## **Release Plan**

Product Name: Neural Network GUI

Team Name: The Tensors

Release Number: ReleasePlan\_v01

Release Date: 5/31/2022

Revision Number: 2

Revision Date**:** 4/8/2022

## **High level goals** (Ordered by priority)

* Be able to drag and drop modular blocks that represent neural network layers or tensor operations (to be abstracted into a single block)
* Be able to download auto-generated code that implements the designed network in common interfaces (such as pytorch and tensorflow)

## **User stories**

Must have:

A. As a user of the website, I want a GUI for creating perceptron tensorflow networks, so that I can make them in an intuitive fashion.

B. As a user of the website, I want the GUI to allow for convolutional networks as well, so I can generate more types of networks.

C. As a user of the website, I want a GUI to also create pytorch networks, so that I can choose different implementations for the same network.

M: As a user of the website, I want to be able to access my neural networks across multiple machines.

Should Have:

D. As a user of the website, I want to generate the code that optimizes the network as well, as I want an intuitive interface for the entire machine learning pipeline.

E. As a user of the website, I want it to tell me basic information about the network, such as number of parameters and number of layers, so I can have a better understanding of the network at a glance.

F. As a user of the website, I want operator blocks for abstractions of common architecture patterns, so I can create and visualize networks based off of these patterns easier.

Could Have:

K. As a user of the website, I want to be able to save the entire network and abstract it into a single block, so I can use this block for more complicated networks.

L. As a user of the website, I want to be able to save the graphical network, so I can leave the website and improve it later.

G. As a user of the website, I want some pre-made networks available, so that I can build off of common network templates.

I. As a user of the website, I want a basic tutorial to guide me on creating a simple network, so that my first time using this can go smoothly.

J. As an educator, I want the website to display some basic information about neural networks, so that this website can be a teaching tool.

H. As a user of the website, I want the generated networks to perform preprocessing on the input data (photos), so I can use the generated networks for a wider variety of image sets.

N. As a user of the website, I want the model I create to be run on a real dataset, so I can get a sense of the efficiency of my model

O: extra tabs to work on more

Doing A involves work that makes all of the rest possible, so it will probably be the hardest

Story points, fibonacci scale 1 2 3 5 8 13 20

| User Story | Story Points |
| --- | --- |
| A | 13 |
| B | 5 |
| C | 8 |
| D | 13 |
| E | 2 |
| F | 5 |
| G | 3 |
| H | 3 |
| I | 3 |
| J | 3 |
| K | 5 |
| L | 5 |
| M | 8 |
| N | 8 |

## **Sprint 1**

A

B

E

## **Sprint 2**

C

D

F

## **Sprint 3**

G

M

L

## **Sprint 4**

K

N

I