

# Working with Fields

## What Contextually is a Field?

Recall from the last tutorial that I created an empty project to keep track of some data I've collected tracking the movements of hordes of cowboys and aliens throughout Greenland. How do I actually begin adding data to my project? Before I can do any of that, I have to set up what are known as the *Fields* that will be used in my project. Say I have all of my data organized into some sort of table; the fields would be the labels for each column of my data. The types of data fields included in a project will determine the types of data visualizations available when users view the data contributed to that project. The relationship between data fields and visualization tools is explained in more detail later in this tutorial; to learn more about visualizations you can check out the visualization tutorials.

## Setting Up Fields

### Manually

Here is a spreadsheet of some data I have collected. As you can see, the fields it contains are the Timestamp, indicating when I took my data; the Latitude and Longitude of where exactly the horde was located; the type of the horde, simply some text indicating whether they are a cowboy or alien horde; and finally the size of the horde, which is measured in number of people. To manually add my fields to the project, I'll simply click the green "Setup Manually" button under the "Fields" heading. If you notice, there is also an "Upload File" button; adding fields from templates will be covered in the next video tutorial, so we won't worry about that right now. How convenient! There is an appropriate type of field for each column of my data.

<u>Timestamp</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Horde Type</u>	<u>Size</u>
5/10/1990 12:00:00	70	-42	Aliens	400
5/11/1991 12:00:00	71	-42	Cowboys	300
5/12/1992 12:00:00	71	-43	Cowboy Aliens	10
5/13/1993 12:00:00	71	-44	Aliens	100
5/14/1994 12:00:00	70	-44	Aliens	150
5/15/1995 12:00:00	70	-45	Cowboys	200
5/16/1996 12:00:00	69	-45	Aliens	50
5/17/1997 12:00:00	69	-44	Aliens	40
5/18/1998 12:00:00	68	-43	Cowboy Aliens	30
5/19/1999 12:00:00	67	-43	Cowboy Aliens	100

### ***Types of Fields: Number***

First, I will set up the Horde Size field, which is of type “Number”. Click on the green “Add Number” button to add a field of this type. As you’ll notice, you can fill out the name of your field, which is how it will appear on all of your charts and graphs, and the units, which indicate the units the number will be measured in. Most visualization tools require at least one number field to work.

### ***Types of Fields: Text***

Next, I will set up the Horde Type field, which is of type “Text”. Click on the green “Add Text” button to add a field of this type. Here you fill out the name of your field, and any restrictions you want to add on your field. The restrictions limit the options for input of your data; for example, I am only dealing with hordes of aliens and cowboys, so I will add restrictions limiting the data to type “Alien” or “Cowboy”. Be sure to add your restrictions in the form of a comma separated list. When visualizing data on iSENSE, text values can be used to group, filter, and summarize number values.

### ***Types of Fields: Timestamp***

Let us now set up the timestamp field, which is, naturally, of type “Timestamp”. Click on the green “Add Timestamp” button to add a field of this type. As you’ll notice, all you need to fill out here is the field name. I’ll just leave the name as “Timestamp”. Note that you are only allowed to have one timestamp field for each project. There really should be no need to ever have any more than one. Data sets with timestamps and at least one number field can be viewed using the Timeline visualization tool.

### ***Types of Fields: Location***

Finally, I will set up the Latitude and Longitude fields, which are, combined, of type “Location”. Click on the green “Add Location” button to add a field of this type. This field type is conveniently set up for you, with a name of latitude and longitude respectively, and units predefined in degrees. Similar to timestamps, you are also only allowed to have one location field per project. Again, there is really no need to have more. Data sets in projects with location fields can be viewed using the Map visualization tool.

### **Editing or Removing a Field**

Notice the triple line button to the left of each field item. By clicking and holding this symbol, you can drag the field to reorder it in the list of fields. I’ll reorder my fields so that they match the ordering on my chart. To delete a field, simply click the little red x to the right of the field, and that field will be removed from the list.

**Where the Fields Appear on your Project Page**

As you can see, when you click the blue “Save and Return” button, all of your newly added fields appear in under the “Fields” heading. To change them at any time, simply click the blue “Edit” button, and you will return to the familiar field editing page. where you can proceed normally.