Final Project Write-up

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a. (5 pts) **Part 1:** In 300 words (only!) describe your website (I will stop reading at 300 words, so please be concise). Include the following:
- My website VISED is an interactive website which aims to help beginners learn and practice sketching.
- VISED splits the learning procedures for a novice of sketching into three basic steps, including 2-dimensional objects, 3-dimensional objects and creativity in sketching. For 2-dimensional objects, there are straight lines, squares, circles and objects composed of primitives. 3-dimensional objects include cubes, cylinders and more complex objects. And besides these sketching techniques, creativity and imagination are also really important.
- There are different interactive ways to engage learners more. For example, scrollspy can help learners interact with the sketching tracks and have a better understanding of how different combinations of strings and dots work. There are also many worked example for sketching that learners can interact with.
- The target ausience can be any novice of sketching. And I think it can especially work well with children who just start learning sketch, considering the interesting interaction, the teaching of basic sketching techniques and also the aim to foster creativity.

b. (5 pts) **Part 2:** Use a bulleted list to describe how a user would interact with your website. For each item in your list, say
  i. the interaction type you implemented
  ii. how I should reproduce it (i.e. click on X on page Y, or scroll on page X, etc.)
- Homepage:
  - Browsing carousel to have a basic understanding of the whole process.
    - Carousel and hover.
    - Go to the homepage. Click the inactive carousel item on the sides. Hover the active carousel item which is in the middle. The indicator below the carousel can show the sequence of steps.
  - Jump to the web page for each step.
    - Carousel and click.
    - Click the active carousel item in the middle of the screen.
  - Jump to about page.
    - Click the "ABOUT" button on the left upper corner.
- Step 1 page:
  - Scroll the page to go through the whole learning process for the first step coherently and smoothly.
    - Scroll.

- - - ■ Go to the page of one.html and scroll down the page to go through the procedures including straight lines practice, squares & circles, and 2-dimensional objects.
    - In the straight lines practice, follow the content of the animation for practice.
        - ■ Animation. Click. Scroll.
        - ■ Scroll down the page to the part titled "STRAIGHT LINES". Click the button "PRACTICE" to start the instructional animation. Click the button "PAUSE" to remove the animation. Keep scrolling this part of instrcution for stragith lines will disappear.
    - Interact with the sketching tracks while sketching squares and circles.
        - ■ Scroll. Animation. Svg path.
        - ■ Scroll down the page to the part titled "SQUARES & CIRCLES". Keep scroll the track of sketching squares, circles, concentric circles, and inscribed circle.
    - Interaction for showcase of worked examples.
        - ■ Scroll.
        - ■ Scroll down the page to the part titled "2-D OBJECTS". Keep scrolling and then the showcase of worked examples of sketching 2-dimensional objects.
    - Jump to the next step.
        - ■ Click
        - ■ Click the button "NEXT" to jump to the web page for the next step "Enter the 3D world".

- Step 2 page:
    - Rotate a cube and learn to sketch it from different perspectives.
        - ■ Animation. Click.
        - ■ Scroll down the page to the part titled "CUBES". Click the buttons "TOP", "DOWN", "LEFT", "RIGHT", "FRONT", "BACK" to rotate the cube manually in order to find a perspective that a learner want to sketch from. Click the button "play", the cube will start rotating automatically. Click the button "pause", the cube will stop rotating.
    - Read instruction of sketching cylinders from the cards.
        - ■ Click. Cover layer.
        - ■ Scroll down the page to the part titled "CYLINDERS". Click the button at the right lower corner of each card, the cover layer of that card will show up and provide more information.
    - Jump to the next step.
        - ■ Click
        - ■ Click the button "NEXT" to jump to the web page for the next step "Play around".
- Step 3 page:
    - Scrollspy for in-page navigation.
        - ■ Click. Scrollspy.
        - ■ Go to the page of three.html. In the first screen of this page, click one the bulleted items. And the page will jump to the corresponding part.

- ○ Click throught the creative examples for this step.
  - ■ Click.
  - ■ Click the button next to the tile to go through one of the worked examples.
- ● About page:
  - ○ Click to see more information about VISED.
    - ■ Collapse. Click.
    - ■ [Go to about.html](#) and click to know more about three titles in the chart.
  - ○

c. (4 pts) **Part 3:** Describe what external tool you used (JavaScript library, Web API, animations, or other). Following the bulleted list format below, reply to each of the prompts. (I will stop reading at the 4th sentence, so please be concise)

  iii. Materialize
  - a. I think this is a more concise version of Bootstrap. And also I prefer its style.
  - b. I used it for responsive design and its components.
  - c. It add the basic framework for some components including carousel in homepage, collapse list in "ABOUT" page and scrollspy in the step three page.

  iv. skrollr.js
  - a. It provides different interesting interaction ways related to scrolling.
  - b. I chose to use it because it can make VISED provide a more smooth and coherent learning and practice process, which is aligned with the basic step-by-step structure of my instruction design.
  - c. I used it in the step 1 page and also step 2 page to smooth the learning and practice procedures. Animation and different parts of the page will show up while scrolling the page.
  - d. It adds the scrolling feature to the step 1 page and step 2 page.

  v.

d. (2 pts) **Part 4:** Describe how you iterated on your HW7 mockups, if at all, including any changes you made to your original design while you were implementing your website. (2-4 sentences max)
- ● In HW7 I only designed the high level navigation and structure of the website while in HW8, I designed how the instruction and interaction will be like for each step.
- ● In HW7 the contents in each page are many images of sketching works, which are very overwhelming and also are not structured enough for the novices.

e. 2 pts) **Part 5:** What challenges did you experience in implementing your website? (2-4 sentences max)
- ● One of the biggest challenge is to design a good flow for the whole learning and practice procedures of sketching.
- ● Understand how svg path work and combine it with scrolling is also very hard for me.
- ● Learning how to build a 3-dimensional cube with CSS and also rotate it both manually and automatically with JavaScript took me a lot of time.