Working Prototype Known Problems Report Digi Guess Digi Netters 12-03-17

- 1. Model has a hard time predicting certain numbers. It confuses 9 as a 4 and 7 as a 1.
 - a. "Input Action" Drawing the number 9 or the number 7 into canvas element
 - b. "Location of fault" Model
 - c. "Possible Action" We could try training the model on a larger data set, with better 9 examples, so it would know what to expect
- 2. When inputting an illegal input it still predicts a number.
 - a. "Input Action" Drawing a false number
 - b. "Location of fault" Model
 - c. "Possible action" Implement a way to only guess a number if it's over a certain probability.
- 3. Model only has a 99.23% accuracy rate, so get's the numbers wrong sometimes.
 - a. "Input Action" Drawing any number, using the canvas or submit button at all
 - b. "Location of Fault" the model
 - c. "Possible action" Lead a research team to study and improve machine learning, receiving corporate sponsorships to fund this multi-million dollar escapade. Eventually Machine learning becomes your life, and your wife leaves you, she takes the kids and the dog, you lose the house. You finally achieve the rate of 100%, but was it worth it? You're alone and destitute, spending all your time in a drunken stupor. None of your friends want anything to do with you. All because 99.23% wasn't good enough for your student project.
- 4. When drawing in corners of the canvas accuracy rate for model goes down slightly
 - a. "Input action" Drawing a number in the corner of the canvas
 - b. "Location of Fault" This is an issue with the way the data is preprocessed.
 - c. "Possible action" This is a padding issue, in order to fix this we would need to change the way the data is padded, as it is not padded on the side the closest to the border.
- 5. Hamburger(Menu) Button doesn't work on front page
 - a. "Input action" None hamburger button is missing
 - b. "Location of fault" the website
 - c. "Possible course of action" this issue can fixed with a bit of trial and error, googling, and hair pulling we currently don't have time to do.
- 6. The header is slightly different on the about page compared to the home page.
 - a. "Input action" Click on the about page and the head changes the boldness of our logo, you can tell if you take a magnifying glass to the screen
 - b. "Location of fault" one of the HTML or is files.

- c. "Possible action" figure out where the differences are in the two and fix them, currently we don't have time to do this.
- 7. Use of a (newly) deprecated module for resizing the data.
 - a. "Input action" Anytime the the data preprocessing is called.
 - b. "Location of fault" preproc.py
 - c. "Possible action" Use 'skimage.transform.resize' and optimize the interpolation