User interface design

Week14: Lab Practical

Nagulama Moses

Lecturer

Department Of Information Technology

Kumi University

Email: mnagulama@gmail.com

Outline

- Intended learning outcome
- Introduction
- Adobe XD design
- Adobe XD prototypes
- Adobe XD Components and libraries
- Adobe XD Collaboration

Intended learning outcome

- Students should become proficient in using Adobe XD, including understanding its user interface, tools, and features
- Students should learn and apply fundamental design principles, such as layout, hierarchy, balance, contrast, and alignment, to create visually appealing and effective interfaces.
- Students should be able to create wireframes and interactive prototypes in Adobe XD to plan and test their interface designs.

Introduction

- Adobe XD, short for Adobe Experience Design, is a powerful and versatile software application used for interface design, particularly for creating user interfaces (UI) and user experiences (UX) for web and mobile applications.
- It's a part of Adobe's Creative Cloud suite and is specifically tailored for designers, UX professionals, and anyone involved in the design and prototyping of digital products.

- Adobe XD has become a popular choice for designers and UX professionals due to its user-friendly interface, robust features, and constant updates.
- Whether you're designing a website, a mobile app, or any digital product, Adobe XD is a valuable tool for creating and prototyping interactive and user-friendly interfaces.

Adobe XD interface

- Adobe XD provides a comprehensive toolbox to perform the basic and advanced operations. A tool is a way to operate on the XD canvas.
- Whenever we hover over a tool, it will display its name and shortcut key. To activate any tool, click on it.
- By default, Adobe XD supports following tools, located in the tool panel given left to the workspace.

- Select Tool (V)
- Rectangle Tool (R)
- Ellipse Tool (E)
- Polygon Tool (Y)
- Line Tool (L)
- Pen Tool (P)
- Text Tool (T)
- Art Board (A)
- Zoom (Z)

Tool Options

- The right sidebar contains several tool options: color fill, border, border-radius, blur, padding, scroll, etc.
- We can choose any of the options as per our requirement.
- The options in the right sidebar will be adjusted on the basis of tool selection. For example, if we select the text tool, then it will display the text tool options such as font size, color, font family, font-weight, etc.

- Further, the right sidebar also contains options for alignment, position, scroll, transform, etc.
- It also contains state options for managing the different states of a component.
- In prototype mode, it will change its options from customization to prototyping and animations.

Design in adobe XD

- Adobe XD is a user experience (UX) and user interface (UI) design tool that allows designers to create wireframes, prototypes, and high-fidelity mockups for websites, mobile apps, and other digital products.
- XD is known for its ease of use, its powerful prototyping capabilities, and its integration with other Adobe products, such as Photoshop and Illustrator.
- To design in Adobe XD, you can start by creating a new artboard. Artboards are the individual canvases that you will use to design your screens.

- You can add various elements to your artboards, such as text, shapes, images, and components.
- Components are reusable groups of objects that can be updated globally. This makes it easy to keep your designs consistent.
- Components can be created from scratch or imported from other XD documents or libraries.
- XD also offers a variety of tools for creating interactive prototypes.

- You can use hotspots and triggers to link together your artboards and create realistic user experiences.
- Once you are happy with your design, you can export it to a variety of formats, including PNG, SVG, and CSS.
- You can also share your design with others by generating a shareable link.

Create and style an artboard

- An artboard is a rectangular canvas in Adobe XD where you design and prototype your user interfaces.
- Each artboard represents a different screen or page in your design.
- You can create multiple artboards in a single XD document to represent different screens or pages in your user interface.

- To create and style artboards in Adobe XD, follow these steps:
- Create a new XD document.
- Click the Artboard tool in the toolbar.
- Drag and drop the artboard tool onto the canvas to create a new artboard.
- To change the size of the artboard, drag the handles on the edges of the artboard.

Layers in Adobe XD

- Layers in Adobe XD are a way to organize and manage the different elements of your design. Each layer can contain a different object, such as text, shapes, images, or other layers.
- You can use layers to stack objects on top of each other, create masks, and apply effects to individual objects.
- To access the Layers panel, click the Layers icon in the toolbar. The Layers panel will display a list of all the layers in your current artboard.

Adobe XD Guides and Grids

- Guides and grids in Adobe XD are two powerful tools that can help you to create more consistent and well-designed layouts.
- Guides are horizontal or vertical lines that you can place on your artboard to help you align objects. To create a guide, simply drag and drop it from the ruler to the desired location on your artboard.
- You can also move and resize guides by dragging them.

