

Creating a Data Collection Form with Epicollect5

Reference Guide for Creating Field Surveys

Epicollect5 is a free web-based tool that enables you to collect customized data (including location and media) in the field using a mobile device. You can easily create a data collection form that can then be opened on a tablet or smartphone by anyone you share it with to collect data in the field (whether online or offline). You can then view, analyze, display, and export that data.

After reading this guide you should be able to:

- Design a data collection form on the Epicollect5 website
- Share your data collection form with others
- Access your form from the Epicollect5 mobile app.

Epicollect5 Basics

The Epicollect5 website can be found at <http://five.epicollect.net>.

To download the mobile app, search for “**Epicollect5**” in the Apple or Android app stores.

Epicollect5 has set up an online community for the discussion of issues related to the application. It is a great place to ask or search for answers to any questions you may have about how Epicollect5 works. Go to <https://spectrum.chat/epicollect5> to view and/or join the community.

Login to Epicollect

1. Go to the Epicollect website at: <http://five.epicollect.net>.
2. Click on “**login**” in the upper right.

Note: you will need a Google login and password to create your own forms in Epicollect5. If you do not have one, go to <http://accounts.google.com> to set one up.

3. On the login page, **enter your Google login and password** in the window that opens.
4. Notice that once you are logged in you will have new options at the top of the page – “My Projects” and “Create a Project.”

Create an Epicollect5 Form

Create a Project

1. To begin creating your own data collection form, click on “**Create Project**” at the top of your screen.

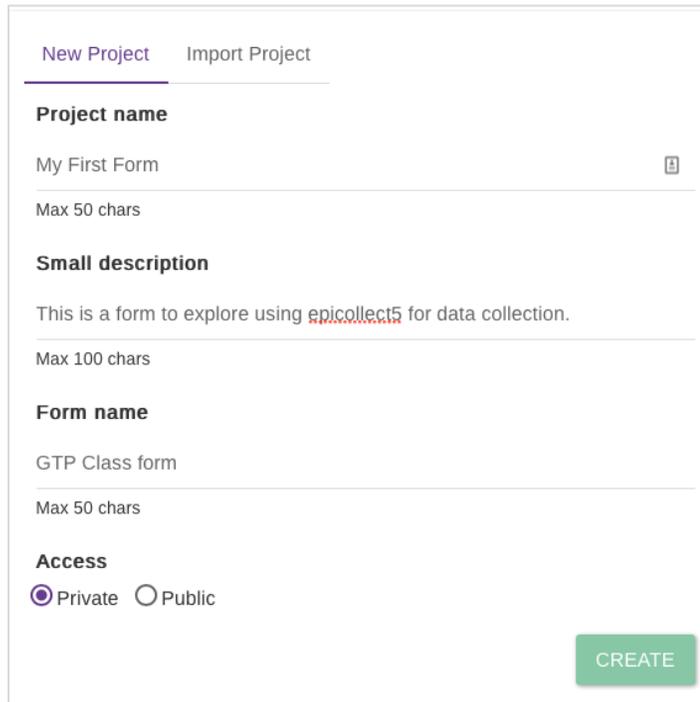


My Projects **Create Project** Find Project



2. In the window that opens enter a project name, description, and form name. Use the suggestions in the graphic below or create your own.

Note: that the project name has to be unique. You cannot use a name someone else has already chosen. So instead of “my” below use your name.



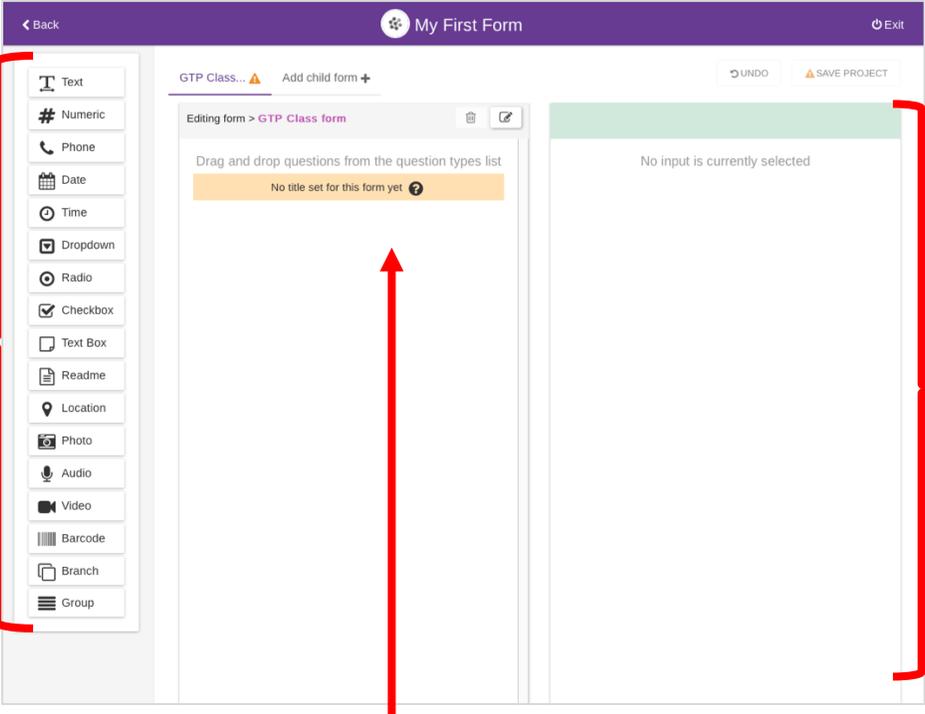
3. You can set access as either “Private” or “Public”. Private means the project is only accessible by you and those you specify, Public means anyone could access your project data. This setting can be changed at any time. Let’s keep it private for now.
4. Click “**Create.**”
5. In the window that opens, select “**OK, open formbuilder now.**”

