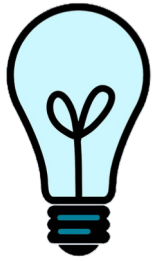




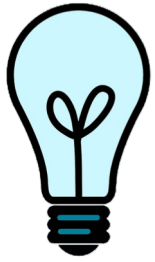
User Experience and Prototyping

Digital Media Innovation
Cindy Royal, Ph.D.
innovation.cindyroyal.net



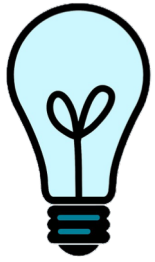
User Experience Design

- User-centered
- Create meaningful and relevant experiences for users
- Start with an idea, research, development, testing
- How will people interact with your product?
- More than just content and design
- Navigation, content organization, user input, responses, design flow
- Incorporates concepts of innovation, design thinking and product management
- Includes how users acquire the product, marketing, branding, usability and functionality



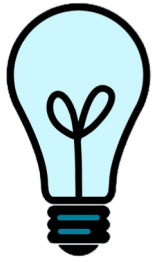
User Experience Concepts

- User interface
- Interaction design
- Content Strategy
- Information architecture
- Visual design
- Functionality
- Usability
- Typography
- Prototyping



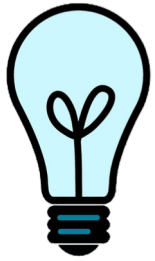
Prototyping

- Test idea before building it
- Paper, wireframe or prototyping tool
- Often start with a paper prototype, then move to a tool
- There are a range of tools, depending on your expertise and desired outcome



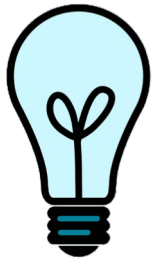
Benefits

- Faster, start building early in the process
- Cheaper
- Get users interacting with your product sooner
- Work on design and interactivity issues
- Get a sense of the visual flow of the application
- Begin comprehending usability issues