- Grids are a series of intersecting horizontal and vertical lines that you can use to create a layout structure for your design.
- To add a grid to your artboard, select the Grid tool from the toolbar and then drag it onto the artboard.
- You can then customize the grid settings, such as the spacing between the lines and the color of the lines.
- Guides and grids can be used together to create even more complex and precise layouts.

Resize and Rotate Objects in XD

❖**Resize objects:**

❖Select the object that you want to resize.

❖Drag the circular handles on the edges of the object to resize it.

❖To maintain the aspect ratio of the object, hold down the Shift key while dragging the handles.

❖To enter a specific width and height for the object, click the Dimensions button in the Property Inspector and then enter the desired values.

❖**Rotate objects:**

❖Select the object that you want to rotate.

❖Hover over one of the circular handles on the edges of the object until you see the rotation cursor.

❖Click and drag the rotation cursor to rotate the object.

❖To enter a specific rotation angle for the object, click the Angle button in the Property Inspector and then enter the desired angle.

❖You can also resize and rotate multiple objects at the same time.

Moving & Aligning Objects in XD

❖**Move objects:**

❖Select the object that you want to move.

❖Click and drag the object to the desired location.

❖To constrain the movement of the object to a horizontal or vertical axis, hold down the Shift key while dragging the object.

❖To enter precise coordinates for the object's position, click the X and Y buttons in the Property Inspector and then enter the desired values.

❖**Align objects**:

❖Select the objects that you want to align.

❖Click the Align button in the Property Inspector.

❖Select the desired alignment option from the drop-down menu.

❖To align the objects relative to the artboard, select the Align to Artboard option.

❖To align the objects relative to each other, select one of the other alignment options, such as Align Left, Align Center, or Align Right.

Arrange objects

- Adobe XD also supports an efficient way to arrange the objects. It supports layer stacks to arrange the object order. We can arrange objects by specifying the orders.
- To specify the order of an object, just select it and move it in any specific direction.
- We have the following options to arrange the objects:
- Bring to Front, Bring Forward, Send Backward, Send to Back

Text Tool in XD

- The text tools in Adobe XD allow you to add and format text in your designs. You can use the text tools to create headings, body text, buttons, and other types of text elements.
- To add text to your design, select the text tool from the toolbar and then click and drag on the canvas to create a text box.
- To format your text, you can use the following tools and features:
- Font: Choose the font, font size, and font weight for your text.
- Color: Choose the color for your text.

- Alignment: Align your text to the left, center, or right.
- Line spacing: Adjust the spacing between the lines of text.
- Tracking: Adjust the spacing between the letters in your text.
- You can also use the text tools to create more advanced text effects, such as:
- Gradient text: Create text with a gradient fill.
- Stroke text: Create text with a stroke.
- Shadow text: Create text with a shadow.
- Curved text: Create text that is curved along a path.

What are the Gradient Colors?

- Gradient colors or color transitions are a gradual blending from one color to another color. Designers perform these blending from the same colors such as light blue to dark blue or two different color tones such as red and black.
- By combining the gradient with different levels of opacity can help us to create a meaningful subject and distance to the objects.
- They can also be used to subtly guide the user's eye and seek their focus towards a specific part of the image.

Gradient Colors in XD

- Select the object that you want to apply the gradient to.
- Click the Fill color picker in the Property Inspector.
- Select Gradient from the drop-down menu.
- In the gradient editor, click the Color stops button to add a new color stop.
- Click the color stop and select the desired color.

Responsive Resize in XD

- Responsive resize in Adobe XD allows you to resize objects and groups of objects while maintaining their spatial relationships at different screen sizes.
- To enable responsive resize, select the object or group of objects that you want to resize and then click the Responsive resize toggle button in the Property Inspector.
- Adobe XD will automatically adjust the spacing and positioning of the elements within the object or group of objects to maintain their spatial relationships.
- To add a constraint, select the object or group of objects that you want to constrain and then click the Constraints button in the Property Inspector.

How to Create Responsive Design Using Adobe XD?

- To create the responsive design, turn on the responsive resize toggle icon from the property inspector area.
- To apply the responsive resize option, select the element you would like to fit on different layouts and turn on the toggle switch.
- By default, the responsive resize feature is turned off for the artboards to let the users adjust their design as per their requirements.
- To turn on the responsive resize for an artboard, select the artboard and turn on the responsive resize feature using the toggle button.

Adobe XD: Prototype

- Prototyping takes your flat design to the next level, helping you tell a more compelling story.
- Adobe XD prototypes are interactive models of your designs that allow you to test and validate your ideas before you start coding. You can create prototypes of websites, mobile apps, and other digital products.
- To create a prototype in Adobe XD, simply link together your artboards using hotspots and triggers. Hotspots are areas on your artboards that users can click or tap to interact with your prototype.
- Triggers are actions that occur when a user interacts with a hotspot.

