

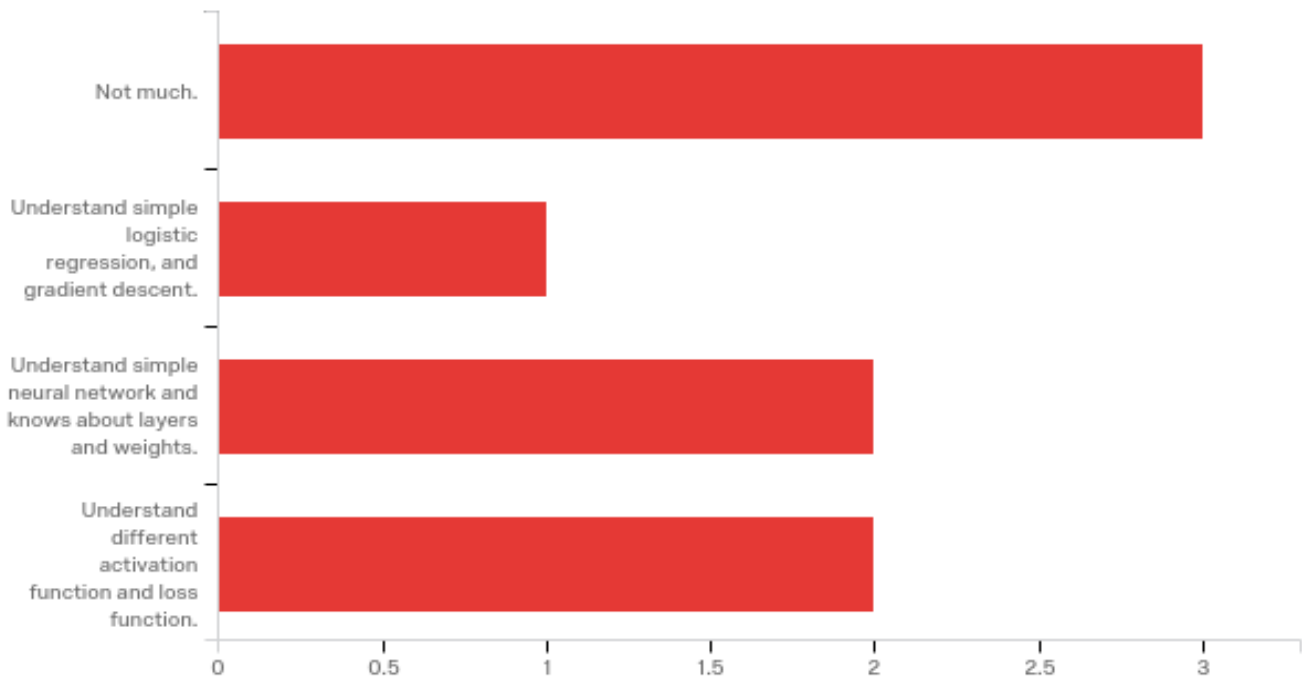
# Default Report

Site user experience survey for  
<http://machinelearningalgorithmsillustrated.azurewebsites.net/>  
December 7th 2016, 1:10 am MST

Q1 - Thanks for taking the time to answer this survey. It will take you about 15 minutes for this survey.

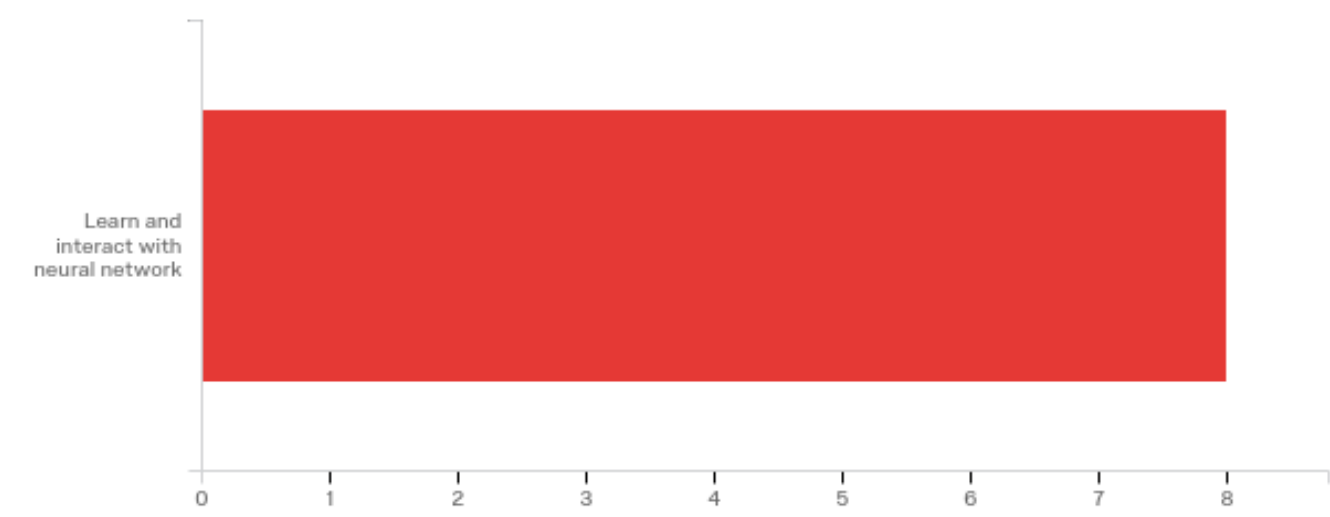
Section 1, prerequisites(Answer before visiting site) What’s your math level in terms of machine learning?Site url:

