Week 01 | Web Page to Web Space

Transformations and Vectors in p5.js

Develop simple sketches utilizing **vectors** and **transformation** functions in p5.js. This exercise is to explore and experiment diverse functions in p5.js. Think that you share effective uses of the vector and transformation functions with your classmates.

# Requirements

* Use various [2D primitive shapes in p5.js](https://p5js.org/reference/).
* Use the [Vector object in p5.js](https://p5js.org/reference/#/p5.Vector).
* The functions listed below should be utilized.
  + Math: random(), map(), constrain(), lerp(), ~~round(), floor(), ceil()~~
  + Transformations: push(), pop(), translate(), rotate(), ~~scale()~~
  + Vector Math: add(), sub(), mult(), div(), copy(), setMag(), limit(), ~~heading(), rotate(), fromAngle()~~

# References

* [p5.js website](https://p5js.org/)
  + [References](https://p5js.org/reference/)
  + [Examples](https://p5js.org/examples/)
* The Nature of Code
  + [Chapter 1. Vectors](https://natureofcode.com/book/chapter-1-vectors/)
  + [Chapter 2. Forces](https://natureofcode.com/book/chapter-2-forces/)
* The Coding Train (Daniel Shiffman's Youtube tutorials)
  + [Code! Programming with p5.js](https://www.youtube.com/playlist?list=PLRqwX-V7Uu6Zy51Q-x9tMWIv9cueOFTFA)
    - 1 Introduction
    - 2 Drawing
    - 2-3, 4 Errors & Console, Comment
    - 3 Animation
    - 4 Interaction
* Getting Started with p5.js ([Link to the book in NYU library](https://ebookcentral-proquest-com.proxy.library.nyu.edu/lib/nyulibrary-ebooks/detail.action?docID=4333728))
  + Chapter 2. Starting to Code
  + Chapter 3. Draw
  + Chapter 4. Variables
  + Chapter 5. Response
  + Chapter 6. Translate, Rotate, Scale
  + Chapter 8. Motion
  + Appendix B. Order of Operations

# Submission

* Attribute references you were inspired by.
* Acknowledge the source of any code that you did not write. This includes code from books, tutorials, the web, or other sources. Do this even if you then modified this code.
* Credit the Creative-Commons licensed sources you used.
* Upload **source codes**, including **media assets**, and **screen recordings** to the [Course Google Drive Folder](https://drive.google.com/drive/folders/1ldjEyaD608nEiuvzACzuCDFdK5qqQG3u?usp=sharing) by 11:59pm, Sunday. Alternatively, you can provide the **link to your project on Glitch** or p5 Web Editor via Google Classroom.
* Post it on your own Documentation blog and keep the title format, “**WP2WS W## – Project Title**”.
* Submit the link to the post via Google Classroom.