- For example, you could create a hotspot on a button that, when clicked, navigates the user to the next screen in your prototype.
- Once you have linked together your artboards and added hotspots and triggers, you can preview your prototype by clicking on the Prototype tab.
- You can also share your prototype with others by generating a shareable link.

How to Create Prototype in Adobe XD

- The XD provides three modes of the work: design, prototype, and share. In design mode, we create the design for our application using XD tools and design features.
- Then we switch to prototype mode to specify the interactive links between artboards and components.
- First, we need to create mockups for the different application screens; then, we need to switch to Prototype mode using the top left tab panel.

Editing the Artboard for Your Adobe XD Prototype

- Select the artboard that you want to edit.
- To resize the artboard, drag the handles on the edges of the artboard.
- To rotate the artboard, click the Rotate button in the Property Inspector and then enter the desired rotation angle.
- To change the artboard's background color, click the Fill color picker in the Property Inspector and then select the desired color.

- You can also use the following features to edit the artboard in Adobe XD:
- Guides: Use guides to help you align and position objects on the artboard.
- Grids: Use grids to create a layout structure for your design.
- Rulers: Use the rulers to measure the dimensions of objects and the distance between objects.

Add Auto-Animate transitions

- To add Auto-Animate transitions in Adobe XD, follow these steps:
- Open the XD project that contains the artboards that you want to animate.
- Select the artboards that you want to animate.
- In the Property Inspector, click the Add Trigger button.
- Select the trigger event that you want to use to initiate the animation. You can choose from a variety of trigger events, such as tap, hover, and scroll.

Use Drag gestures to transition between artboards

- Open the XD project that contains the artboards that you want to transition between.
- Select the artboard that you want to use as the starting point for your drag gesture.
- In the Property Inspector, click the Add Trigger button.
- Select the Drag trigger event.
- In the Action menu, select Transition to Artboard.
- Select the artboard that you want to transition to.
- Select the easing effect that you want to use for the animation.
- You can also add a Drag Back trigger to the second artboard.

Add overlays to simulate UI elements

- Create a new artboard for each overlay.
- On each artboard, design the UI element that you want to simulate. For example, you could create an overlay for a keyboard, a menu, or a modal dialog.
- In the Property Inspector, set the Opacity of each overlay to 0%.
- Drag and drop the overlays onto the artboard where you want to simulate them.

Work with voice triggers

- Voice triggers and speech playback are two features in Adobe XD that allow you to create more interactive and engaging prototypes.
- Voice triggers allow you to trigger transitions and actions in your prototypes using voice commands. For example, you could create a voice trigger that animates to the next artboard when you say "next".
- Speech playback allows you to play back text as audio in your prototypes. For example, you could use speech playback to create a prototype that speaks instructions to the user.

Components and libraries

- Build out a library of colors, character styles and components that you can use across projects or team members.
- Adobe XD components and libraries are powerful tools that can help designers to create and reuse design elements consistently across their projects.
- Components are reusable groups of objects that can be updated globally. When you make a change to a component, the change is automatically reflected in all instances of that component throughout your design.

- Libraries are collections of components, character styles, and colors that can be shared with other designers and used across different projects. This makes it easy to maintain a consistent brand identity and design language across all of your teams' work.
- Consistency: Components and libraries can help you to create and maintain consistent designs across your projects. This is important for building a strong brand identity and creating a positive user experience.
- Efficiency: Components and libraries can save you a lot of time and effort, especially when you are working on complex designs with many repeated elements.
- Collaboration: Components and libraries can make it easy to collaborate with other designers on projects.

Create design components

- Identify the elements that you want to make into components. This could be anything from a button to a navigation bar to a complete card layout.
- Group the elements together. This will make it easier to manage and edit the component as a whole.
- Give the component a descriptive name. This will help you to easily identify the component when you need to use it.
- Edit the component as needed. You can change the size, shape, and appearance of the component. You can also add new elements to the component.

- Here are some examples of design components that you can create in Adobe XD:
- Buttons
- Form elements
- Navigation bars
- Card layouts
- Headers and footers
- Icons

Vary component instances

- To vary component instances in Adobe XD, you can override the properties of the component instance. This means that you can change the appearance, behavior, or content of the component instance without affecting the master component.
- To override the properties of a component instance, follow these steps:
- Select the component instance.
- In the Property Inspector, find the property that you want to override.
- Enter a new value for the property.
- Click the checkmark icon to apply the change.

