



# RC201

## Creating Data Forms in REDCap

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Collaborative Data Services (CDS)

## Agenda

- Quick Tour around REDCap
- Using the Online Designer to create/edit forms
- Using the Data Dictionary to create/edit forms
- Creating a Codebook & PDFs of forms
- Development vs Production

# Quick Tour around REDCap

# My Projects Page

### Fred Hutch REDCap News (No need to login to access any of these links!)

- REDCap is now at version 8.5.1. View [REDCap versions and the features added to each release](#).
- CDS provides [extensive \(and free\) REDCap Training](#), both in-person and video-based training.
- MyCap may just revolutionize the collection of data from participants on mobile devices. Watch the [MyCap video](#).
- If you want to create a new REDCap project, please complete this short [New Project Request survey](#).
- [Additional information](#) on the Fred Hutch REDCap instance, including security and IRB considerations.

Listed below are the REDCap projects to which you currently have access. Click the project title to open the project. [Read more](#)

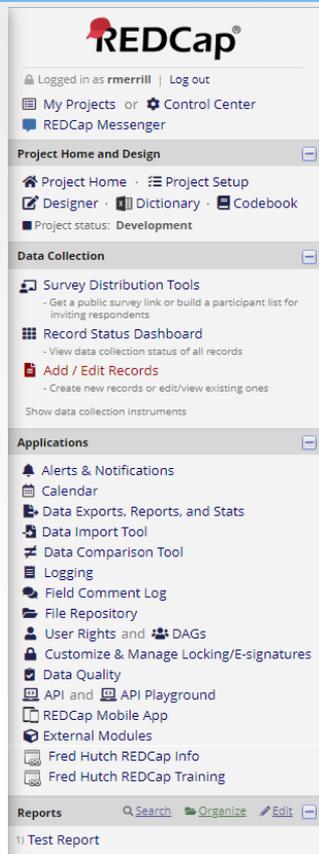
**ATTENTION REQUESTED:** You have not accessed the User Access Dashboard yet. It is recommended that you access the User Access Dashboard at least once each calendar month to review which users still have access to your projects.

Go to [User Access Dashboard](#)

**My Projects** [Organize](#)

Project Title	Records	Fields	Instrument	Type	Status
<a href="#">Paul Demo Project July 2018</a>	6	43	7 forms		
<a href="#">Paul Brand New Project</a>	0	2	1 form		

# Project Navbar



The screenshot shows the REDCap Project Navbar with the following sections and items:

- Project Home and Design**
  - Project Home
  - Project Setup
  - Designer
  - Dictionary
  - Codebook
  - Project status: Development
- Data Collection**
  - Survey Distribution Tools
    - Get a public survey link or build a participant list for inviting respondents
  - Record Status Dashboard
    - View data collection status of all records
  - Add / Edit Records
    - Create new records or edit/view existing ones
  - Show data collection instruments
- Applications**
  - Alerts & Notifications
  - Calendar
  - Data Exports, Reports, and Stats
  - Data Import Tool
  - Data Comparison Tool
  - Logging
  - Field Comment Log
  - File Repository
  - User Rights and DAGs
  - Customize & Manage Locking/E-signatures
  - Data Quality
  - API and API Playground
  - REDCap Mobile App
  - External Modules
  - Fred Hutch REDCap Info
  - Fred Hutch REDCap Training
- Reports**
  - Search
  - Organize
  - Edit

Access to most parts of REDCap including other pages (My Projects, Project Home, etc.), Data collection, Other stuff (Applications), Reports, Help

# Project Home

## Ryan REDCap Demo Oct 2019

[Project Home](#) [Project Setup](#) [Other Functionality](#) [Project Revision History](#)

[Edit project settings](#)

The tables below provide general dashboard information, such as a list of all users with access to this project, general project statistics, and upcoming calendar events (if any).