OK, OPEN FORMBUILDER NOW



Design Your Form

Take a moment to familiarize yourself with the Epicollect formbuilder. The graphic below should help:



The screenshot shows the Epicollect formbuilder interface. On the left is a vertical list of question types: Text, Numeric, Phone, Date, Time, Dropdown, Radio, Checkbox, Text Box, Readme, Location, Photo, Audio, Video, Barcode, Branch, and Group. A red bracket on the left side of this list is labeled "Question types". The main workspace is divided into two panes. The left pane contains a message: "Drag and drop questions from the question types list" and a yellow box with the text "No title set for this form yet". A red arrow points from the text "Drag question types here to add to form" below the screenshot to this yellow box. The right pane contains the text "No input is currently selected". A red bracket on the right side of the workspace is labeled "Edit question text & options".

Question types

Edit question text & options

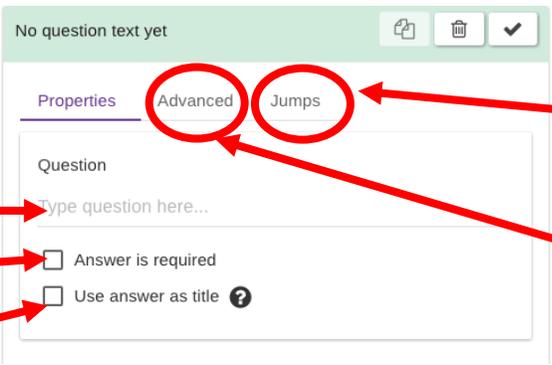
Drag question types here to add to form

Add fields:

1. In the far-left column **click and hold** on the type of field/question you would like to add to your form/survey and drag it to the middle column. This will add it to your form. See diagram below to understand your question options.

Type	Description
Text	A simple text input
Numeric	An input which allows only numbers (integer or decimal), it will use a numeric keyboard layout on the mobile device
Phone Number	An input which allows only numbers, it will use a phone keyboard layout on the mobile device
Date	An input to enter a date, it will use a date picker on the mobile device. The value stored is timezone independent.
Time	An input to enter the time, it will use a date picker on the mobile device. The value stored is timezone independent
Dropdown	Multiple choices input, it will show all the possible answers on a popup
Radio	Multiple choices input, it will list all the possible answers immediately. Only one answer can be chosen
Checkbox	Multiple choices input, it will list all the possible answers immediately. Multiple answers can be chosen
Text Box	A big box to enter text on multiple lines
Readme	An input that does not require any answer, useful to show hint/tips to users while completing the questionnaire or at the beginning of it as introductory text.
Location	Geographic data, answer will be the latitude and longitude provided by the device hardware. Accuracy is also captured (best value is usually 4/5 meters depending on device). Both latitude and longitude values are rounded to 6 decimal places, providing a precision up to 11.1 cm. More info
Photo	An image taken with the camera, or an image file picked by the one stored on the device
Audio	An audio recording using the device microphone
Video	A video recording using the device camera
Barcode	Uses a barcode scanner to get the answer (what barcodes do you support?)
Branch	A dynamic list of entries, useful for questions like "List your family members"
Group	Inputs within a group will be displayed on the same device screen

- Once you have added a question, you can customize that field/question in the far-right column.



Annotations for the screenshot:

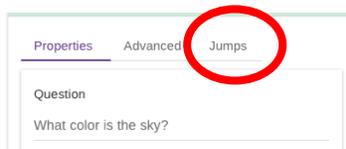
- Question text**: Points to the text input field.
- Require answer**: Points to the next to "Answer is required".
- Set response as title for point**: Points to the next to "Use answer as title".
- Skip questions based on response**: Points to the **Jumps** tab.
- Add'l question settings**: Points to the **Advanced** tab.

