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Part 1: Website Description
No Confusion Matrix is a website that aims to teach about confusion matrix through games. Our website allows users to test and consolidate their knowledge on the confusion matrix through series of matching games. The website is designed to look like an online gaming website so that it would attract non-academic users to learn more about a small concept in machine learning. The website also utilizes animations and interactions to make the user experience more engaging. The target audience of the website is people who are interested in learning about machine learning or the confusion matrix through a more relaxing and interesting platform.

Part 2: Interactions
- Learn about the concepts of the confusion matrix
  - Direct manipulation
  - Click "Learn the Concept", click somewhere else on the page to exit
- Check your understanding of the confusion matrix through a matching game
  - Direct manipulation
  - Play with exercises → Get Started → Easy → drag "Katrina", "Jessica", "Rachel", "Claire" under the "True Positive" box, the rest into "False Positive" box → Check Answer → should see a pop-up window saying "Nice Job! All Correct" → click "x" to exit
  - Play with exercises → Get Started → Easy → Check Answer → should see a pop-up window saying "Sorry. Incorrect." → click "x" to exit
- Different level of difficulty for the game
  - Direct manipulation
  - Play with exercises → Get Started → click "Easy", "MEDIUM", or "HARD" to see different content on the actual game page. The level and algorithm should change.
- Contact webmaster
  - Fill forms
  - Still confused → contact us → write an email to the website creator

Part 3: External Tools Used
- Bootstrap
  - I chose it to make the website responsive
  - I formatted my website and uses features such as buttons and columns
  - It adds responsive design to my website
- Animation
  - I chose it because I would like to make my website more attention-grabbing
  - I used it in the directory page to the game page and on the game page so the pages are not too static and boring.
  - It adds fun to my website

- Web API + External Library
  - I chose to use them because I need a drag and drop feature for my game page and more interesting buttons
  - I used them in the game page to make the game more interactive and most of my buttons to make the page more interesting
  - It adds functionality (drag and drop) to my website

Part 4: Iterations

I have my friends who major in design from outside the class to look at my website. We went through 3-5 iterations to make the website more engaging and pretty. I also followed the TA's suggestion and narrowed down my website to focus on the gaming page and gave up developing a more interactive "learn the concept" page.

Part 5: Challenges

I had major trouble making the gaming page prettier and matching the style with the rest of my website. I was able to solve this problem by going through iterations with my design friend.