* Documentation
  + Document as you work
  + Generally two audiences: user, maintainer
* User Manual
  + Describes how to use system
  + Complete UI description
  + How to do any “function”
  + Non-technical
  + “Use case” can be good way to organize
  + Try to do more than just reformat web pages
  + Pictures are good
* Technical Manual
  + Audience is another engineer
  + Describe how system works
    - Big picture 🡪 details
  + Lots of diagrams
  + Hardware and software
  + Hardware documentation
    - Diagrams
      * block diagram
        + May be multiple levels
      * Schematics
      * PCB layout
        + Typically multilayer and overlay
      * Timing diagrams
    - General overview
      * Describe overall system in terms of block diagram blocks and busses
      * Give the user a sense of what happens and where
      * How data flows in system
      * Block diagram should include which part is in each block
      * Board layout
        + Where are blocks (color coding)
        + Where are components (overlay)
    - Detailed description
      * Organized by block
      * Detailed description of how block works (at component/signal level)
      * Describe what each component does/signals look like
        + Use timing diagrams
      * Show where in schematic and PCB
      * Enough information to know if circuit working by probing
      * Refer to memory map
        + Include addresses, devices, chip selects
    - Document changes
      * Most of documentation should use final schematic
      * Need to include schematic for your PCB
      * Document changes to both schematic and PCB
        + What and why
  + Software documentation
    - Audience: other programmers
    - How software works
    - Use diagrams to show interactions
    - General overview
      * Software block diagram
        + Blocks – files/functions/shared variables
        + Separated by subsystem (display, audio, etc.)
      * Describe how the blocks interact (use cases)
      * Show hardware interactions
      * Block details
        + Mostly in code comments
        + Add interaction diagrams and explanations