- Type in a question prompt under "question". This will be what a user sees on the mobile form to provide the information requested. For example, if you choose a date field, the question might be, **"What is the Date?"**
- To require a person to answer a question (i.e. the question cannot be skipped or left blank), select the **checkbox** next to "answer is required."
- If you want a particular question's response to serve as the overall title for that entry, **select use answer as title**. You can select up to 3 answers to serve as the title. This could be the date information was collected, the person who collected it, or some other information. When you view the data in a map, the title is used to distinguish each placemark.
- The **advanced tab** in the right column allows you to set other requirements for your question. The options will vary by question type. For example, for a date question you could select the format you would like the user to enter the data in. You can also select a default value for a question.
- You can use the **Jumps tab** to allow users to skip questions based on the response to a particular question. For example, if you ask a multiple choice question, the next question could be different based on the user's answer. See the section below on setting up Jumps.
- Once you have completed all of the necessary settings for a particular question, you will see the title of your question in the center column. It should have a **green check** next to it. This means all of the necessary settings have been provided. If not, there will be an orange triangle with an exclamation point.

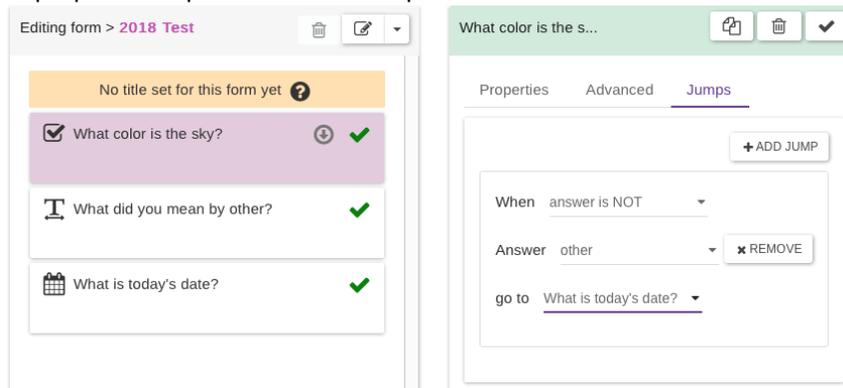
Setting up question “jumps” (i.e., skips)

Occasionally you will want to collect different information based on a user’s response to a particular question. For example if you ask a multiple choice question that includes an “other” option, you are likely going to want to know why the user selected “other.” However, if the user did not select “other” you don’t want to ask “what did you mean by other?” This is when a jump (or skip) is helpful.

1. After adding a question that you would like to be the basis of a skip/jump, select the **Jumps** tab in the far right column. **NOTE: This can only be done once you have already added the questions you want to skip and the question you want to jump to.**



2. Select **+Add Jump**.
3. In the box that opens, under **When**, select what you want to trigger the jump. For example,
4. Under **Answer**, select what answer value would trigger the jump.
5. Under **go to**, select the question you would like to jump to.
6. For example, if you are looking to ask “What did you mean by other?” following a multiple choice question, you would only want the user to skip that question if they DID NOT answer “other.” (i.e., If they did select other you would want them to move on to the next question – What did you mean by other?) In this scenario, you would select When - **answer is NOT** and Answer - **Other** and then go to proper next question. Your Jumps box would look like this:



In this example, the user would only see the “What did you mean by other?” prompt if they had answered “other” to the “What color is the sky?” question. If they did not answer “other,” they would jump to the “What is today’s date?” question.

Save your project

1. When you are done adding questions to your form, select **Save Project** in the upper right.



2. Once your project is saved, leave the FormBuilder by clicking **Exit**.



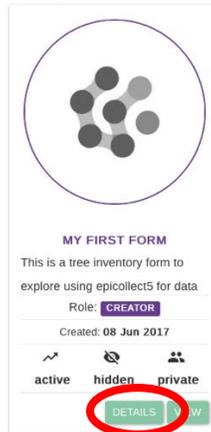
Edit Project Settings

Once you have created a project and form, you can also edit your project details and settings.

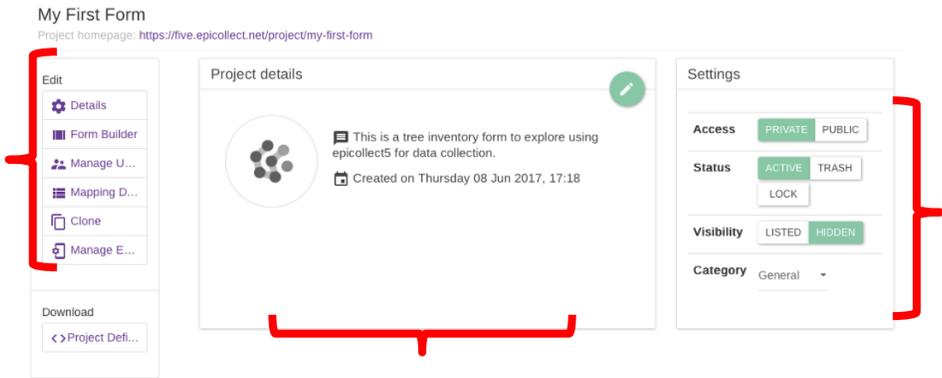
1. Assuming you are still logged in to your account on Epicollect, select **My Projects** from the top menu bar to view all of your projects.