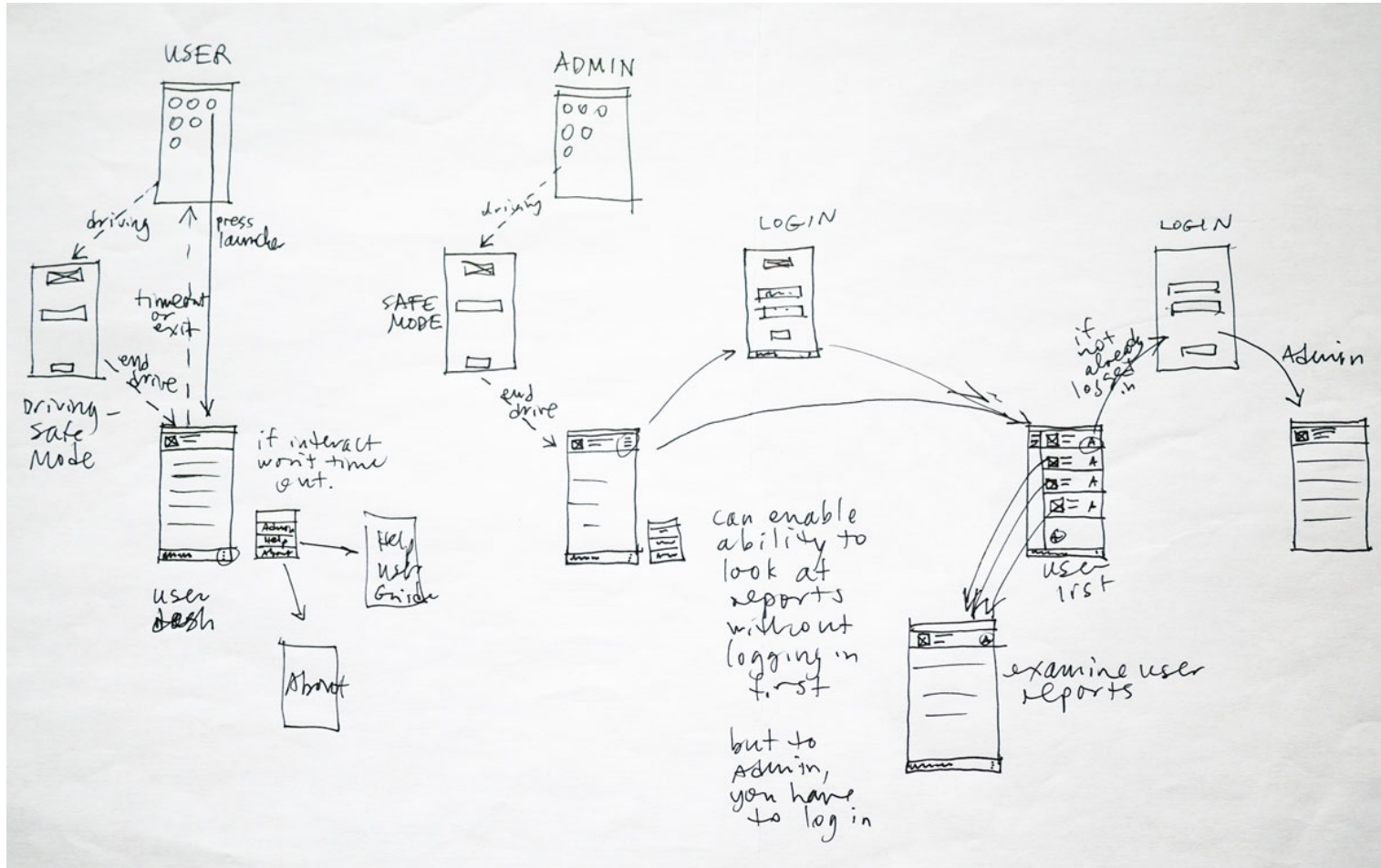


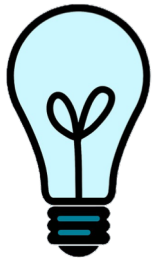
Flow Chart Sketch

- Use a flow chart to map out the user experience
- Define navigation items
- How items will relate?
- What basic interactions need to be created?
- High level view of design
- Sketch backend and frontend, admin vs user



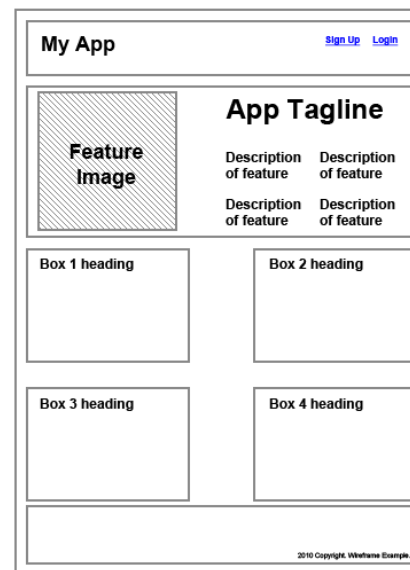
Flow Chart Sketch

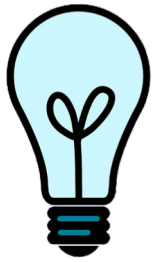




Wireframe

- A wireframe is like a blueprint. It is a low fidelity representation of what you will create.
- Uses basic lines and shapes to outline information sections, layout and core visualization and interactions
- Designers used to (and some still do) make Photoshop wireframes for coders to implement
- Tools can help you make an interactive or clickable wireframe

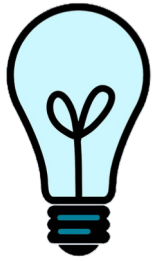




Paper Prototype

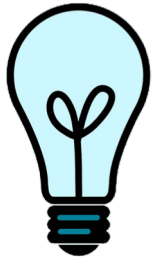
- Hand drawn sketches
- Cut and paste to create a mock up of the desired experience.
- Use post-its, glue, colored paper, etc.
- Use one piece of paper for each page or screen