☆ Project is not used as a template [Add](#)

Current Users (2)	
User	Expires
rmerrill (Ryan Merrill)	never
rmerrill2 (Ryan Merrill2)	never

Project Statistics	
Records in project	2
Most recent activity	10/07/2019 7:50am
Space usage for docs	0.00 MB

Upcoming Calendar Events (next 7 days)		
Time	Date	Description
		No upcoming events

Brief project overview including users and general usage statistics

# Project Setup

## Paul Brand New Project

[Project Home](#) [Project Setup](#) [Other Functionality](#) [Project Revision History](#)

Project status:  Development Completed steps 0 of 7

**Main project settings**

 Not started

 Use surveys in this project? [?](#)  [VIDEO: How to create and manage a survey](#)

 Use longitudinal data collection with defined events? [?](#)

**Design your data collection instruments**

 Not started

Go to  Online Designer or  Data Dictionary Explore the  REDCap Shared Library

Have you checked the [Check For Identifiers](#) page to ensure all identifier fields have been tagged?

Learn how to use [Smart Variables](#) [Piping](#) [Action Tags](#)

**Enable optional modules and customizations**

 Optional

 Repeatable instruments [?](#)

 Auto-numbering for records [?](#)

 Scheduling module (longitudinal only) [?](#)

 Randomization module [?](#)

 Designate an email field for sending survey invitations [?](#)

Access to online designer, data dictionary, main project settings, optional modules and customizations, user rights, etc.

# Record Home Page

## Paul Demo Project July 2018

### Record Home Page

The grid below displays the form-by-form progress of data entered for the currently selected record. You may click on the colored status icons to access that form/event.

Choose action for record ▾

Subject ID 1  
Detroit

Data Collection Instrument	Status
Enrollment	
Baseline Interview	
Month 3 Interview	
Month 6 Interview	
Month 12 Interview	
Psychosocial Survey	
Exit	

Choose action for record ▾

-  Download PDF of record data for all instruments
-  Download PDF of record data for all instruments (compact)
-  Lock all instruments across all events
-  Unlock all instruments across all events
-  Assign to Data Access Group (or unassign/reassign)
-  Rename record
-  Delete record (all forms)

When you click on subject id, you will move to a focused view of a single record and access to "actions for record"

# Record Status Dashboard

## Record Status Dashboard (all records)

Displayed below is a table listing all existing records/responses and their status for every data collection instrument (and if longitudinal, for every event). You may click any of the colored buttons in the table to open a new tab/window in your browser to view that record on that particular data collection instrument. Please note that if your form-level user privileges are restricted for certain data collection instruments, you will only be able to view those instruments, and if you belong to a Data Access Group, you will only be able to view records that belong to your group.

### Legend for status icons:

- Incomplete  Incomplete (no data saved) ?
- Unverified  Partial Survey Response
- Complete  Completed Survey Response

Dashboard displayed: [Default dashboard] ▼

[Create custom dashboard](#)

Displaying record Page 1 of 1: "1" through "18" ▼ of 9 records

ALL (9) ▼ records per page

[+ Add new record](#)

Displaying: [Instrument status only](#) | [Lock status only](#) | [All status types](#)

Subject ID	Enrollment	Baseline Interview	Month 3 Interview	Month 6 Interview	Month 12 Interview	Psychosocial Survey	Exit
1	<span style="color: green;">●</span>	<span style="color: red;">●</span>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<span style="color: red;">●</span>	<span style="color: red;">●</span>
2	<span style="color: red;">●</span>	<span style="color: yellow;">●</span>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<span style="color: green;">●</span>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	<span style="color: green;">●</span>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<span style="color: green;">●</span>
14	<span style="color: green;">●</span>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Overview of all your records; access to custom dashboards.

# Add/Edit Records

## Paul Demo Project July 2018

### Add / Edit Records

You may view an existing record/response by selecting it from the drop-down lists below. To create a new record/response, click the button below.