2. To review the settings of a particular project, select **Details**.



- The details page that opens is where you manage everything about your project. Review the image below to get oriented with this page. The graphic explains what you can do with each of the edit menu items:



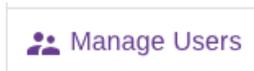
Choose which part of your project you want to edit

Control who can find your project

Edit your project icon and description

Add Users

- To control who can access, edit, and/or add to your project, select **Manage Users** from the edit menu (left column).



- Note that there are 4 types of users you can have access your account.
 - Creator** – The person who setup the project (i.e. you). This can't be changed. Creator has full access to the project, can authorize other users, and change settings and forms.
 - Managers** – has full access like a creator except they can't assign other managers.
 - Curators** – can view, edit and upload data, but cannot make changes project settings or forms.
 - Collectors** – can view and upload their own data only. Cannot make changes project settings or forms.

- To add another authorized user, select **Add Users** on the far right side of page.



7. Add an email address for a user (they will use this email address to log in to the system). Assign the user a role based on the options above using the **Role dropdown menu**. Select **Add User**.

Add User to this project ×

Email

cary.chadwick@uconn.edu

Role

Collector ▼

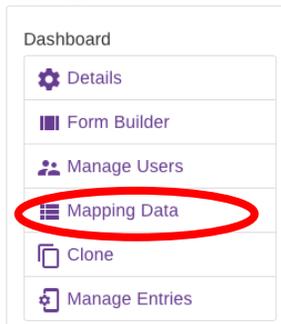
CLOSE
ADD USER

8. Any person you add should now appear under the tab for their assigned role.
9. **Note:** The folks you add as users **DO NOT receive an automatic email confirmation** that they have been added to your project. If you want them to know you have added them you have to tell them. See “Sharing” section below.
10. **Another Note:** Users need to have a Google login to use Epicollect. If you don’t want your users to have a Google login, you can make your project public. (See next section.)

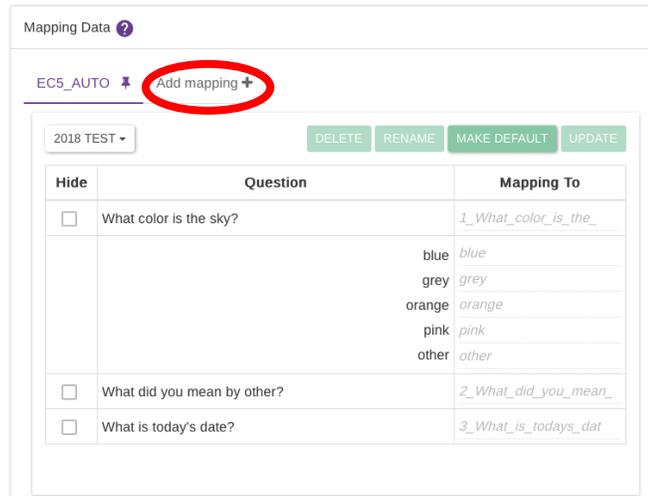
Editing Your Data Field Names/Categories

By default, Epicollect5 uses the questions you create as field names in your data table. However, the field names are a limited number of characters, so that when you look at a column in the data table the column headings are shortened versions of your questions and often not clear what was being asked. For this reason, it is a good idea to customize what each question is called in your data table.

1. In your project Dashboard, select **Mapping Data**.



2. In the Mapping Data window, notice you will see the questions you added to your form and the data field name that it will use by default in your data table and map.



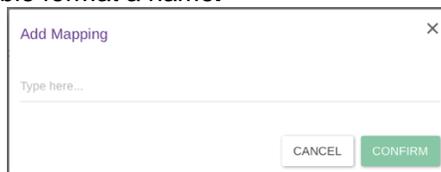
Mapping Data ?

EC5_AUTO Add mapping +

2018 TEST - [DELETE] [RENAME] [MAKE DEFAULT] [UPDATE]

Hide	Question	Mapping To
<input type="checkbox"/>	What color is the sky?	1_What_color_is_the_
		blue blue
		grey grey
		orange orange
		pink pink
		other other
<input type="checkbox"/>	What did you mean by other?	2_What_did_you_mean_
<input type="checkbox"/>	What is today's date?	3_What_is_todays_dat

- To customize the “Mapping To” field names, select **Add mapping+**.
- Give your customized data table format a name.

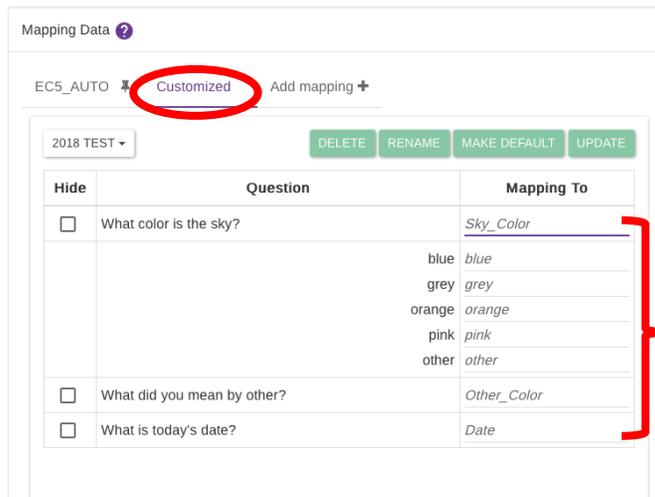


Add Mapping [X]

Type here...

