




InspireData is a visual learning tool that allows students to easily collect and analyze data using multiple plot types. Students can then see relationships and connections they may have missed by only looking at the data in a spreadsheet or database. InspireData's Time Series animation feature allows students to see how data changes over time, helping them understand trends. The Slide Show feature makes it easy to share results and conclusions with the rest of the class. The program includes 50+ database templates to help students quickly get started with their data analysis projects.

## Creating a New Project


To create a new project:

1. Launch InspireData by clicking on the program's icon. 
2. Choose New when the InspireData Starter opens. 
3. The program will open up in Table View. Each row in Table View is a record, and each column is a field that can hold a value. For example, one of the fields can be Student Name and it can have a value of Tom or Judy.
4. To enter data in any of the cells click on it and begin typing, then press Return or Enter on your keyboard.
5. To save your project, choose File > Save and enter a name for your project, then click on Save.



InspireData includes more than 50 curriculum based projects to help you get started. To open one of these projects, choose Databases from the InspireData Starter when you launch the program or choose File > Open Database. 

## Working in Table View


InspireData opens in Table View by default when you create a new project. In Table View, you can do the following:

- *Change the name of a field:* click on the field name and enter a new name, such as age, etc.
- *Change the icon for a record:* double-click on the symbol to the left of a 

record to open the Icon Editor. To use a student photo as the record icon, click on Import in the Icon Editor and locate the photo you want to use, then click on Open.

- *Add a record:* click on the Add Record button in the toolbar to add a record with the default icon. 
- *Add a field:* click on the Add Field button in the toolbar. To delete a field, right-click on it and choose Delete Field. 
- *Change field order:* click on the field name and drag and drop until it is where you want it.
- *Sort field values:* choose Table > Sort. Choose the field you want to sort by and whether it should be in ascending or descending order, then click on OK to close the dialog box.
- *Change the data type of a field:* click on the field name to display the data type pulldown menu, then select a data type.



- *Add a note to a cell:* select the cell and click on the Note button. Enter the note text in the text area above the table cells and click on the Note button again to hide the note. A triangle will appear on the upper right corner of the cell to let you know it has a note. To edit the note, click on the Note button with the cell selected. 

## Surveys

A survey is a data entry form that can make it easier to enter data accurately. Using the e-Survey feature introduced with version 1.5 of InspireData, you can publish surveys to the Web so that the data can be entered from any computer connected to the internet.

Each database has a survey associated with it by default. To edit the survey and customize it to fit your needs:

1. Choose Table > Edit Survey.
2. Click on Use custom title to add a title to the survey.
3. Check the box next to Allow user to select record icons if you want students to select their own icons.
4. Check the boxes for the fields you want to include. Check the Required? box for any field that cannot be left blank.
5. If you're using the survey as an e-Survey, use the Invitation field to explain what the survey is about.
6. Enter the text for your questions in the Question text boxes.
7. Click on OK.

To use the survey to enter your data, choose Table > Launch Survey. For each record, enter the data in the appropriate fields and click on the Add Record button.

To publish the survey so your students can fill it out online:

1. Choose Table > Publish e-Survey.
2. Click on Publish.
3. The next screen will show you the URL where the survey can be accessed online, as well as some important ID numbers. The Survey ID will be needed by your students to fill out the survey, while the Owner ID will be required by you to end the e-Survey. You may want to print out the information on this screen by clicking on Print This Text.
4. Click on Done to close the window.

To fill out the e-Survey, your students will go to <http://esurvey.inspiredata.com>, enter the

Survey ID and click on Start. They will click on Submit when they're finished to save the data to the e-Survey database.




To end an e-Survey so that no more entries can be made, choose File > End e-Survey, enter the Owner ID and click on End e-Survey. You will be asked to confirm that you want to end the e-Survey.

There are two ways to view the survey results:


- choose e-Survey from the Starter, enter the Survey ID and click on Open.
- choose File > Open e-Survey Database.

## Plot View




To work in Plot View:

1. Click on the Plot View button in the toolbar. The data is displayed freely the first time you switch to Plot View. Each icon represents a record in your database. 
2. To view the data for any record in your data set, double-click or hover over its icon. The record's data will be displayed in a popup window. To close the window, click anywhere on the plot.
3. To change the plot type, click on one of the plot type buttons in the toolbar at the bottom of the window.
4. To clear a plot to its default settings, click on the Clear button in the toolbar. 
5. InspireData keeps a history of the plots you create. To go back to a previous plot, click on the Back button in the toolbar just as you would on a web browser. Click the Forward button to return to the most recent plot.
6. To return to Table View, click on the Table View button in the upper left. 

You can change the appearance of a plot in a number of ways:

- *Turn on labels*: click on the Label button. To change the field used for the labels, click on the down arrow next to 



the Label button and choose a different field.

