We started the basis of our final project working on expanding the work we did in homework three. In our project to expand on homework three, we came across a website known as (https://thispersondoesnotexist.com/). The basic gist of the website is that it uses computer generation and AI to create a totally unique face of a human being who as the name suggests does not exist. It is able to do this using a generative adversarial network, in specific StyleGAN, (https://en.wikipedia.org/wiki/StyleGAN). As a basis, we pre-downloaded 15 different generated faces and then randomly selected them as the images in the puzzles for homework three. Beyond that, we also implemented PHP and user-inputted data. This was done by using a login page at the start of the web page that asks the user to input a name. This input field has a default name entered which can be changed. Then using PHP and the echo function we take that name and use it in the puzzle page to denote who is playing along with the HTML on the webpage. To get to the page there is a login button that also shades itself when hovered over. When arriving on the puzzle page of the webpage, a randomized image is shown which the user has to unscramble. When hovering over one of the movable image blocks, the number and outline are highlighted blue as well. There is also a shuffle button below the puzzle if the user wishes to reshuffle if they get stuck or want to restart with the same image. We also implemented a gradient shifting background, so the color of the background page shifts overtime to different colors. We accomplished this using two HTML and CSS files one for the login and one for the main page and one Javascript and one PHP file as well. Lastly, we used the AAMPS local server to demo the project, putting all files into the "www" folder of the application.

Other websites that provided useful tools ranging from CSS design tricks and PHP manipulation:

https://www.w3schools.com/js/tryit.asp?filename=tryjs_form_submit

https://www.w3schools.com/js/js_random.asp

https://2ality.com/2012/03/converting-to-string.html

https://www.digitalocean.com/community/tutorials/how-to-modify-attributes-classes-and-styles-in-the-dom

https://developer.mozilla.org/en-US/docs/Web/CSS/cursor

https://www.w3schools.com/php/php_forms.asp

https://stackoverflow.com/questions/2906582/how-to-create-an-html-button-that-acts-like-a-link

https://css-tricks.com/the-state-of-changing-gradients-with-css-transitions-and-animations/