- You can override any property of a component instance, including:
- Size: You can change the size of the component instance.
- Shape: You can change the shape of the component instance.
- Appearance: You can change the color, fill, border, and other appearance properties of the component instance.
- Behavior: You can change the behavior of the component instance, such as its hover state, click state, and disabled state.
- Content: You can change the content of the component instance, such as the text or image that it displays.

Nest and swap components

- Drag and drop a component instance onto another component instance.
- The nested component instance will be added to the parent component instance.
- You can edit the nested component instance without affecting the parent component instance.
- To swap components in Adobe XD, you can follow these steps:
- Select the component instance that you want to swap.
- Drag and drop a different component instance onto the selected component instance.

- You can also nest and swap components using the Assets panel. To do this, follow these steps:
- Open the Assets panel.
- Drag and drop a component instance from the Assets panel onto another component instance in the design.
- To swap components, drag and drop a different component instance from the Assets panel onto the selected component instance in the design.
- Nesting and swapping components can be useful for creating more complex and reusable designs.

Browse a library

- To browse a library in Adobe XD, follow these steps:
- Open the Libraries panel.
- Click the library that you want to browse.
- The assets in the library will be displayed in the Assets panel. You can filter and sort the assets to find the specific assets that you are looking for.

Collaboration

- Learn how to publish an interactive prototype, gather feedback, and iterate on a design.
- Adobe XD offers a variety of collaboration features that allow designers to work together on projects in real time and asynchronously.
- **Coediting**: Coediting allows multiple designers to edit the same XD document simultaneously.
- This can be useful for brainstorming ideas, iterating on designs, and getting feedback from other team members.

- **Document history**: XD keeps track of all changes made to a document, so it's easy to see who made what changes and when. This can be helpful for resolving conflicts and tracking the progress of a project.
- **Shared links**: Designers can share links to their XD documents with others, even if those people don't have XD installed. This makes it easy to get feedback from stakeholders and collaborators.
- **Design handoff**: XD makes it easy to hand off designs to developers. Designers can export their designs in a variety of formats, including CSS, SVG, and PNG.

Publish a prototype

- To publish a prototype in Adobe XD, you can follow these steps:
- Open the Adobe XD project that contains the prototype you want to publish.
- Click the Share tab in the top right corner of the window.
- In the Share panel, give your prototype a title and choose a View Setting.
- Design Review: This option allows others to view and comment on your prototype, but not edit it.

- Development: This option provides developers with information about your prototype, such as CSS styles and export assets.
- Presentation: This option allows you to present your prototype to others in a full-screen view.
- Click the Generate Link button.
- Adobe XD will generate a link to your prototype. You can share this link with others by email, chat, or social media.

Gather stakeholder feedback

- To gather stakeholder feedback in Adobe XD, you can use the following steps:
- Prepare your prototype. Make sure that your prototype is ready for review. This means that it should be complete and functioning, and it should be visually appealing.
- Identify your stakeholders. Who needs to provide feedback on your prototype? This could include your manager, team members, clients, or other interested parties.

Export your design in adobe xd

- To export your design in Adobe XD, you can follow these steps:
- Open the Adobe XD project that contains the design you want to export.
- Select the artboard or layer that you want to export.
- Click the Export button under the file menu.
- Choose the export format and settings that you want.

❖**Export formats:**

❖PNG: This is a lossless image format that is well-suited for web graphics and icons.

❖SVG: This is a vector image format that is well-suited for logos and other scalable graphics.

❖JPG: This is a lossy image format that is well-suited for photos and other complex images.

❖PDF: This is a document format that can be opened in most PDF readers.

Review Design Specs

- To review design specs, you should follow these steps:
- Read the design specs carefully. Make sure to understand all of the requirements and constraints for the design.
- Check the design specs for completeness. Do they cover all of the important aspects of the design, such as functionality, performance, and user experience?
- Check the design specs for accuracy. Are the requirements and constraints realistic and achievable?

- Check the design specs for consistency. Are the requirements and constraints consistent with each other?
- Identify any potential problems or risks. Are there any areas where the design specs are unclear, incomplete, or inaccurate?
- Provide feedback to the designer. Once you have reviewed the design specs, provide feedback to the designer. This feedback can be used to improve the design specs and ensure that the design meets all of the requirements.

References

- Adobe XD (2023), Get Started with Adobe XD. https://www.adobe.com/products/xd/learn/get-started.cc-home.html

Thank you

Next Lecture We Shall Look At

Lab practicals