[CANCEL] [CONFIRM]

- With your new data table format name selected, you can begin customizing the field names for each question.



Mapping Data ?

EC5_AUTO Customized Add mapping +

2018 TEST - [DELETE] [RENAME] [MAKE DEFAULT] [UPDATE]

Hide	Question	Mapping To
<input type="checkbox"/>	What color is the sky?	Sky_Color
		blue blue
		grey grey
		orange orange
		pink pink
		other other
<input type="checkbox"/>	What did you mean by other?	Other_Color
<input type="checkbox"/>	What is today's date?	Date

Click here to edit field names

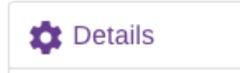
- Pro Tip:** Mapping programs generally do not like field names with spaces in them. It is best to create field names without spaces. For example: SkyColor or Sky_Color. This will make it much easier to import your data into a variety of mapping programs later on.

Making your Project Public

Making your project public will allow anyone to view & collect data for your project without having to login with a google account. Rest assured however, they cannot edit your project settings or form(s).

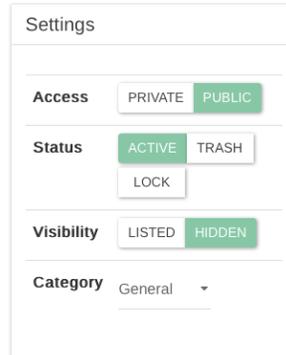
Once your project is public, you can still restrict who can access it by making it a “hidden” project. This means a user needs the project url or exact project name to find it on the web or in the app.

11. To make your project public, select **Details** from the edit menu on the project settings page.



12. In the **Settings** panel on the right side, select **Public** for the Access.

13. Also in the **Settings** panel, decide whether to select **Hidden or Listed** for visibility. Listed means your project will show up in the project gallery on the Epicollect website for anyone to see. Hidden means a user needs the project url to access it.

A screenshot of a "Settings" panel. It contains four sections: "Access" with "PRIVATE" and "PUBLIC" buttons (PUBLIC is selected); "Status" with "ACTIVE", "TRASH", and "LOCK" buttons (ACTIVE is selected); "Visibility" with "LISTED" and "HIDDEN" buttons (HIDDEN is selected); and "Category" with a dropdown menu showing "General".

You are now ready to start collecting data with your customized form! See the Epicollect5 App guide for information on how to access your form on your mobile device

Collecting GPS-Enabled Field Data with Epicollect5 for iOS and Android Devices

Reference Guide for Using the Epicollect5 App

Epicollect5 is a free web-based tool that enables you to collect customized data (including location and media) in the field using a mobile device. You can easily collect data on your mobile device using either a form you have created or that someone else has created.

After reading this guide you should be able to:

- Access a data collection form from the Epicollect5 mobile app.

Epicollect5 Basics

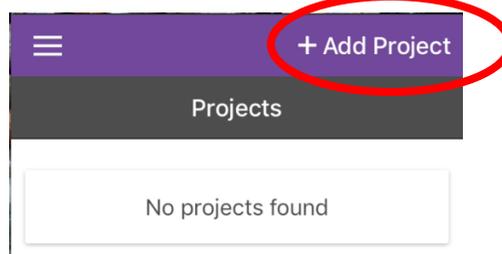
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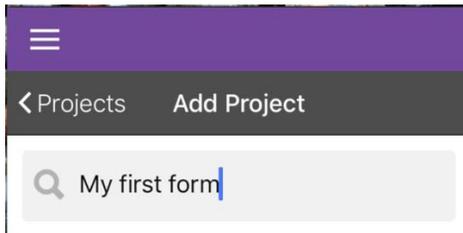
Access a Data Collection Form from a Mobile Device

1. If you have not already done so, download the **Epicollect5 mobile app** to your smartphone or tablet using your device’s app store. Just search for **Epicollect5**.
2. Open the **Epicollect5** app on your device.
3. The app will open to the **Projects** screen. Select **Add Project**.

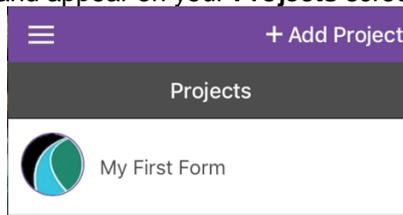


4. In the **Search for a project** box, enter the **name of the project** you created on the Epicollect website or the name of a project a friend created.





5. When your project appears below the search box, **select** it. (If it doesn't show up make sure you have the right project name. If that doesn't work, make sure the project is public.)
6. Your project will then load and appear on your **Projects** screen. **Select** it by tapping on it.



You have now loaded your form on your mobile device and can begin collecting data.

