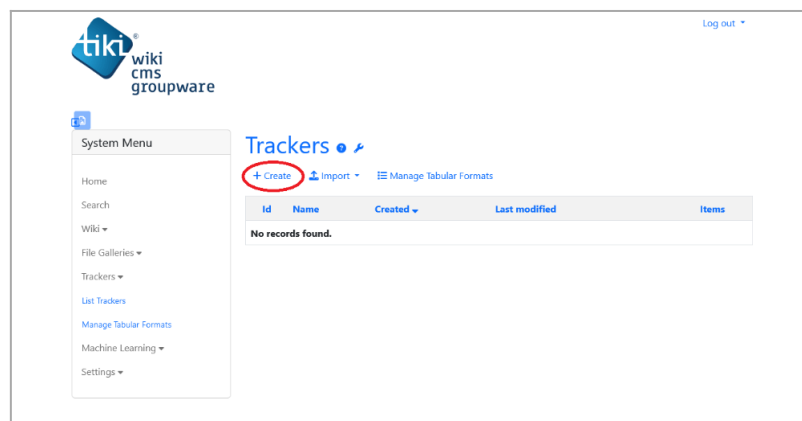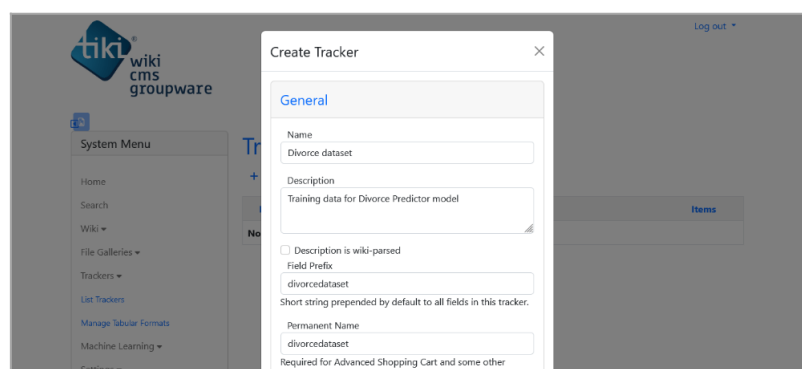# Preparing Machine Learning Dataset

Preparing dataset in Tiki involves creating a new Tiki tracker and adding items to it or using an existing tracker and making any necessary modifications to it. This is an important step because using Machine Learning models to make predictions require the models to be trained beforehand on already existing data. Trackers in Tiki are used for this purpose because of the ease in working with data contained in them just within Tiki, eliminating the need for special tools.

Creating Dataset

You create a dataset in Tiki by simply creating a tracker. Do this by going to the **List Trackers** page, click on the **Create** button and fill in the **Create tracker** form like you would for every other tracker.
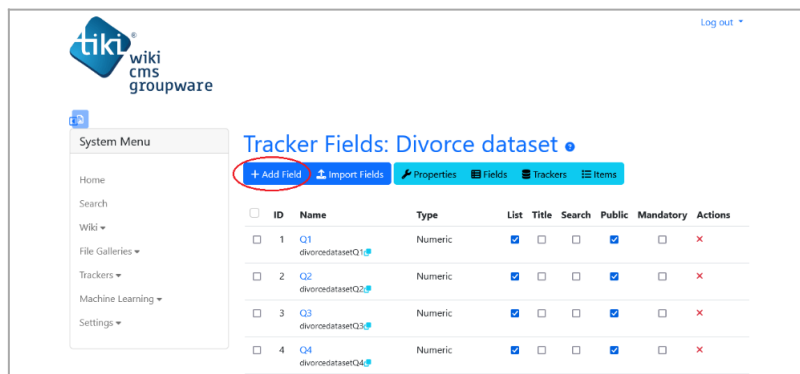

