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](http://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-](http://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/](http://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](http://paletton.com/)
  + https:/[/www.colorspire.com](http://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](http://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](http://www.youtube.com/watch?v=eYZ8vBXL1kk)
  + Part 2: https://[www.youtube.com/watch?v=\_iodOh-QTww](http://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](http://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