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Specific Requirements Draft:

- 1. Webapp Layout
 - a. Real-time rendering of HTML file and associated CSS and JS files using editor autoformatting [2g] and browser hot-reloading [3e]
 - b. Able to connect and render multiple browsers simultaneously
 - c. Means of displaying each browser, could be tab based or split screen
- 2. Code Editor
 - a. Focus on language feature set for HTML, CSS, JS (features should work at least for these languages)
 - b. Support for Code highlighting, styling, and linting
 - c. Auto-completion, especially for listing the valid CSS properties
 - d. <u>PostCSS</u> to prefix and polyfill CSS properties for browsers
 - e. <u>Babel</u> to polyfill JS for browsers
 - f. <u>CanIUse</u> support for estimating target browser compatibility with currently compiled CSS
 - g. Format on save functionality, on save runs appropriate checks (styling, linting, PostCSS compilation, triggers browser updates)
 - h. Allow uploading & running current files/folders/workspaces
- 3. Virtualized Browsers
 - a. Render webpage based on compiled editor code
 - b. Support for most popular browsers; currently this includes Chrome, Edge, Firefox, Safari; Source
 - c. Allows selection specific browser versions for the browsers in [b]
 - d. A way to either automatically build VM's or used currently available online browser testers at an additional cost i.e. <u>Browserling</u>, <u>BrowserStack</u>, <u>LambdaTest</u>
 - e. Support for <u>hot-reloading</u>

Specific Requirements Version 2:

1. Code Editor

- 1.1 The editor will accept user inputted HTML, CSS, and JS Code to make the Website
- 1.2 The editor will prepare the code for rendering by the browsers
- 1.3 The editor will allow the user to save any files created in the Editor.
 - 1.3.1. These files can then be downloaded to the user's computer.
- 1.4 The editor will allow the user to upload any Files that already exist.

2. Virtualized Browsers

- 2.1 The editor will accept a list of browsers to test
- 2.2 The editor will have a means of displaying each browser
- 2.3 The editor will be able to connect and render multiple browsers simultaneously
- 2.4 The editor will have real-time rendering of HTML file and associated CSS and JS files

Specific Requirements Version 3:

- 1. Code Editor
 - 1.1 The editor will accept user inputted HTML, CSS, and JS Code to make the Website
 - 1.2 The editor will prepare the code for rendering by the browsers
 - 1.3 The editor will allow the user to save any files created in the Editor.
 - 1.3.1 These files can then be downloaded to the user's computer.
 - 1.4 The editor will allow the user to upload any Files that already exist.
- 2. Virtualized Browsers
 - 2.1 The editor will accept a list of browsers to test
 - 2.2 The editor will have a means of displaying each browser
 - 2.3 The editor will be able to connect and render multiple browsers simultaneously

2.4 The editor will have real-time rendering of HTML file and associated CSS and JS files

Use Case Draft:





