Developers Guide

To develop applications for the "Score Customer Propensity to Buy Bikes" model

REST API

You can interact with a deployed model through the REST API. This model offers two methods

1. Train the Model
2. Score data using the trained model

This document provided details on how to use these two methods to build applications.

General Notes

SSL only

We require that all requests are done over SSL.

Session Key

You will need a session key for all the REST calls, except for training a model for the first time. The session key can be obtained in two ways:

1. From the web interface (click on "For Developers" tab in the "Score Data" box).
2. In the response to a "Train the Model" method call when no session key is specified.

Train the Model

This operation creates an instance of a trained model. There are two variations of the method:

- If a session key is not specified a new instance of the trained model is created.
- If a session key is specified the corresponding instance is retrained.

This operation accepts training data as a well-formed CSV file.

Note: In the current version the CSV file must conform to one of these two data dictionaries (data dictionary 1 or data dictionary 2). Conformance means that they must have the same number of columns, in the same order.

REST ENDPOINTS   https://demo.snapanalytx.com/my_model/2/train/
or
https://demo.snapanalytx.com/my_model/2/train/<Session Key>

METHOD   POST

REQUEST BODY	The content of the file to be uploaded.
PARAMETERS	**name** string. For now should be hard coded to be "myfile" **filename** string. The name of the file being trained.
RESPONSE	**session_id:** the session key to be used in subsequent calls to this instance **data_dictionary_index:** specifies which data dictionary the uploaded file conforms to. A zero-based index, 0 and 1 refer to the first and second data dictionaries respectively. **error:** a string with the error message, if any.

Score Data in a CSV file

Use this method to score data in a CSV file against a previously trained model. Data consists of a set of one or more records each of which are scored individually. Scoring in this case means assigning the prediction (will or will not buy mobile home insurance policy) and the probability of the prediction. Note:

1. Data can be submitted only to a trained model.

2. The scoring method requires a valid session key.

3. The data to be scored must conform to the data dictionary used to train the model.

REST ENDPOINT	https://demo.snapanalytx.com/score_csv/1/my_model/<Session Key>
METHOD	POST
REQUEST BODY	The content of the file to be scored.
PARAMETERS	**name** string. For now should be hard coded to be "myfile" **filename** string. The name of the file being trained.
RESPONSE	A JSON object with these keys: **url:** The URL to retrieve the CSV file using a GET. The CSV file will contain 2 additional columns - the prediction and the probability of the prediction. **error:** a string with the error message, if any.

Score Data for a Single Customer

Use this method to score data for a single customer against a previously trained model. Data consists of a header record in CSV format that contains the column names and a single row of column values. The format of the row must conform to one of these two data dictionaries (data dictionary 1 or data

[dictionary 2](). Conformance means that they must have the same number of columns, in the same order.

 Note:

1. Data can be submitted only to a trained model.
2. The scoring method requires a valid session key.
3. The data to be scored must conform to the data dictionary used to train the model.

Here is a sample Python Application.

REST ENDPOINTS	https://demo.snapanalytx.com/score/2/my_model/<Session Key>
METHOD	POST
REQUEST BODY	A header row in CSV format and a row of column values in CSV format.
RESPONSE	A JSON object with these keys:
	prediction_probability: The prediction and the probability of the prediction.
	error: a string with the error message, if any.