<http://machinelearningalgorithmsillustrated.azurewebsites.net/>



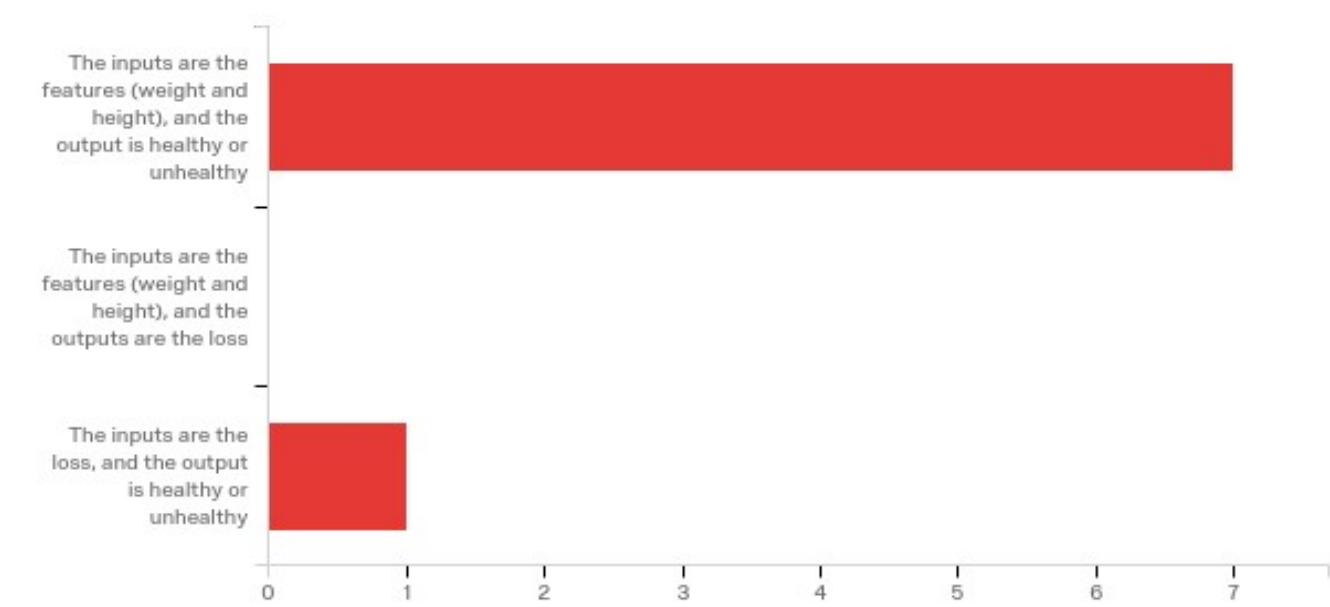
#	Answer	%	Count
1	Not much.	37.50%	3
2	Understand simple logistic regression, and gradient descent.	12.50%	1
3	Understand simple neural network and knows about layers and weights.	25.00%	2
4	Understand different activation function and loss function.	25.00%	2
	Total	100%	8

Q2 - Section 2, home page(Answer after viewing home page) Describe the goal of the project:



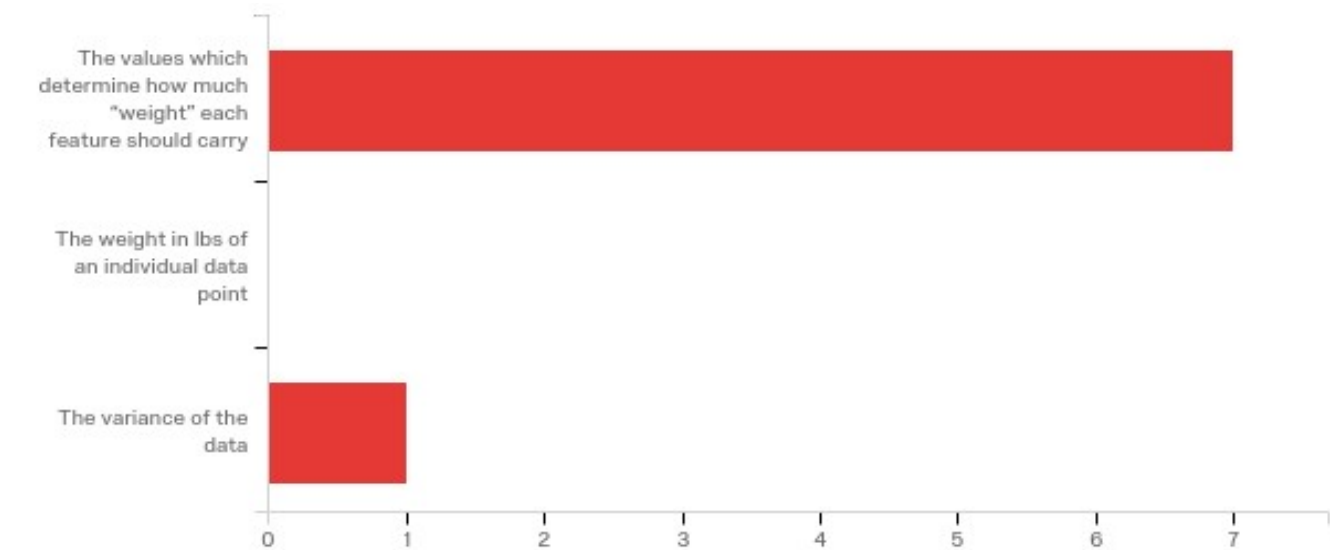
#	Answer	%	Count
1	Learn and interact with neural network	100.00%	8
	Total	100%	8

Q4 - Section 3, learn page(Answer after viewing learn page) What are the inputs and output of the toy example?



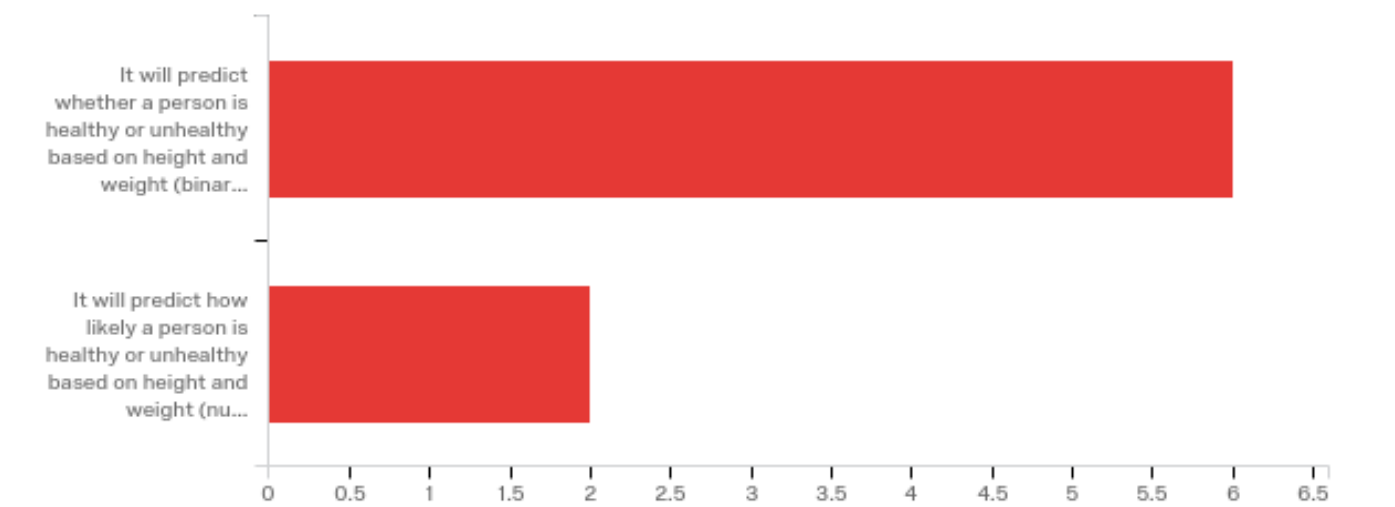
#	Answer	%	Count
1	The inputs are the features (weight and height), and the output is healthy or unhealthy	87.50%	7
2	The inputs are the features (weight and height), and the outputs are the loss	0.00%	0
3	The inputs are the loss, and the output is healthy or unhealthy	12.50%	1
	Total	100%	8

Q5 - What are model parameters?



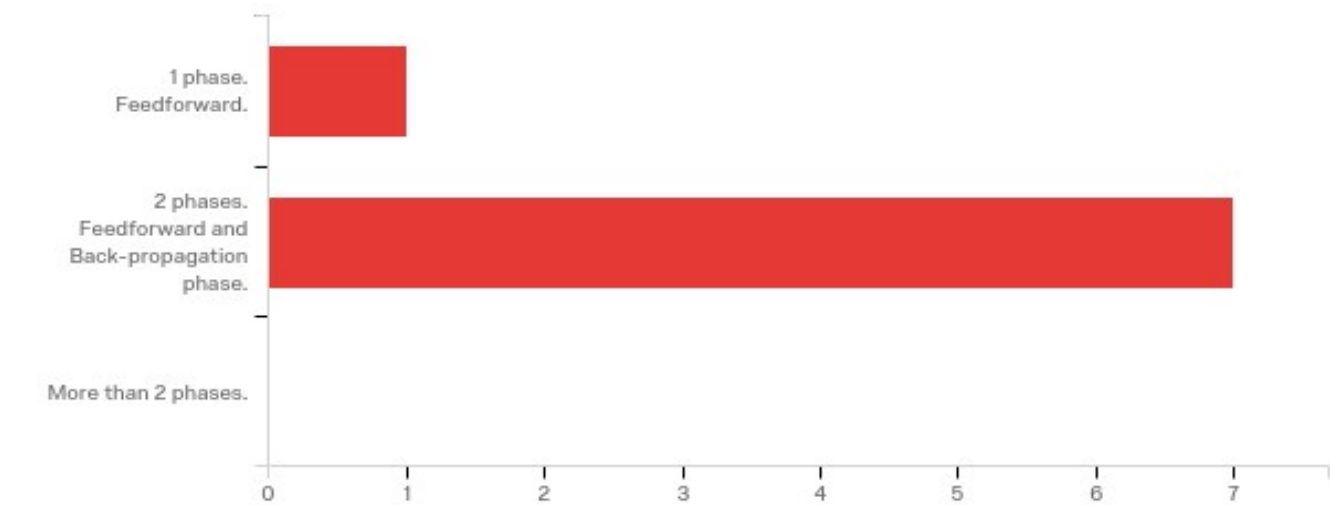
#	Answer	%	Count
1	The values which determine how much “weight” each feature should carry	87.50%	7
2	The weight in lbs of an individual data point	0.00%	0
3	The variance of the data	12.50%	1
	Total	100%	8

Q6 - What question will a trained model be able to answer in the toy example?



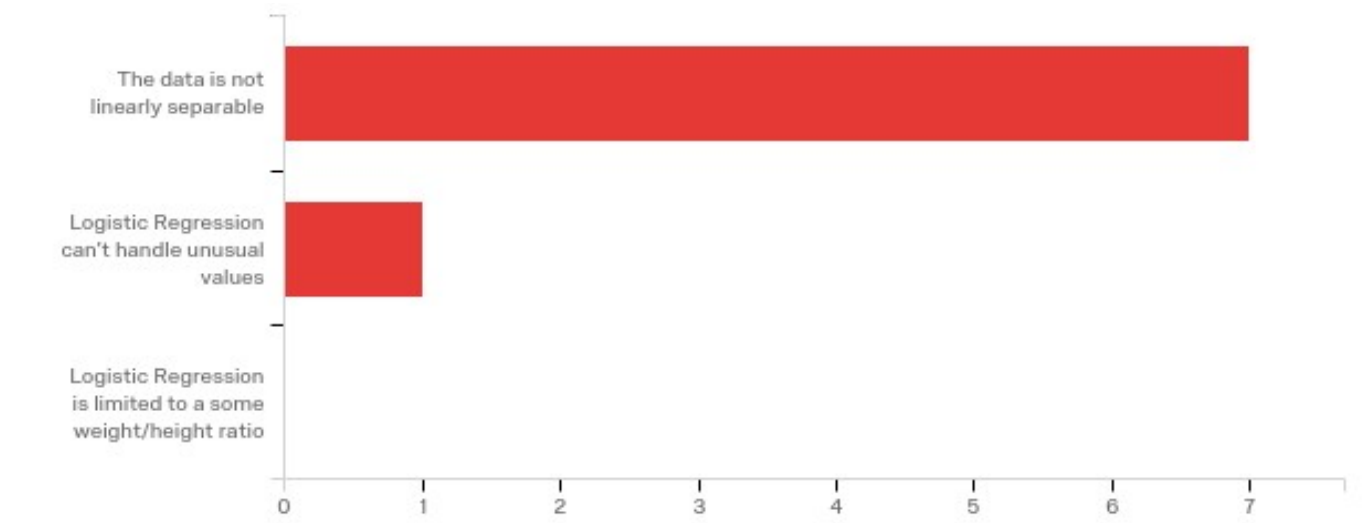
#	Answer	%	Count
1	It will predict whether a person is healthy or unhealthy based on height and weight (binary output)	75.00%	6
2	It will predict how likely a person is healthy or unhealthy based on height and weight (numeric output)	25.00%	2
	Total	100%	8

Q7 - How many phases are in the learning of a neural network?



