**Project Submission**

**Your First Neural Network**

**Introduction**

In this project, you'll get to build a neural network from scratch to carry out a prediction problem on a real dataset! By building a neural network from the ground up, you'll have a much better understanding of gradient descent, backpropagation, and other concepts that are important to know before we move to higher level tools such as Tensorflow. You'll also get to see how to apply these networks to solve real prediction problems!

The data comes from the [UCI Machine Learning Database](https://archive.ics.uci.edu/ml/datasets/Bike+Sharing+Dataset" \t "_blank).

**Instructions**

1. Download the project materials from [this link](https://d17h27t6h515a5.cloudfront.net/topher/2017/January/588d28a7_dlnd-your-first-network/dlnd-your-first-network.zip" \t "_blank), or from the link at the bottom of the page, and unzip it.
2. cd into the dlnd-your-first-network folder that you just unzipped.
3. Download anaconda or miniconda based on the instructions in the [Anaconda lesson](https://classroom.udacity.com/nanodegrees/nd101/parts/2a9dba0b-28eb-4b0e-acfa-bdcf35680d90/modules/aba54606-cf35-4a77-b643-efec6a90bfa1/lessons/9e9ed61d-20c3-4431-95aa-a1099f28d601/concepts/4cdc5a26-1e54-4a69-8eb4-f15e37aaab7b" \t "_blank).
4. Create a new conda environment:

conda create --name dlnd python=3

1. Enter your new environment:
   * Mac/Linux: >> source activate dlnd
   * Windows: >> activate dlnd
2. Ensure you have numpy, matplotlib, pandas, and jupyter notebook installed by doing the following:

conda install numpy matplotlib pandas jupyter notebook

1. Run the following to open up the notebook:

jupyter notebook dlnd-your-first-neural-network.ipynb

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1. Follow the instructions in the notebook will lead you through the project.
2. Ensure you've passed the unit tests in the notebook before you submit the project!

If you need help running the notebook file, check out the [Jupyter notebook lesson](https://classroom.udacity.com/nanodegrees/nd101/parts/2a9dba0b-28eb-4b0e-acfa-bdcf35680d90/modules/aba54606-cf35-4a77-b643-efec6a90bfa1/lessons/13f4b7d6-92a9-468d-9008-084fc8b53a23/concepts/75e1eee0-5f81-4d5b-a1ca-eaebe3c91759" \t "_blank).

**Feedback**

You can expect to get feedback from your Udacity reviewer within 3-4 days.

**Submission**

1. Ensure you've passed all the unit tests in the notebook.
2. Ensure you pass all points on [the rubric](https://review.udacity.com/" \l "%21/rubrics/700/view" \t "_blank).
3. When you're done with the project, please save the notebook as an HTML file. You can do this by going to the **File** menu in the notebook and choosing "Download as" > HTML. **Ensure you submit both the Jupyter Notebook and it's HTML version together.**
4. Package the notebook and the HTML file into a zip archive, or push the notebook and the HTML file to a GitHub repo.
5. Hit Submit Project below!

**What to do afterwards**

If you're waiting for new content or to get the review back, here's a [great video from Frank Chen](https://vimeo.com/170189199" \t "_blank) about the history of deep learning. It's a 45 minute video, sort of a short documentary, starting in the 1950s and bringing us to the current boom in deep learning and artificial intelligence.