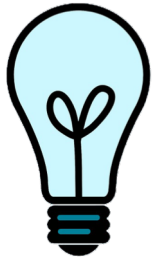
Prototype

- Mid to high fidelity representation of the interface
- Simulate the interaction; mimics full product experience
- Looks like final product, without all the functionality built in
- Design, color, graphics
- Useful for user testing



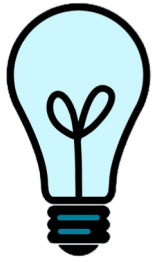
Prototyping Software

- Proto.io
- Sketch
- InvisionApp
- Adobe XD
- Figma



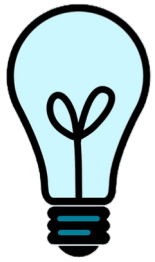
Proto.io

- Free trial, has a free option at end of trial with limited projects
- Web-based
- Extensive library for learning tutorials
- Symbols and shapes to implement in prototype
- Sample and Blank projects
- Review tutorials to learn how to use
- Select type of project: phone, tablet or website
- Select device size



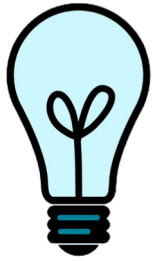
Editor Interface

- Canvas
- Libraries of shapes, icons and placeholders
- Drag and drop, resize, change properties
- Upload your own assets
- Layer-based – can reorder, lock and group
- Drag connectors from UI elements to screens
- Containers for scrollable blocks of content or reusable content
- Create animations with timelines
- Patterns and grids
- Can password protect and invite specific users
- Export as HTML



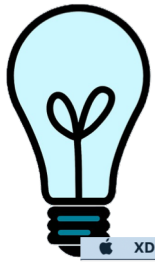
Proto.io Interface

The screenshot displays the Proto.io design tool interface. The main workspace shows a mobile app design for "Screen 1: State 1" with a resolution of 375x667 and 80% zoom. The design features a white background with a red "CodeActually" logo at the top, flanked by black arrows, and the text "JavaScript" centered below it. The interface includes a top toolbar with icons for Undo, Redo, Patterns, Scroll, Addons, Screens, Assets, Fonts, Variables, Search, Share, Download, Save, and Preview. On the left, there are panels for "SCREENS" (listing "Screen 1" and "Screen 2") and "LAYERS" (listing "Small Button 1", "Statusbar 1", "Image 2", "Image 3", "Horizontal line 1", and "CodeActually..."). On the right, there are panels for "LIBRARIES" (with "Basic", "iOS", and "Icons" tabs) and "INSPECTOR". The "LIBRARIES" panel includes a search bar and icons for Text, Rectangle, Oval, Shape, Horizontal line, and Vertical line. The "INSPECTOR" panel shows a "PROJECT ASSETS" section with a "Drag & drop" instruction and a "browse" link. At the bottom, there is a "SCREEN STATES" panel with a dropdown menu for "State 1" and a "+ NEW SCREEN STATE" button.