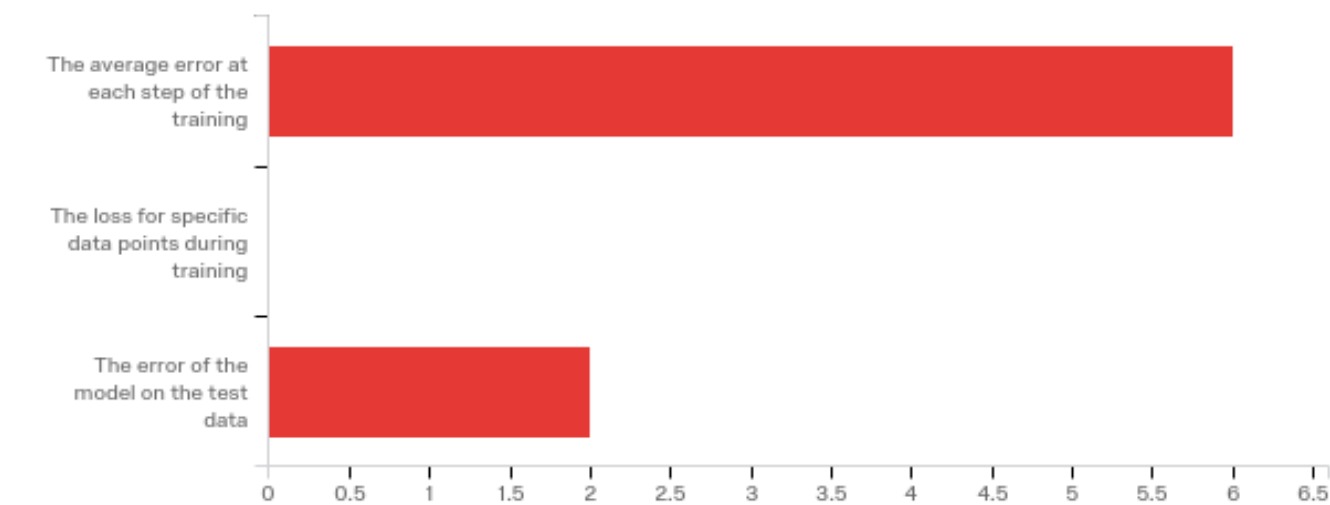
#	Answer	%	Count
4	1 phase. Feedforward.	12.50%	1
5	2 phases. Feedforward and Back-propagation phase.	87.50%	7
6	More than 2 phases.	0.00%	0
	Total	100%	8

Q8 - Why is simple logistic regression no longer suitable when “tall skinny guys” show up?



#	Answer	%	Count
1	The data is not linearly separable	87.50%	7
2	Logistic Regression can't handle unusual values	12.50%	1
3	Logistic Regression is limited to a some weight/height ratio	0.00%	0
	Total	100%	8

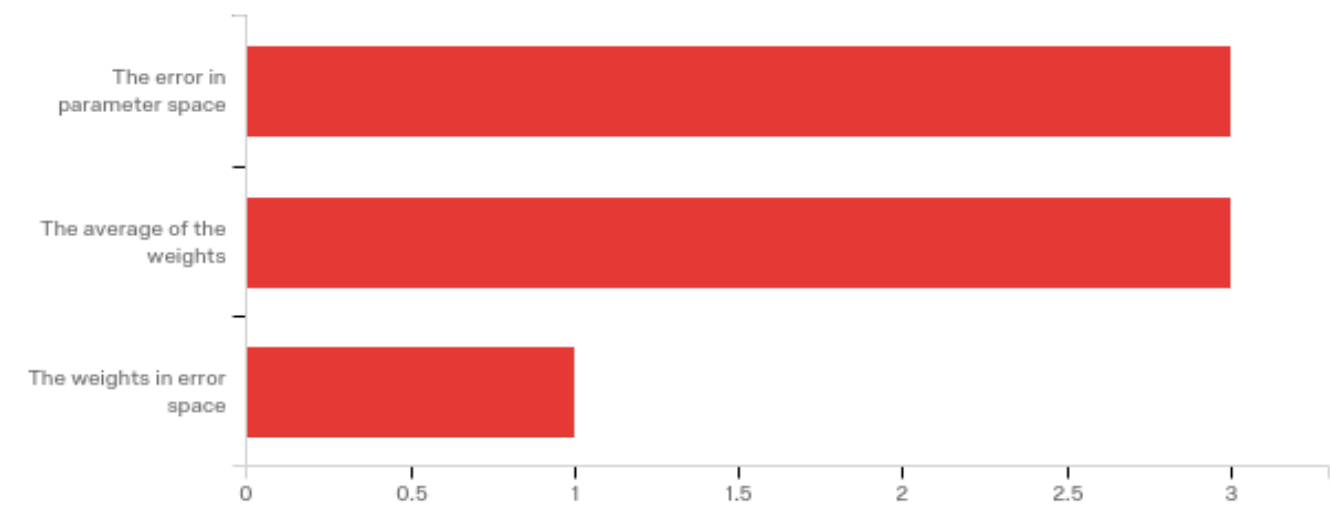
Q9 - What does the loss chart show?



#	Answer	%	Count
1	The average error at each step of the training	75.00%	6
2	The loss for specific data points during training	0.00%	0
3	The error of the model on the test data	25.00%	2
	Total	100%	8

