P5.js Web Editor Research

Takeaways

1. Very likely to have:
   a. Caret dragger
   b. Symbol Strip (beginners)
   c. Text Actions Strip
2. File Actions: all over the place (strip, menu, header)
3. p5 specific: preview + code
   a. Avoid too much info on screen
4. Horizontal Split > Paging > Vertical Split
5. Hard to know beginner-specific features
6. More useful on mobile than desktop
   a. Autocomplete
   b. File Tabs
7. Hypotheses:
   a. Beginners: Clicking > Key Combination
   b. File Actions are used less than editor commands

Brainstorm

Ideas to make implementation simpler / easier / better (?)
- MVP File Actions: "CTRL" button + current key combinations?
  - Possible? Ergonomic? Works on iOS?
  - Fast to implement (doesn't need icons for every action)
  - Strip by default (can disable in menu), point to other keyboards
- Canvas + Editor
  - [Mini Floating Canvas](#) + Fullscreen
  - Horizontal Split
  - Run = Navigate (preview + terminal)
  - Hold / Double-tap play for auto-refresh?
- Future:
  - Customization (what actions are in the custom footer bar, etc)

Notes

Legend:

- Awesome feature but how do you implement it?
- Frequent feature
- **Important for all editors / mobile applications**

Navigating large texts is difficult (caret)

Editors

Notable features from each researched editor

1. **SPCK**
   a. Drop caret dragger
   b. Symbol strip ((), if, =, !, &&, ;, ., ")
   c. Action Strip (static)
      i. Double-stacked
      ii. Paging
      iii. Arrows
      iv. Tab
   d. Header menu
      i. Sandwich
      ii. Search (find in page)
      iii. Run (= Navigate)
   e. Auto-indent
   f. Terminal output (+ copy output button)
   g. Change detection indication (dot)
2. **Acode**
   a. File Tabs
   b. Header menu
      i. Sandwich
         1. Explorer
      ii. Edit file
      iii. Run (= Navigate)
      iv. **More**: New FIle, Save, Save As, Open File, Open Folder, Open Recent, Console, GIthub, FTP, Settings, Help
      v. Action Strip
         1. Double-stacked
            a. Two menus
            b. Editor Functions (save, shift, tab, find, save)
            c. Arrows
            d. Move/Copy
      vi. (G) Change detection indication
      vii. (G) Autocomplete

        viii.   (G) Command Overlay
              1.   Commands + Shortcuts

3. **Droidedit**
    a. Drop caret dragger
    b. Action Strip
        i. File Ops
        ii. Undo + Redo
        iii. Find
        iv. Save
        v. Number Strip
4. **Enlightened:** Not a good reference for us
5. **DCoder:**
    a. Header
        i. Sandwich
        ii. More
    b. Bottom Terminal (cool)
    c. Action bar (on edit)
        i. Floating Undo + Redo
        ii. tab < > { } ( ) "
        iii. Run
    d. Good dialogs for file creation + save name