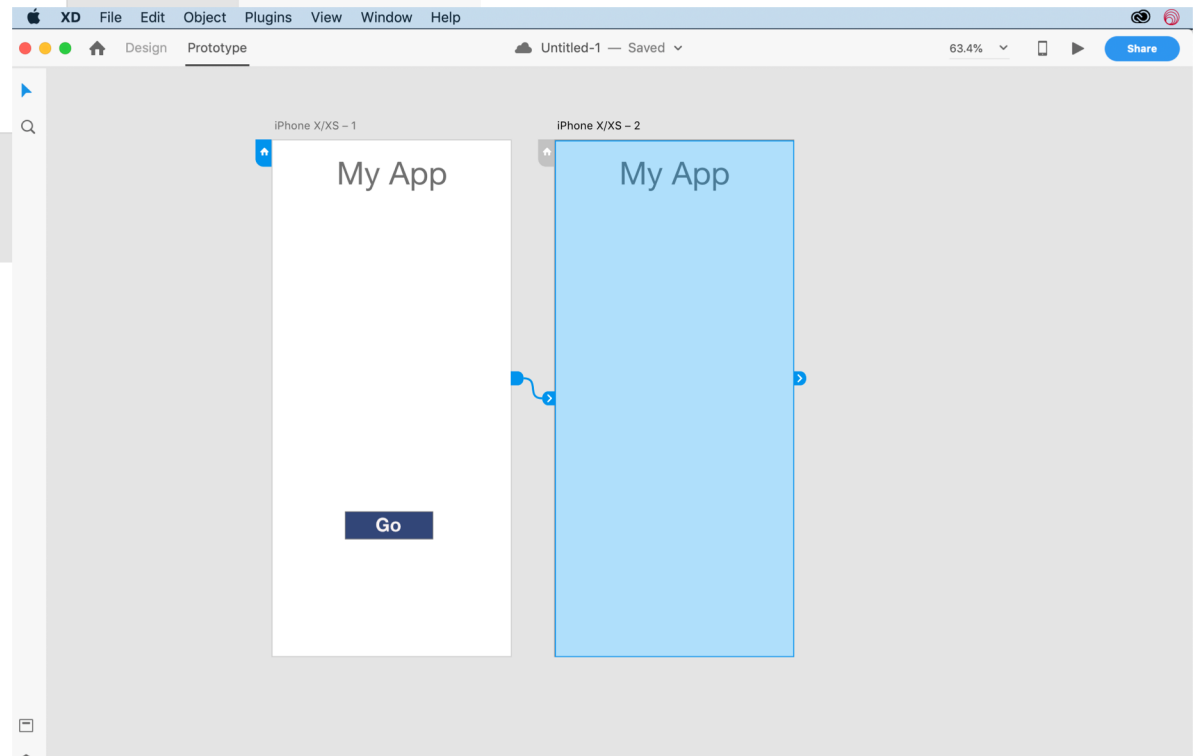
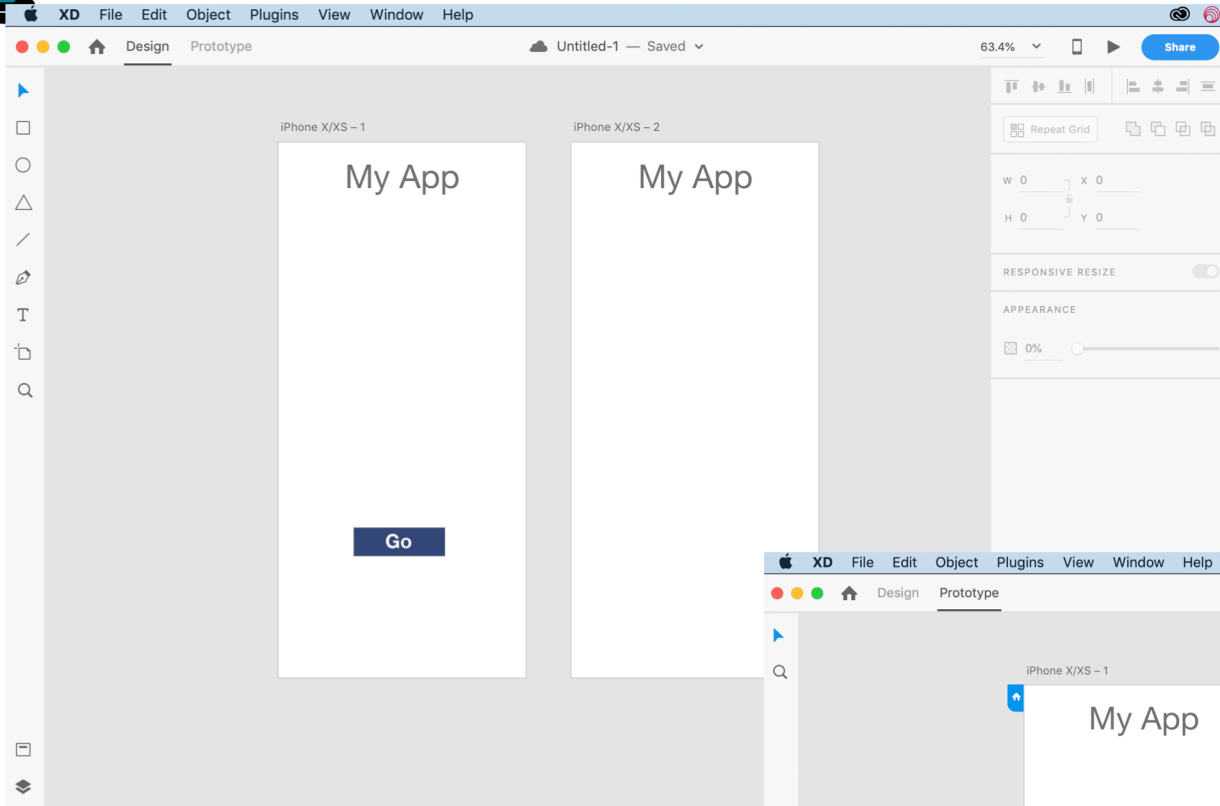