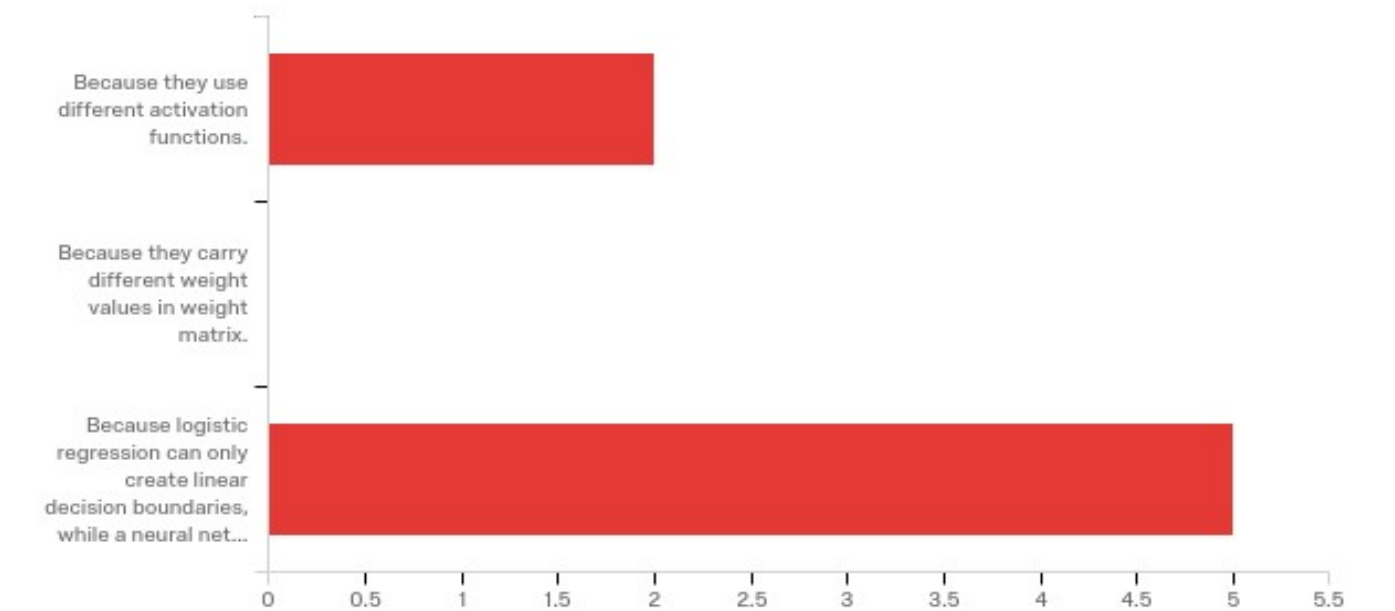


Q10 - What does the gradient descent chart show?



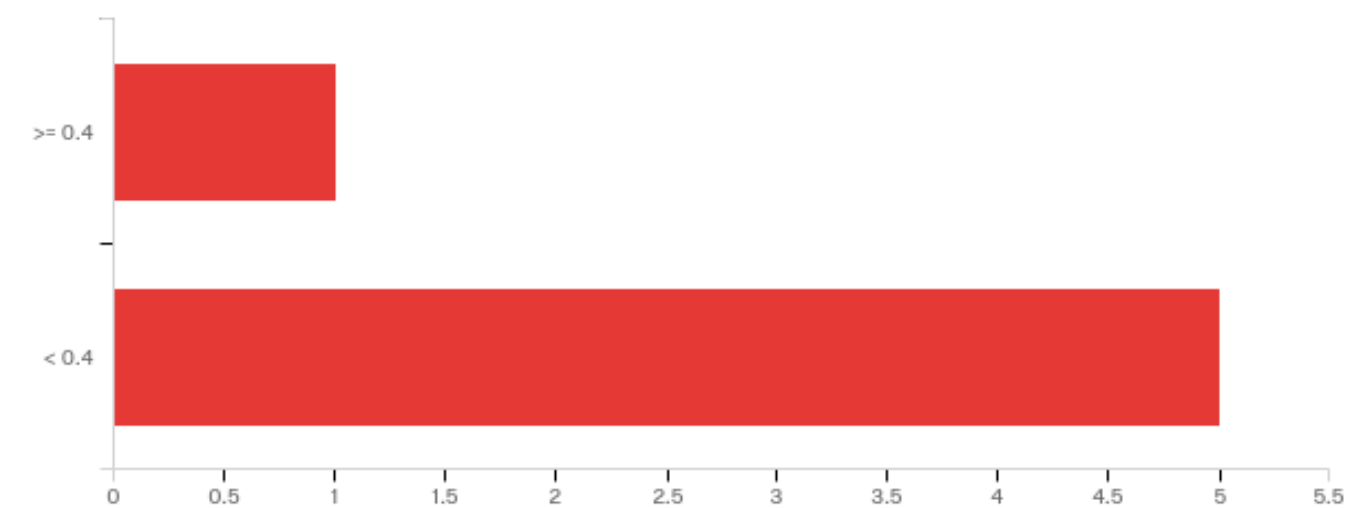
#	Answer	%	Count
1	The error in parameter space	42.86%	3
4	The average of the weights	42.86%	3
3	The weights in error space	14.29%	1
	Total	100%	7

Q11 - Why is the hyperplane different between logistic regression and single layer neural network?



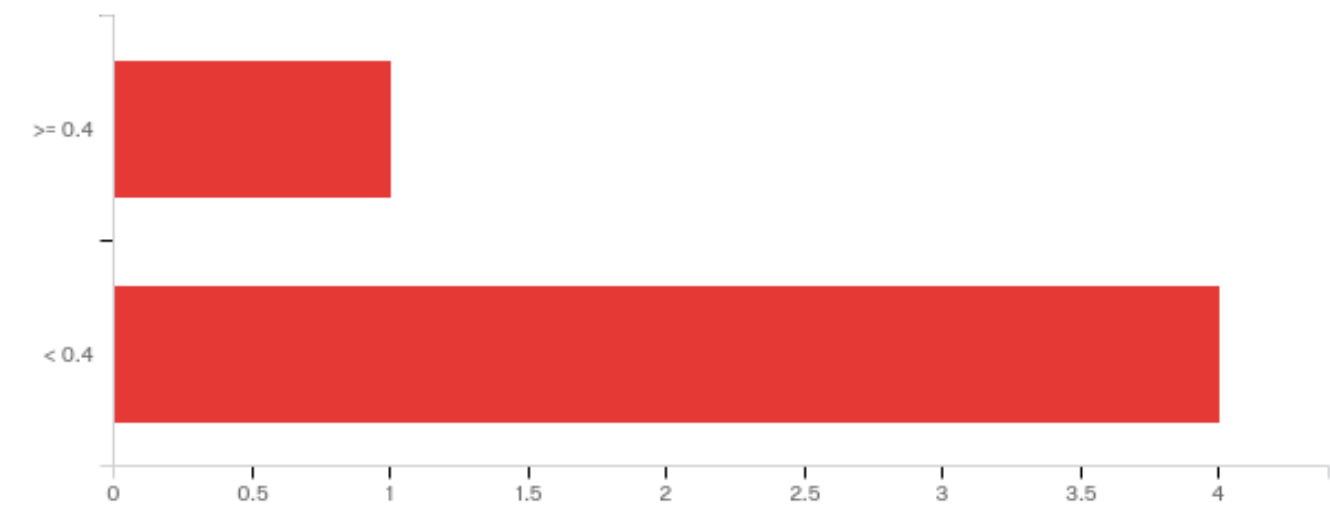
#	Answer	%	Count
1	Because they use different activation functions.	28.57%	2
2	Because they carry different weight values in weight matrix.	0.00%	0
3	Because logistic regression can only create linear decision boundaries, while a neural network with hidden layers is capable of creating non-linear decision boundaries	71.43%	5
	Total	100%	7

Q13 - Section 4, play page(Answer after viewing play page, and build a model with two layers with 10 nodes each) What is the training loss?



