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The Water Cycle

Programs Used: Brackets | Illustrator | Photoshop
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This interactive non-linear game is a web-based educational tool targeted towards teaching elementary school students about the water cycle. The game is intended to be housed on a website, where teachers are able to direct students to this digital space on their devices during distanced learning. Having younger students exclusively learning from slides can leave both parties quickly drained, so it will create a great opportunity for the students to explore on their own for a couple of minutes while giving the teachers a bit of an organization break.

This project was designed to develop the understanding of Design Thinking methodology, where defining the users and then understanding their needs goes hand in hand with good design. Here, it was utilized through constructing a cohesive interactive project as a state machine with user inputs. A state machine consists of a number of moments, known as states, that happen according to a previous action and may alter future outcomes. User inputs refer to the computer devices used to trigger the moments, from the keyboard to the mouse. This specific state machine consists of eight states that users can go through, based on their selected paths. There are two branches that eventually meet back together at the end.

The aesthetics of this project were decided by focusing on the target audience and through present art skills. The game features simple designs that are engaging and easy on the eye for the young students to absorb information. Each state consisted of a minimum of two defining elements that signified the specific state transfers that were being made by each input. Smaller blocks of text were also used with a few short definitions of each state, while still directing focus on the graphics. In educating the students more visually, it creates a greater memory-loop for them to recall when away from the space.