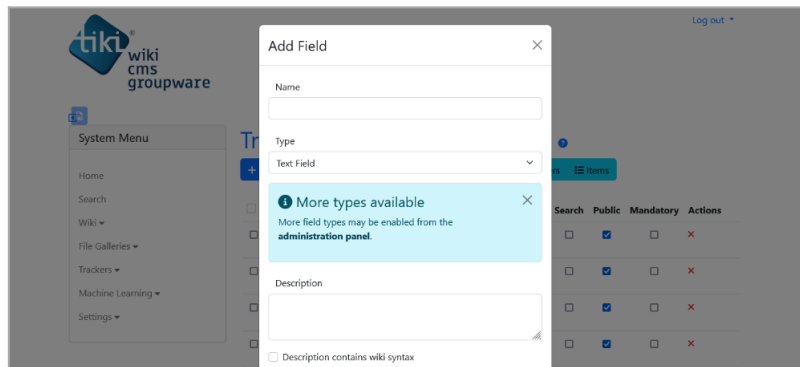Use the create button on List Trackers page to create a tracker

Fill in the Create tracker form

Give it a name and a concise description and save; then add fields to the tracker to match your dataset attributes. That is, you add a field for every dataset attribute.

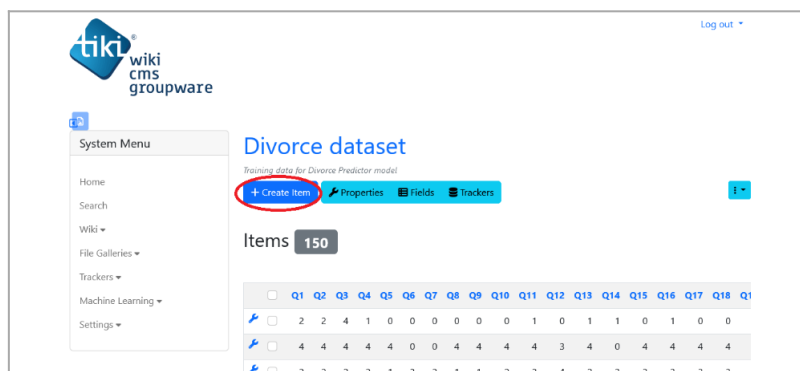Add a tracker field by clicking on the Add Field button

Add new field form

The tracker field type you choose will depend on the attribute type. Tracker Field Types has a list of available Tiki Tracker field types. Do not use multi-value field types like Checkbox Tracker Field. Only use single-value field types such as Text Tracker Field. Use Numeric Tracker Field for all continuous attributes.

Note that the field types you choose will directly affect the user experience during model use. For categorical attributes, consider using field types like Dropdown Tracker Field or Radio Tracker Field to ease user input during usage.

See Creating a Tracker for more information on creating trackers. To learn how to add fields to a tracker, see Adding fields to a tracker.

Adding Samples to Dataset

In Tiki, each tracker item represent a sample. You add dataset samples by adding items to the tracker. A simple way to do this is to use the **Create Item** form displayed after clicking on the **Create Item** button in the view tracker page.

Click on Create Item button to add tracker item

Create tracker item form

Samples can also be collected from user input if the dataset tracker is embedded in a wiki, article or blog page using PluginTracker.

Importing Samples

If dataset already exist in an external source such as a Comma-Separated Values (CSV) file, you can import samples from it to a tracker in Tiki using Tracker Import Export for this. Say you are working on Divorce Prediction project, you can download the project's dataset into your computer, then using Tracker Tabular in Tiki, import the samples into a tracker.

Tracker Tabular list

Use the Import button to import items into tracker

See Tracker Import Export to learn how to import tracker items using Tracker Tabular.

Related links

- Machine Learning
- Creating Machine Learning Models
- Configuring Machine Learning Models
- Training Machine Learning Models
- Using Machine Learning Models
- Trackers
- Tracker Field Types
- https://github.com/RubixML/Divorce