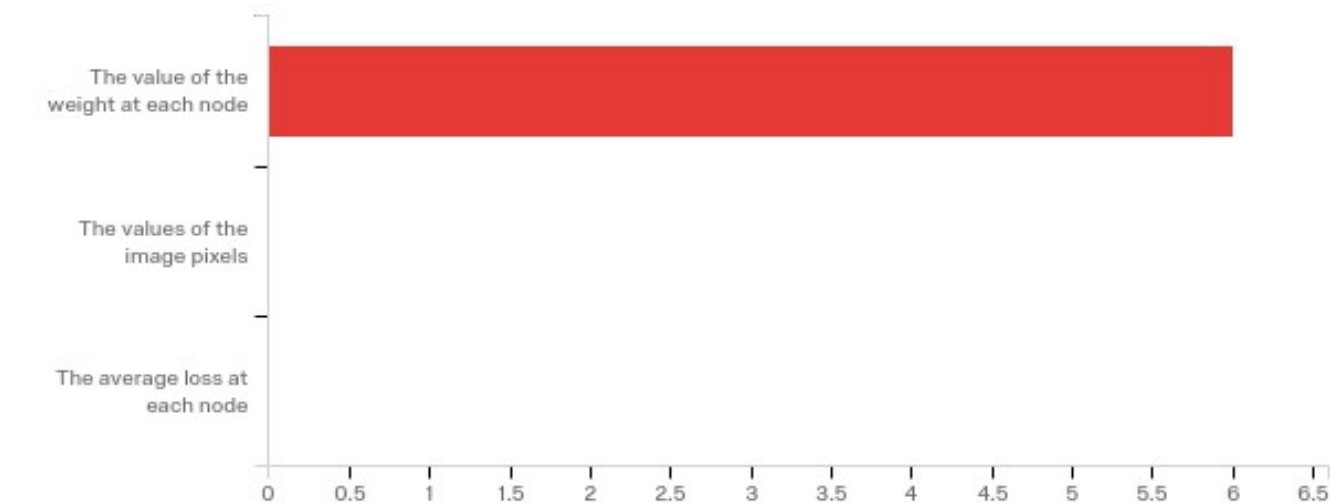
#	Answer	%	Count
1	>= 0.4	16.67%	1
2	< 0.4	83.33%	5
	Total	100%	6

Q14 - What is the test loss?



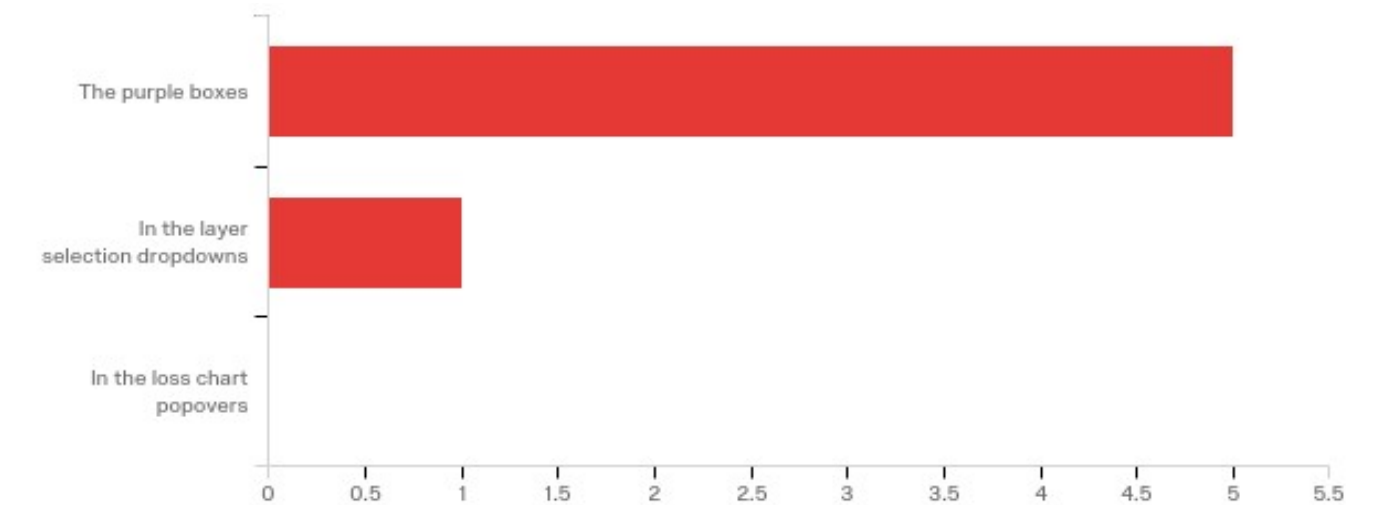
#	Answer	%	Count
1	$\geq 0.4$	20.00%	1
2	$< 0.4$	80.00%	4
	Total	100%	5

Q15 - What information to the tooltips on the matrices provide?



