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Project 1: Documentation

1. **Overall Theme/Impact**
   1. The apps theme and instructions on functionality are clearly stated on screen.
   2. The app works as intended and allows for clear and plentiful methodologies for how the user to manipulate what is drawn to the canvas. The user can manipulate the shape, start color, end color, size, padding, degree, and fps of the drawing.
   3. The app combines the functionality of multiple programs done in class along with the other unique additions such as being able to manipulate any of the provided variables (with the exception of color) mid-drawing to create more unique forms of algorithmic botonny.
   4. With additional work with the HTML and CSS to allow for additional screen sizes this application will be approaching portfolio quality.
2. **User Experience**
   1. The purpose of the app is explained in the rightmost column along with the instructions for usage.
   2. Labels depict the functionality of each controls so the app can be utilized effectively without reading instructions. No errors occur in any combination of user options for drawing to the screen.
   3. The provided text is visually separated into appropriate elements with blocks of varying sizes and colors.
   4. App utilizes button, radial, and sliders with differing colors to allow users to easily manipulate the provided controls labeled by overall function and specific options.
   5. Regardless of combination of user choices the canvas will accurately print the selections to the screen without errors.
   6. The visual design follows a block separation that separates content neatly based on purpose using a blue and white color theme.
3. **Media**
   1. Both the HTML and CSS pass validation.
   2. Semantic HTML elements are used to separate sections of the application.
   3. Entirety of CSS exists within external style sheet.
   4. Embedded font is used as the primary text font for all text used.
   5. Canvas.save() and canvas.restore is utlilized in the five library draw functions: drawCircle, drawSquare, drawTriangle, drawDiamond, and drawX.
4. **Code**
   1. All file and coding conventions are followed.
   2. All event handlers are dictated and utilized within the setupUI function.
   3. Index and Lib js files are included and content is correctly dived between them with no js within the HTML file.
5. **Right**
   1. Controls were able to be separated efficiently to allow for new controls to be implemented and changed without causing errors within other controls.
   2. The wide variety of customizations available allowed for a plethora of different fireworks to be created.
   3. All the features with the exception of color changes can be edited while the firework is being generated, allowing for user created transitions.
6. **Wrong**
   1. The website is poorly optimized for smaller screen sizes.
   2. The control layout did not allow for other types of input such as drop downs to fit comfortably.
7. **Extra Features**
   1. Change the randomize button into a toggle that randomizes on every canvas click.
   2. Change the reverse button into a toggle.
   3. Optimize the layout to work on additional screen sizes.

**H. Resources**

* 1. How to create and utilize buttons:
     + <https://www.w3schools.com/tags/tag_button.asp>
  2. How to create and utilize radials:
     + <https://www.w3schools.com/tags/att_input_type_radio.asp>
  3. How to create and utilize sliders:
     + <https://www.w3schools.com/howto/howto_js_rangeslider.asp>