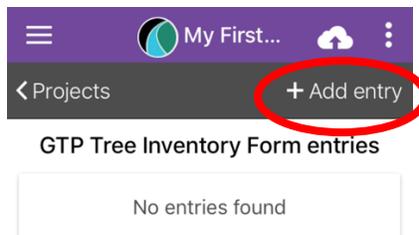
Sharing your Form with Others

To share your form with others so that they can also collect data under your project, ask them to download the Epicollect5 app to their device.

Give them the project name and have them follow the steps above to open it on their device. They can then follow the steps below to begin collecting data. If they are having trouble finding your project, you can also send them a direct link (URL).

Collecting Data

1. To start collecting data on your form, select **Add entry** from your project page.

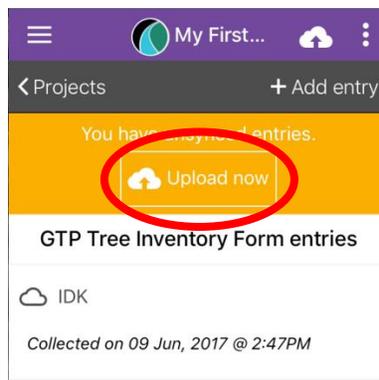


2. Your form will open. **Fill it out.**
3. When you finish filling out the form, select **Save entry.**

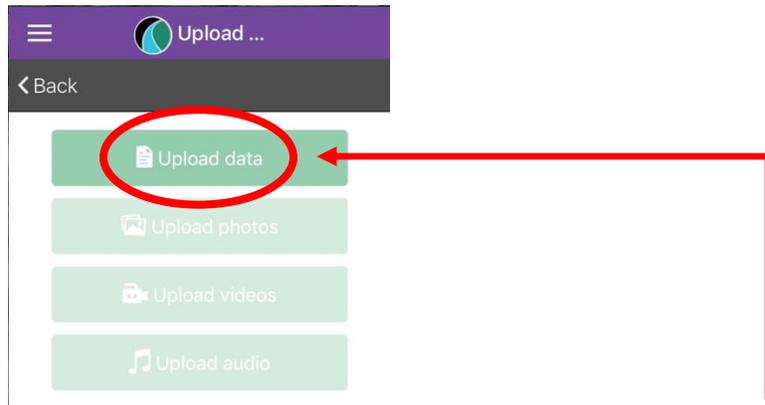


Save entry

- Once your entry is saved, you will return to your project screen. To continue collecting data at another location, select **Add entry** again.
- Note that the data you collect is saved to your device, but is not automatically saved to the Epicollect website.
- To save your data to the Epicollect website, select **Upload now**. You can either do this after each entry or when you are done collecting data.



- The upload data screen will open. Select **Upload data**.



- If you have collected photos, videos, or audio, you will have to select the appropriate button for each of those to save them to the Epicollect website, after the data is uploaded.

DONE! Go forth and collect more valuable data!



Viewing and Managing Data on the Epicollect5 Website

Reference Guide for Using the Epicollect5 Website

Mapping Field Data on the Web

Field data can be viewed, edited (depending on user permissions) and exported from the Epicollect website. This exercise will showcase methods for interacting with form responses and exporting the data to a .CSV file which can be imported into Google Maps.

Viewing Form Responses on the Epicollect Website

Once you start collecting data in the field using the Epicollect5 mobile app, the data will be stored on the Epicollect website.

Viewing Epicollect Project Data in a Web Browser

1. To begin viewing a project's data, navigate to <http://five.epicollect.net> in your web browser.
2. On the upper right side of your screen select **Find Project** and click on **Search**.



3. If you know the name of a specific project or have a particular topic you are interested in, type that into the search window that appears. If you don't you can **type in "Water Quality Monitoring"** to access the data for the Natural Resource Conservation Academy's Water Quality Monitoring project. Click on the **View** button.

Note: Only projects that are listed as public and unhidden can be found in this way. If it was listed as private or hidden it would not appear in the project gallery and you would need the project web address to view the data. The direct url for the water quality monitoring project is:

<https://five.epicollect.net/project/water-quality-monitoring>



- The project's page will open. To view the data collected using that form, select **View Data**.

WATER QUALITY MONITO...

Form for collecting basic water quality data using a TPS meter.

3 ENTRIES LAST ON: 29 JUN 2017 **VIEW DATA**

- A table will open displaying all of the data collected using that project form.