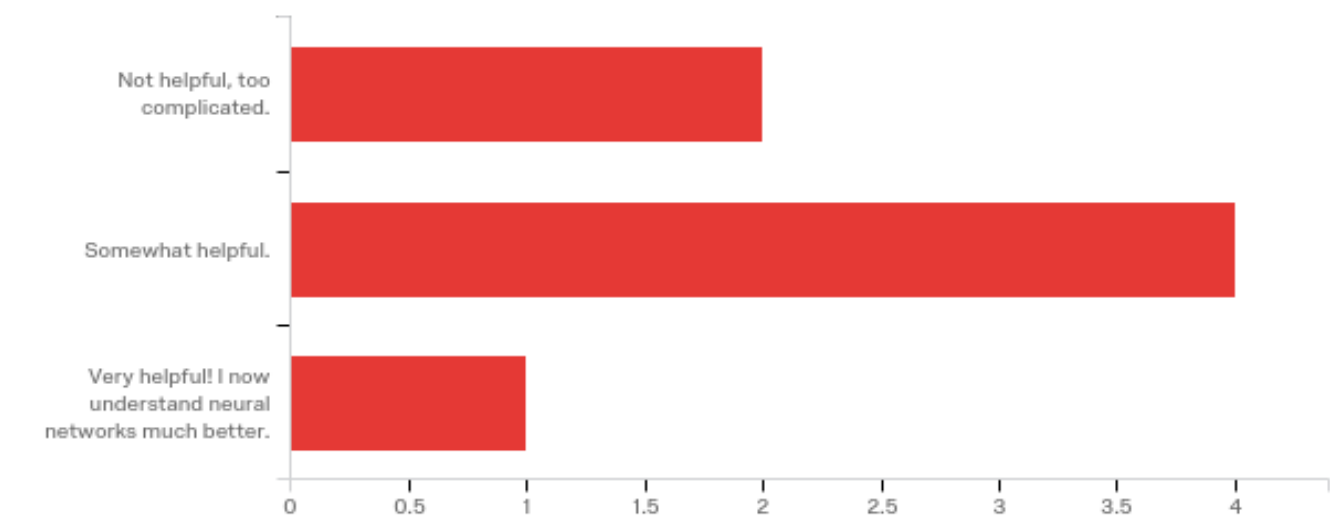
#	Answer	%	Count
1	The value of the weight at each node	100.00%	6
2	The values of the image pixels	0.00%	0
3	The average loss at each node	0.00%	0
	Total	100%	6

Q16 - Where on the page are the model parameters?



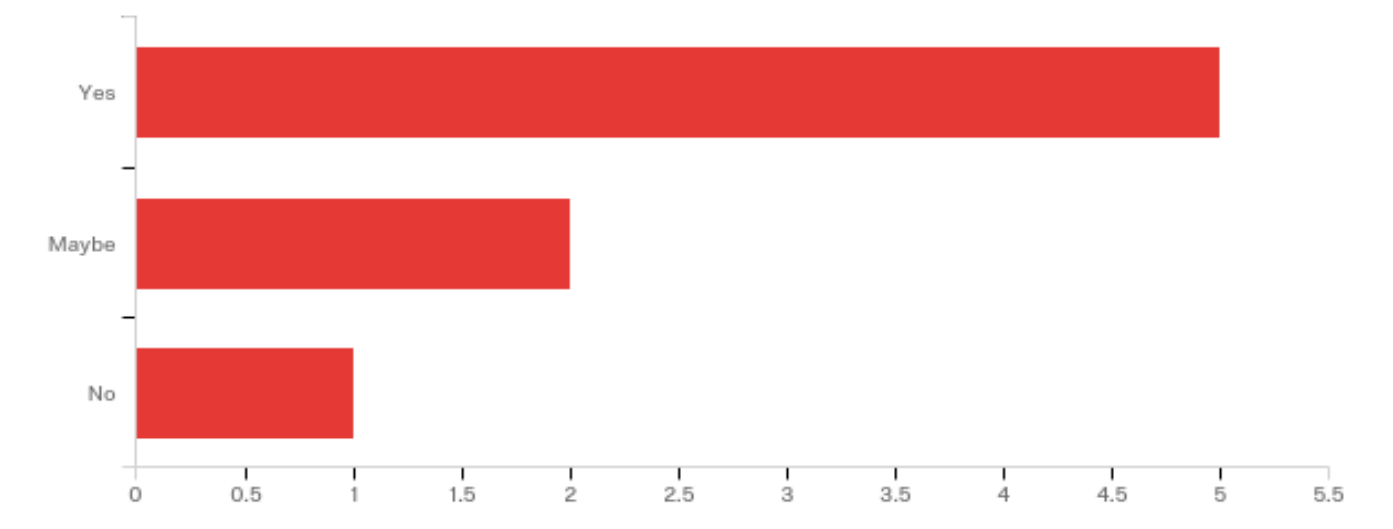
#	Answer	%	Count
1	The purple boxes	83.33%	5
2	In the layer selection dropdowns	16.67%	1
4	In the loss chart popovers	0.00%	0
	Total	100%	6

Q17 - Section 5, LR;DR page (too long didn't read lol)(Answer after viewing LR;DR page) Is this section helpful?



#	Answer	%	Count
1	Not helpful, too complicated.	28.57%	2
2	Somewhat helpful.	57.14%	4
3	Very helpful! I now understand neural networks much better.	14.29%	1
	Total	100%	7

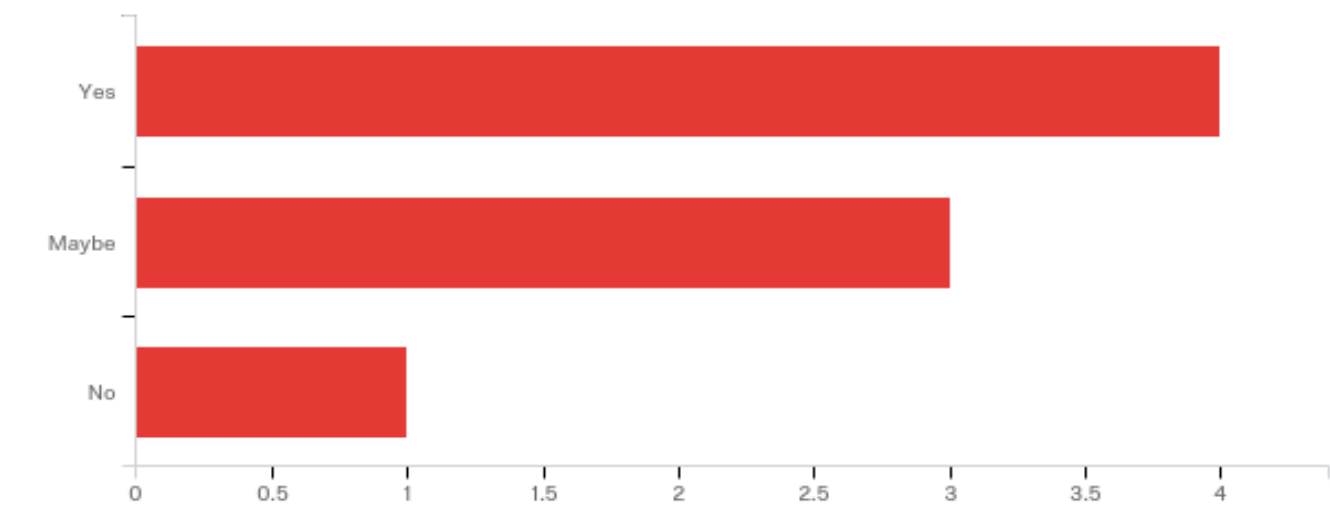
Q18 - Section 6, overall site experience(Last section) Did you learn anything new by using this project?