- *Add color to your icons:* click on the Color by Field button and select a field. A legend will be added at the top of the plot. 
- *Change the icon size:* click on the icon size button and use the slider to adjust the size. 
- *Mark (highlight) an icon:* click on the icon to select it, then click on the Mark button in the toolbar. 
- *Add a plot title:* choose Plot > Plot Title. Enter a title and click on the Accept button (it looks like a check mark).
- *Add a note:* click on the Note button and enter the text for the note. Click on the Note button again to hide the note.

### Venn Plot

A Venn plot divides the data into groups based on certain characteristics. A Venn diagram can have up to three loops in InspireData.

To create a new Venn plot:

1. Click on the Venn Plot button in the toolbar. 
2. Click on the word Field and choose a field.
3. Click on the equal sign and choose an operator.
4. Click on the question mark. Enter a value in the popup window to restrict your data using that value and click on the Accept button (it looks like a checkmark). For example, you may want to only display students whose age is < 10.
5. Click on the Add Loop button if you need multiple groups. To delete a loop, click on the square at the start of the loop. 




### Stack Plot

A stack plot is useful for displaying counts of items. A stack plot divides a field into categories and organizes the icons in each category into a stack. The more records a

category has, the higher the stack.


To add a stack plot:

1. Click on the Stack Plot button in the toolbar. 
2. Click on X Axis and select a field. The icons will display as stacks.
3. To change the type of stack plot, click on the Stack plot type button in the lower left and choose a different stack plot type.
4. Use the button to the right of the Stack plot type button to switch between a stack plot and a bar chart.

### Axis Plot

An axis plot shows a scatter graph that is helpful for investigating correlations.


To create a new axis plot:

1. Click on the Axis Plot button in the toolbar. 
2. Click on X Axis and choose a field for that axis.
3. Click on Y Axis and choose a field for that axis.

### Pie Plot

A pie plot is useful for showing how a group of data are related to the whole data set.


To create a new pie plot:

1. Click on the Pie Plot button in the toolbar. 
2. Click on the Select Field button at the top of the plot and choose a field.
3. If you want to compare two pie plots side by side, click on the Plot type button in the lower left and choose a type with multiple pie plots. Next, click on X Axis or Y Axis and choose the field you want to use for the comparison.


### Time Series Data

InspireData can create animations showing how data changes over time, also known as time series data. To create a time series plot, you will first need at least one field in your table to have the Series type assigned to it.

To create a Series field in Table View:

1. Create a new field in your table by clicking on the Add Field button. 
2. With the new field selected, choose Series from the field type pulldown menu. The Series Field window will open.
3. Choose the format of the column headings and the data type of the cells in the series.
4. Click OK when you've set your options to close the Series Field window.

To create a new time series plot:


1. Create a new Axis plot by clicking on the Axis plot button in the toolbar.
2. Click on the Series Plot button in the lower left corner and then choose Instant Plot. 
3. Series Playback controls will be displayed above the plot. Use these controls to animate the time graph.



4. By default every record is displayed individually. To group records, click on the Series Plot type button and choose Grouping, then choose the field you want to use to group the data.

## Calculations

To calculate summary data for a plot:



1. Click on Compute summary data button. Questions marks will appear on the plot. 
2. Click on the Operation button in the toolbar and choose the type of calculation (mean, media, smallest, largest, count, etc.) you want to perform.
3. Click on the Field button and choose the field you want to base the calculation on. Choose Formula to open a window where you can perform more advanced calculations.

## Slide Shows

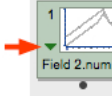
The slideshow feature allows students to document and present their work. Each slide captures a live view of the data, meaning that

they are updated whenever changes are made to the original plots.

To create a slideshow:

1. Click on the Slide Sorter button to open the Slide Sorter on the right side of the screen. 
2. Click on the Capture Slide button to add a new slide to the Slide Sorter. 
3. Continue clicking on the Capture Slide to capture additional slides.

Once you have captured your slides, you can modify them in a number of ways:

- *To rename a slide:* click on the Slide Options button for that slide and choose Rename Slide. Enter the new name and click on OK. 
- *To update a slide after you make changes to a plot:* click on the Slide Options button for that slide and choose Update Slide.
- *To reorder slides:* drag and drop the slide you want to move to a location.
- *To delete a slide:* choose the slide and press the Delete key on your keyboard.

To view your captured plots as a slideshow, choose Slide Show > Start Slide Show.

InspireData will go to the first slide in the Slide Sorter and display slide show controls you can use to advance to the next slide.

## Export Data

To export data so it can be used in another program (such as Microsoft Excel), choose File > Export Table. You can choose to have the data saved in a comma delimited (.csv) or tab delimited (.tab) file. The comma delimited option is recommended.

## Keyboard Shortcuts

- Add Record in table view: Control/Command + R
- Add Field in table view: Control/Command + L
- Capture slide: Control/Command + E