- You can view the data by scrolling to the right or view an individual record by clicking on the eyeball. **Pick one to view.**

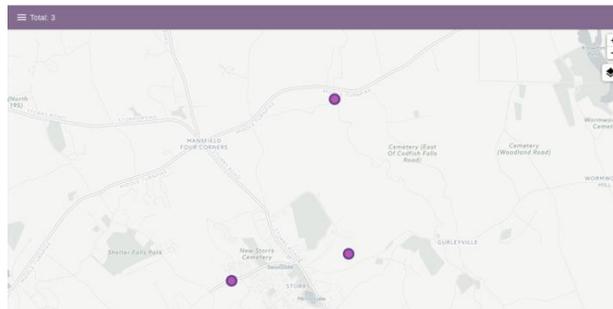
View	Title	Created At	Your Name (or Team Name)	Stream Name	Stream Location	What is the weather like?
	Roberts brook -Ag	29th Jun, 2017	Dave	Roberts brook -Ag	41.812735, -72.240473	cloudy, hot
	Forest fenton	29th Jun, 2017	Dave	Forest fenton	41.833245, -72.24297	cloudy, hot
	Urban Eagleville	29th Jun, 2017	Dave	Urban Eagleville	41.809136, -72.261304	cloudy, hot

Viewing Data on a Map

- To view the data geographically, select **Map** at the top of the screen.

 Download
  Table
  **Map**

- All data collection points will then appear on a map, grouped by location.



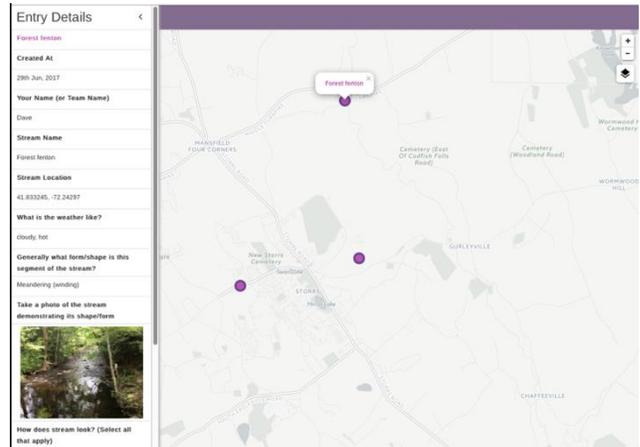
- To view individual data points, **click on one of the dots**. A column will open on the left with the data collected at that point.

Note: If data points are close together, you will see a bigger dot with a number in it. This means there are several data points collected in the same area. **Click on the number dot** to open the individual points and then click on each of the individual dots to view the data collected.

- To change your basemap, select the **layers**

button. 

- Explore the different basemap options and **select one** that suits your fancy.

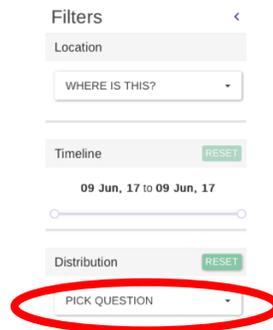


- The Epicollect map also allows you to filter your data. This can be useful if you have multiple data points, but only want to see ones with a certain characteristic. To filter your points, select the **filter button**. Note, you may have to close the Entry Details panel if it is open to see the filter

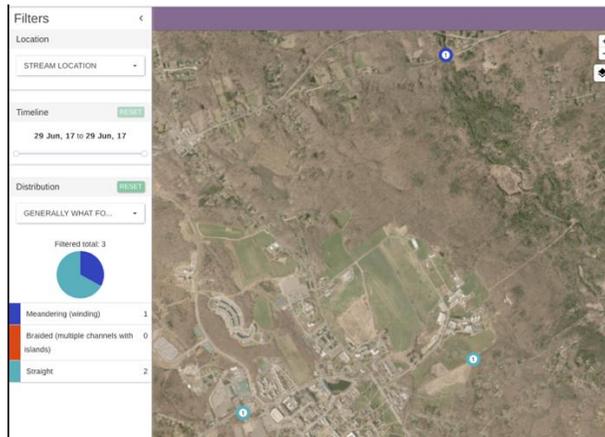
icon. 

- Note that you can select different locations or different dates.

- Under **Distribution** in the filter menu, use the dropdown arrow to **select one of the survey questions** to filter the data by.



- Note that once you select a question to filter the data, a pie chart will appear and the dots on the map will change based on the answers to the question selected.



16. Note that this map is public so anyone with the project url can view or download (but not edit) the data. To share the data with friends, send them the project website url.

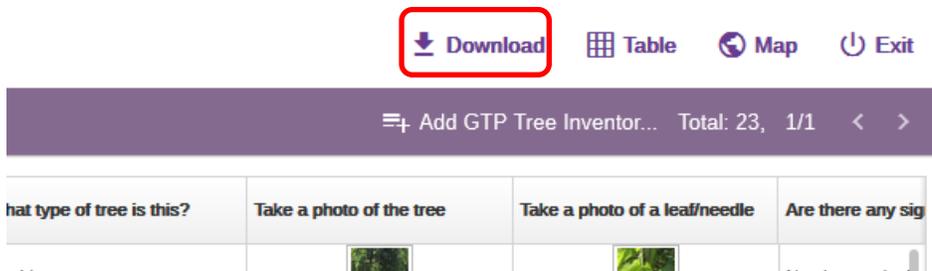
The data map in Epicollect may be good enough for your purposes. However, in some cases you may want to combine this data with other data or customize how it is displayed. In the next step you will learn how to export this data to bring it into another mapping program. **Leave this project open.**

Exporting Field Form Data

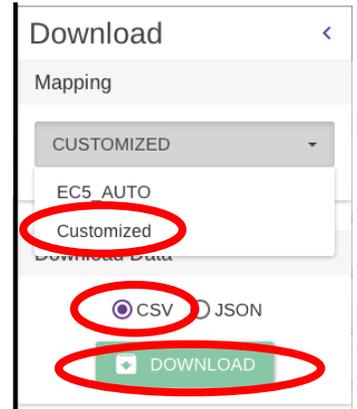
If a project is listed as public on the Epicollect website, anyone can download the data.