#	Answer	%	Count
1	Yes	62.50%	5
2	Maybe	25.00%	2
3	No	12.50%	1
	Total	100%	8

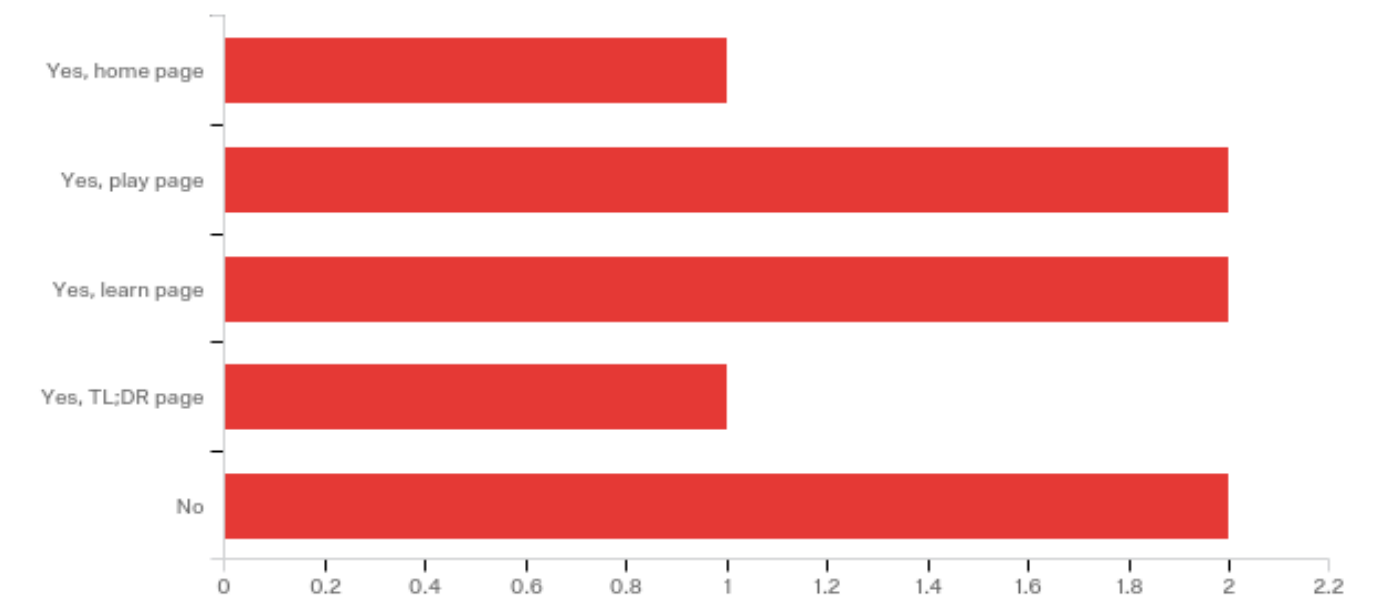


Q19 - Did this project help you get some insight into the mechanics of NNs?



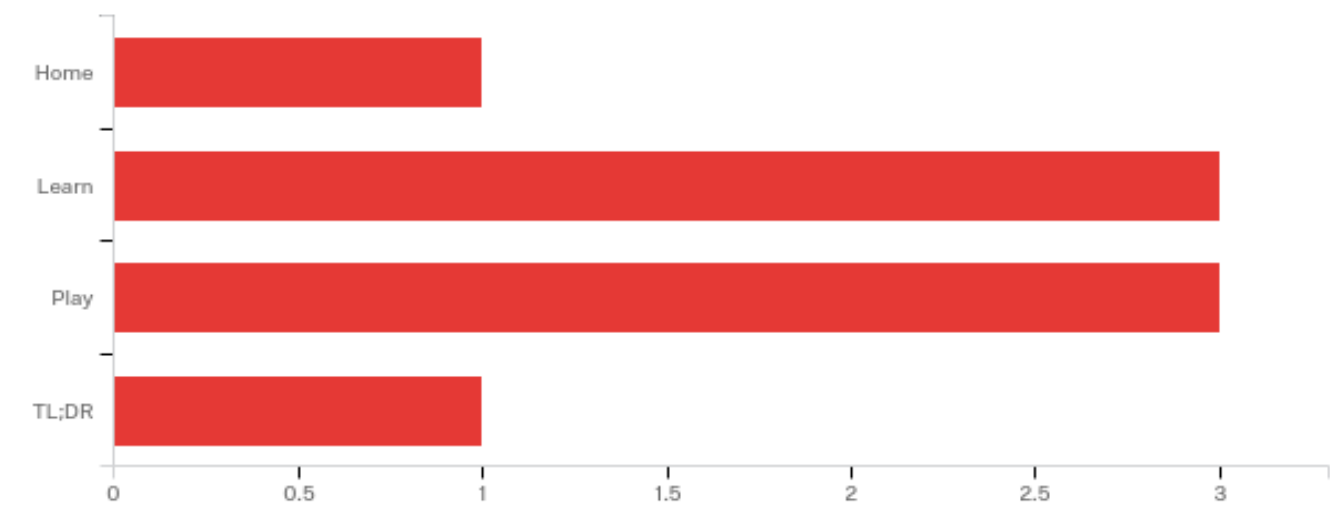
#	Answer	%	Count
1	Yes	50.00%	4
2	Maybe	37.50%	3
3	No	12.50%	1
	Total	100%	8

Q20 - Was there anything particularly frustrating or unclear?



#	Answer	%	Count
1	Yes, home page	12.50%	1
2	Yes, play page	25.00%	2
4	Yes, learn page	25.00%	2
5	Yes, TL;DR page	12.50%	1
3	No	25.00%	2
	Total	100%	8

Q21 - What did you like best?



#	Answer	%	Count
1	Home	12.50%	1
2	Learn	37.50%	3
3	Play	37.50%	3
4	TL;DR	12.50%	1
	Total	100%	8