**Exercise 3: Create and Deploy a TensorFlow Model**

Duration: 60 minutes

In this exercise, you will use TensorFlow to construct and train a simple deep neural network classification model that will classify claim text as belonging to a home insurance claim or an automobile claim. You will then deploy this trained model as a web service.

**Task 1: Create a simple TensorFlow based model**

1. Within the Workspace, select the Workspace item in the menu and navigate to the folder where you uploaded the Databricks Archive (which should be [your-name/AI-lab]), and select the notebook called 03 Claim Classification. This will open the notebook so you can read and execute the code it contains.
2. Read the instructions at the top of the notebook, and execute the cells as instructed. Remember you can use SHIFT + ENTER to execute the currently selected cell, and if you do not have a cluster attached, you will be prompted to attach to the cluster you recently deployed.

Pay attention to the top of the notebook where you are asked to ensure the tensorflow and tflearn libraries are installed. If you are running this lab in a hosted environment, they will already be installed. Otherwise, follow the posted instructions to install the libraries, ensuring they are installed and attached to your cluster before you run the cells in the notebook.

**Task 2: Deploy the TensorFlow model**

1. Within the Workspace, select the Workspace item in the menu and navigate to the folder where you uploaded the Databricks Archive (which should be [your-name/AI-lab]), and select the notebook called 04 Deploy Classifier Web Service. This will open the notebook so you can read and execute the code it contains.
2. Read the instructions at the top of the notebook, and execute the cells as instructed. Remember you can use SHIFT + ENTER to execute the currently selected cell, and if you do not have a cluster attached, you will be prompted to attach to the cluster you recently deployed.