Basic UX/UI Design… and Kanban Board Creation

Basic web design and creating a Kanban board with stories & tasks

Design   …your Web Application

User Experience (UX)

- Keep it INTUITIVE
  - Navigation should be obvious
- Make it consistent with industry standards
  - Follow the "standard" for interactions a.k.a clicking a hamburger icon () should open the navigation and arrows (<,>) should open drawers.
  - Keep interactions the same across the application
- Allow users to make errors by handling errors gracefully a.k.a form validation that askes users to correct inputs that are not correct
- Resources
  - https://usabilla.com/blog/fundamental-concepts-ux/
  - https://careerfoundry.com/en/blog/ux-design/5-key-principles-for-new-ux-designers/
  - https://www.mockplus.com/blog/post/interaction-design-principles

Design   …your Web Application

User Interface (UI)

Responsive Design or Mobile First layout

- Rearrange (stack) elements on narrow screen
- Hide and/or show different elements based on screen size
- Adjust font sizes
- Resources
  - https://darwindigital.com/mobile-first-versus-responsive-web-design/
  - https://www.smashingmagazine.com/2017/02/mobile-first-is-just-not-good-enough-meet-journey-driven-design/

Design   ...your Web Application

User Interface (UI)

Fonts & Icons
- Find alternate fonts for logos & headers
- Use icons where appropriate
- Resources
  - https://fonts.google.com/
  - https://material.io/tools/icon
  - https://fontawesome.com/

Images
- Graphics need to be your originals, Creative Commons or Public Domain
- Resources
  - https://www.pexels.com/
  - https://unsplash.com/creative-commons-images

Color & Contrast
- Pick a color palette
- Keep accessibility in mind
  - Visually impaired & colorblind
- Resources
  - https://coolors.co
  - http://paletton.com
  - https://www.colorspire.com

Navigation
- Again... it should be Intuitive
- Animations (Only if times allows at the end)
- Resources
  - https://css-tricks.com/video-screencasts/97-intro-to-css-animations/

Define   ...your Timeline

How much time do you have to complete your project?

- Estimate the amount of time on a daily/weekly basis
  - Approximately 2 hours/day, 5 days/week for 4 weeks = 40 hours
- This number is used to estimate completion of the project on time.
- Plan to complete your project including testing the days before demo day so you can fine tune & polish the leeway, plus it gives you some padding on your estimates.

Create   ...your Kanban Board

Create an account on trello.com

- Create a board on Trello
- Name the board something meaningful regarding your project
- Share your board with teachers and mentors
- Create swim lanes
    - Planning / Research
        - All items that need to be planned
        - Things that need to be learned / researched
    - Back log
        - Brainstorm and story writing
    - Ready for development
        - Story writing completed, full details and acceptance criteria
    - In Progress/Development
        - Stories currently being worked (should be limited to 1 or 2)
    - Testing
        - Your testing processes for each story
        - User testing for each story or iteration
    - Buggs
        - For things that broke and need to be fixed
    - Completed / "Done-Done"
- Create stories
    - Steps for stories:
        - Title -- A brief summary of changes
        - Define definition of Done -- "As a [persona], I [want to], [so that]."
        - Prioritize
        - Estimate
        - Minimum Viable Product or Optional
    - Stories are NOT tasks, they are definition of a feature
        - You should task out each story, that become development "chunks"

Resources to create...your Stories

- Atlassian tutorial
    - https://www.atlassian.com/agile/project-management/user-stories
- "How To Write User Stories", by Robert Smith.
    - Part 1: https://www.youtube.com/watch?v=eYZ8vBXL1kk
    - Part 2: https://www.youtube.com/watch?v=_iodOh-QTww
- Example of thought process for a simple task such as create a PBJ Sandwich
    - https://youtu.be/5X58UgQpGyQ

Task out ...your Stories

Create tasks

Steps for tasks:

- Define tasks required to fulfill the definition of done
- Prioritize
- Estimate/Time Box
  - Keep in mind your total time line estimate. Plan to finish a week early.
  - For new tasks, multiply estimate by 1.5 or 2
  - Time boxing, determine the max time to spend on an optional feature
    - Once that time is met, stop work on it and reevaluate
  - Resource
    - https://www.agilealliance.org/glossary/timebox

Develop ...your Web Application

The FUN part, and why you are here.

- Update your Kanban board as you start and complete stories and tasks.
- You and others should be able to gauge your completeness by the board status.

Test ...your Web Application

Test, test and more testing

What should you be testing?

- Make sure it behaves correctly.
- Make sure it looks correct.

How should you test?

- Test as stories are completed
- Test on many devices and resolutions
- Test in multiple web browsers
  - Chrome, Safari, Microsoft Edge, if suicidal Internet Explorer
- Have others test
  - You should observe them testing and listen to their feedback
  - Have teacher, mentors, peers, friend (smart & dumb), your kids, your parents

Update   ...Documentation

Document the entire process of design, development and testing.

- Reference your decisions when questions arise.
- Define your Time line
- Create your Kanban board
- The documentation will be included in your portfolio, so make it look nice.

Homework

Required to complete your homework!

- Document your decisions
  - Select fonts, icons, images, color scheme
- Define your Time line
- Create your Kanban board
  - Create Stories
    - Create task list for story
    - Estimate effort (in hours)
- Start Development

Due next week, share the link to the Kanban board with all details in stories and tasks