a title that needs fixing; (4) select it in the table; (5) switch to the *Editor* tab; (6) edit the title in the right widget; (7) switch back to the *Collection* tab; and (8) check that the title has updated correctly in the set of movies.

Create a fourth wireframe called Task Flow. In the wireframe, layout a box-and-arrow diagram that shows the paths a user might follow to perform the task. Each box should represent one of the eight interface states. There can be multiple paths that diverge, converge, and loop. For instance, users can scroll **either** the Cover Flow **or** the Data Grid in step 2. Or they might return to step 2 after finishing step 8. You might think of other examples. How can you integrate cases like these into the flow of your diagram? Add a simple label to each box. *(Important: Don't try to fill the boxes with mini UIs!)*

Next, create a storyboard of the task flow. For each box, create a duplicate wireframe of either your Collection or Editor wireframe—whichever is appropriate for that interface state. Rename the duplicate to match the corresponding box label, then alter it to show what the UI would look like just before the user performs the corresponding step. Add Markup elements as appropriate to help fellow designers understand what's going on.

Finally, link your wireframes (https://balsamiq.com/wireframes/desktop/docs/linking/) to let people see the storyboard in action. Link each box in the diagram to its wireframe. In each wireframe, link the element acted upon to the next wireframe in the task flow. (For elements that don't support the "Links" option, you can add a ***Link*** element on/near the element.) In each wireframe, also add two ***Button*** elements outside of the main layout: one called "Back" to go back to the previous—if multiple, choose one—wireframe in the task flow, and one called "Home" to jump to the Task Flow wireframe. Once you've linked everything up, use Full Screen Presentation mode to test navigate your creation!

Turning It In

Use the Project/Save Project As... menu item to save a copy of your project. The exact name of your file should be simply `DesignB.bmpr`. Make sure it contains all and only the wireframes, assets, links, markup, and ***Comment***s that you wish to submit. Submit the file to the Homework - Design B assignment in Canvas.

To score the assignment, we'll be looking at how well you: reproduced the sketch UI; effectively gathered helpful data; refined your design accordingly; represented likely interaction states and paths in the task flow diagram; conveyed what is happening interactively as a set of altered wireframes with markup; and provided links to navigate the storyboard. The maximum score is 20 out of 20.