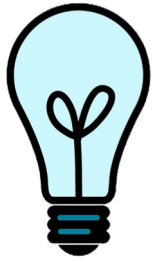
Adobe XD

- Part of Adobe Creative Cloud
- Free starter plan
- Students have access on campus
- Creative Cloud student rates start at \$19.99/month
- Design and Prototype
- Set up multiple artboards and triggers, actions and animations
- Similar features to other Adobe products, so easy to learn
- Design screens, then Prototype interactions
- Can Share for Review and Export as Video



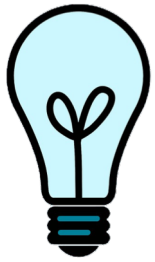
Adobe XD Interface



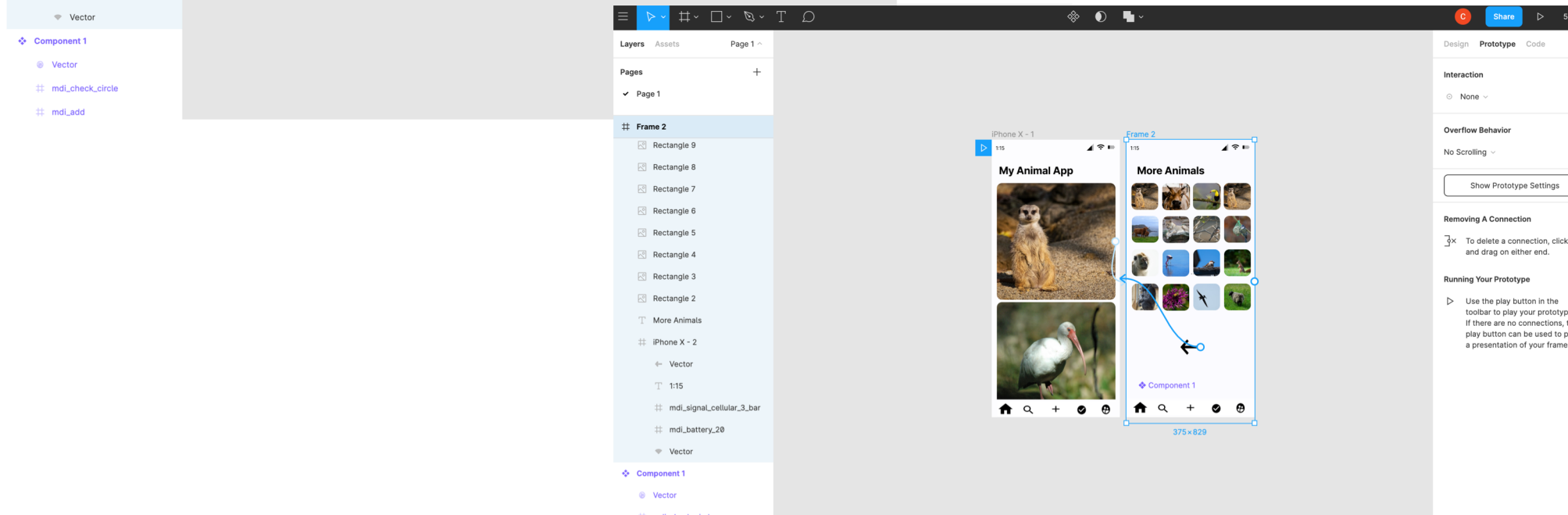
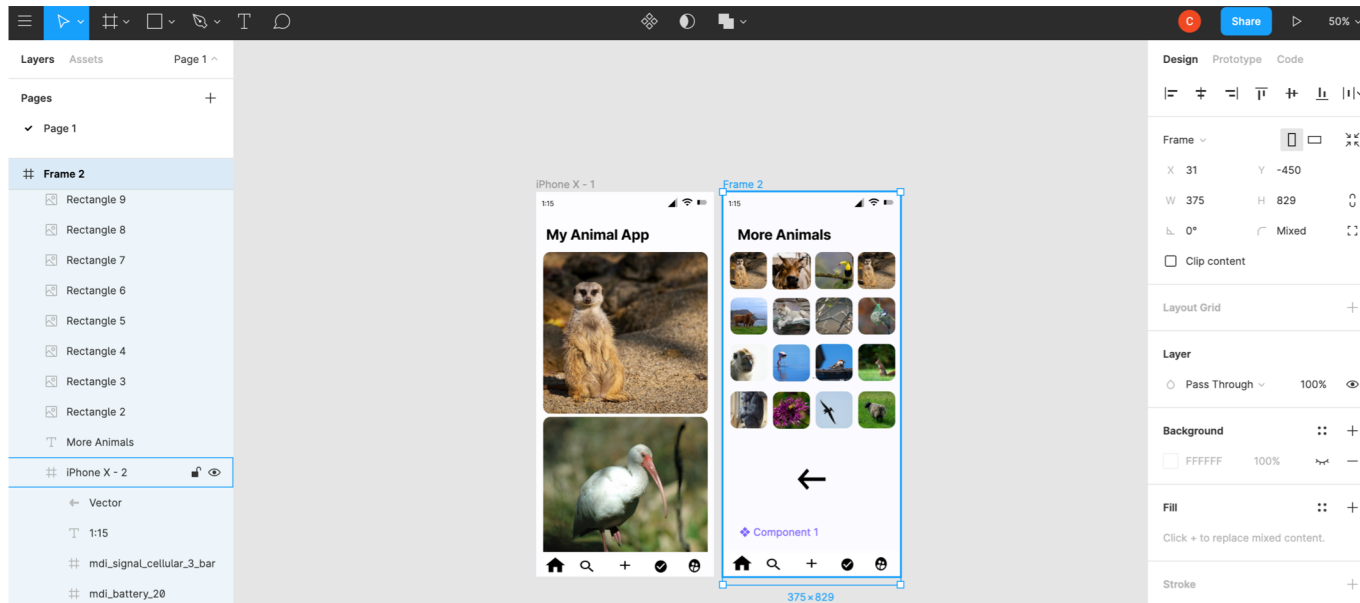


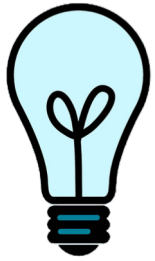
Figma

- Gaining in popularity
 - Free student pricing option; need to apply <https://www.figma.com/education/>
- Web-based
- Allows for collaboration with your team on a project



Figma Interface





Conclusion

- In practice, you will use appropriate prototyping tool depending on your organization, client and needs
- Be prepared to learn new tools
- New tools will continue to emerge in this space
- Use whatever tool you feel comfortable for our Prototype assignment
- More important to understand the importance of representing your idea with a high fidelity prototype and getting feedback and input before investing in development.
- Each tool provides tutorials:
 - <https://support.proto.io/>
 - <https://helpx.adobe.com/xd/tutorials.html>
 - <https://help.figma.com/article/116-getting-started>