Exporting Form Data from Epicollect

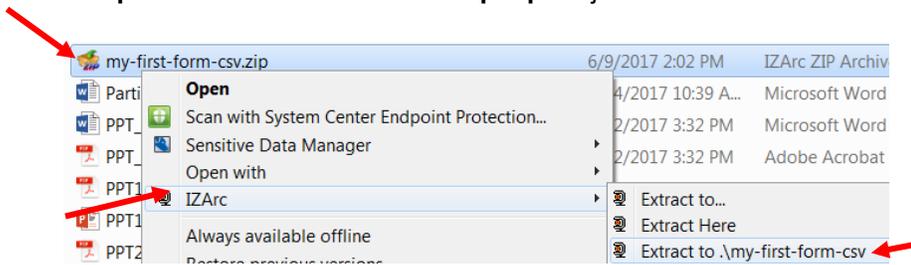
1. With an epicollect project open in either table or map view, click on the **Download** icon in the upper right corner of the screen.



2. A “**Download**” panel will expand from the left side of the screen.
3. Under **Mapping**, you can select either the default (“EC5_AUTO”) or a custom mapping format (if the owner of the project has set one up). These options basically control what the names of your columns will be in your data table. Typically the default is fine, you can always edit your column names later. (see “Working with CSV Data” section below.) If you are using the Water Quality Monitoring project, select “**Customized**” from download menu.
4. Set the **Format** to **CSV** and click **Download**. Note: JSON is for those with computer programming skills who want to play with the data in javascript.
5. A download window will appear. **Save the file to a USB flash drive or hard drive** of your computer. The name of the file will be the form name. The file is a compressed (.zip) comma separated values (.CSV) file. Select **Save File**. Click **OK**.



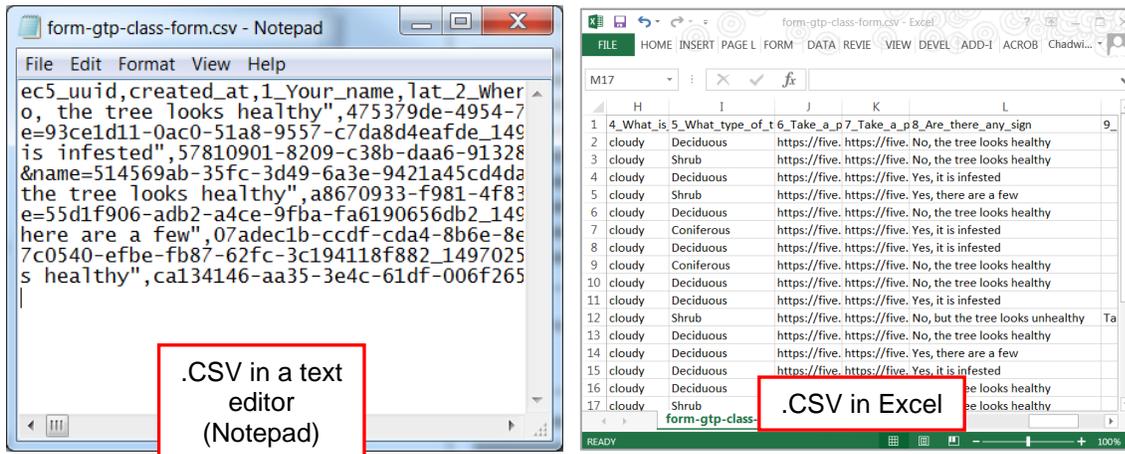
6. On your computer, **view/navigate to the folder** where you saved the .zip file. **Right click** on it and **unzip** to in the same location. **Mac people...**just double click!



Note: Your extract tool may look different than this! Mac people...just double click!

Working with Comma Separated Values (.CSV) Data

Comma separated values (.CSV) files allow data to be saved in a table structured format within a text file. The file contains all of your data separated by commas. Each line of the file is a data record. Each record consists of one or more fields, separated by commas. The CSV file you just downloaded can be opened in a text editor or in as a spreadsheet in Excel, Google Sheets, or other spreadsheet programs. It can also be imported into a number of other programs – including Google Maps – including Google Maps and ArcGIS Online!



Pro Tip: For this exercise, we will import the .CSV file directly into Google Maps.

However, it may be handy to know that the file can be edited in Excel BEFORE you import it into Google Maps. You may want to try this in the future (i.e. when you have more time). That's because editing .CSV tables in Google Maps is somewhat restricted.