

## CS 4063/5063

### Homework: Design D

Due Thursday 2022.03.31 at 11:00pm.

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

In this homework you will: (1) gain additional experience using wireframe elements; (2) create a wireframe of an About Pane, based on a UI specification; (3) create a spatially precise redesign of the Editor Pane, taking the Gestalt Principles of Design (GPoD) into account; and (4) apply GPoD to analyze the benefits and drawbacks of the new layout.

#### **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/>

#### **The Design Scenario**

Imagine you are a designer on a large team. The team is developing a new application in JavaFX for browsing a personal movie collection on a desktop or laptop. The team is currently exploring ways to improve the learnability and memorability of the Editor Pane design. You have been tasked with applying GPoD to fine-tune the layout by precisely positioning, sizing, and styling the widgets in the pane. The team has also asked you to design an About Pane to show key information about the app and your team to users. You will use Wireframes to design the layouts, then add Comments and other Markup elements for use in presenting an analysis of your design choices to your design team.

#### **The About Pane Design Specification**

*"The About Pane will display key information about the movie collection application, the development team, and online support resources. When a user selects the About option in the **Movies** menu, the About Pane will appear inside a fixed-size, borderless window. The window must be between 300 and 400 pixels in both width and height. The About Pane must include all of the details specified in the table below, suitably accentuated by visual importance. Layout and styling is otherwise left to the discretion of the designer."*

Detail	Form / Requirements	Visual Importance	Interactive?
application icon	image	medium	links to project page
application name	text, 5–30 characters	very high	no
application tagline	text, 60–100 characters	low	no
application URL	link	high	links to project page
application version	text, 5-10 characters	medium	no
software license	text <b>and</b> image	low	links to license page
team logo	<i>your choice</i>	medium	no
team name	text, 5–30 characters	medium	links to team page
<i>one other</i>	<i>your choice</i>	<i>your choice</i>	<i>your choice</i>

### **Wireframe a User Interface for Viewing Application Details**

Think about what each detail means and how it relates to the others. Drawing from your experience with how text, images, and links can be displayed in HTML/CSS web pages, decide which UI elements you will use to display each detail, following the specification.

In Wireframes, create a new project called **DesignD**. Name the wireframe **About**. Build a wireframe that displays the UI elements you chose for each detail. Populate the various elements with suitably representative data for each detail. You may import a few small, appropriate image files as assets to use in displaying any details that require an image. Carefully layout and style each of the elements, keeping in mind that you will use HTML/CSS to implement both layout and styling as precisely as you can in **PrototypeD**.

### **Fine-Tune the Editor Pane Design**

Copy over your **Editor** wireframe from **DesignC**. (If you didn't turn in **DesignC**, copy over your most recent version of the **Editor** wireframe from **DesignB**, or even from **DesignA** if necessary.) Don't forget to copy over any assets used in the wireframe. Duplicate the **Editor** wireframe and name it **Tuning**. (*You should have three wireframes at this point.*)

Start by reviewing the slides from class on the Gestalt Principles of Design. In your **Tuning** wireframe, experiment with the positions, sizes, and styles of your UI elements, both individually and in groups. Examine how visual relationships *within* and *between* different combinations of widgets *reinforce* and/or *interfere* with your ability to correctly identify how they are meant to be grouped functionally. As you do this, think about how well those combinations follow the principle, corollary, and guideline of each of the nine GPoD covered in class. Keep experimenting and tuning until you are confident you have reached an improved layout that seems likely to significantly increase the ability of most novice users to interpret the functional relationships of the editing widgets correctly. *This process is open-ended, but don't overdo it! An hour should be plenty to get a feel for it.*

Next, identify two likely improvements and two likely shortcomings of your new design for perceiving functional relationships correctly. For each of those two+two, analyze how specific design choices either follow or break particular GPoD. Factor at least five of the nine GPoD into your analyses. Add a separate Comment for each analysis to the **Tuning** wireframe. Add Arrows and other Markup to both wireframes to highlight analyzed parts.

### **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 **DesignD.bmpr**. Make sure it contains all and only the wireframes, assets, links, markup, and comments that you wish to submit. Submit the file to the **Homework - Design D** assignment in Canvas.

To score the assignment, we'll be looking at the completeness and quality of your About Pane design, the character and amount of improvement in your Editor Pane design, and the cogency, thoroughness, and depth of the GPoD analysis in your Comments/Markup. The maximum score is 20 out of 20.