Total records: 6

Choose an existing Subject ID

-- select record -- ▾

Add new record

### Data Search

Choose a field to search

(excludes multiple choice fields)

All fields ▾

Search query

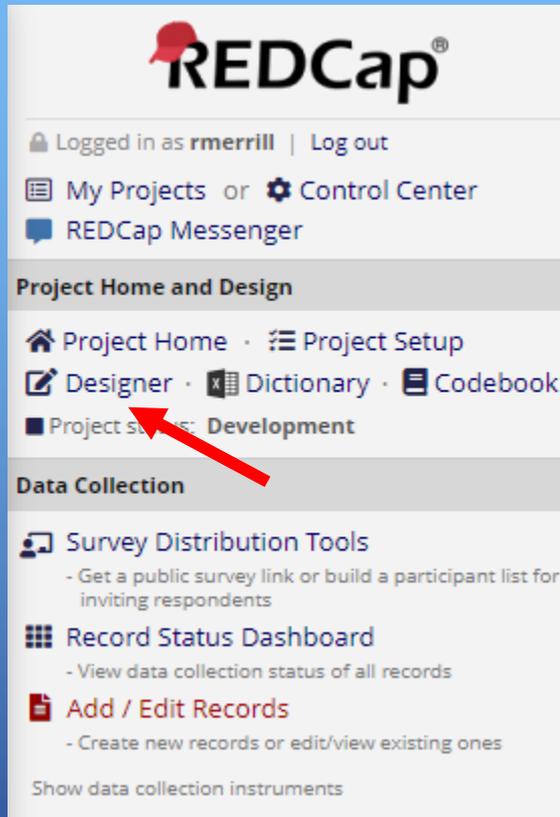
Begin typing to search the project data, then click an item in the list to navigate to that record.

Allows you to...

1. Select a record by subject id.
2. Add a new record.
3. Search for a record by any field in project.

# Using the Online Designer to create/edit forms

# Creating a data form using the designer



REDCap<sup>®</sup>

Logged in as **rmerrill** | Log out

My Projects or Control Center

REDCap Messenger

**Project Home and Design**

Project Home · Project Setup

Designer · Dictionary · Codebook

Project status: Development

**Data Collection**

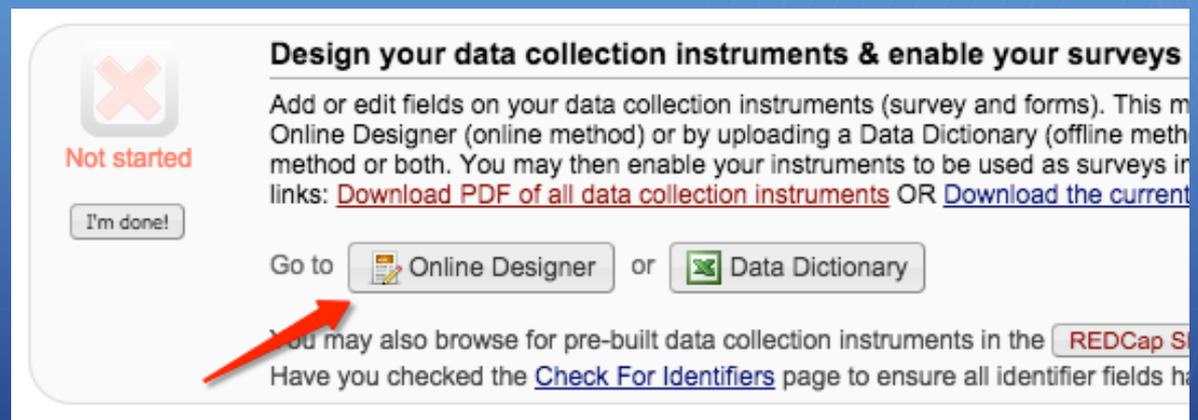
Survey Distribution Tools  
- Get a public survey link or build a participant list for inviting respondents

Record Status Dashboard  
- View data collection status of all records

Add / Edit Records  
- Create new records or edit/view existing ones

Show data collection instruments

- Starting the designer
  - Click **Designer** link under Project Home and Design on left-hand navigation bar
  - Click **Online Designer** button under Design your data collection instruments & enable your surveys under Project Setup tab



**Design your data collection instruments & enable your surveys**

Add or edit fields on your data collection instruments (survey and forms). This may be done using the Online Designer (online method) or by uploading a Data Dictionary (offline method) or both. You may then enable your instruments to be used as surveys in your project. For more information, see the links: [Download PDF of all data collection instruments](#) OR [Download the current data collection instruments](#)

**Not started**

I'm done!

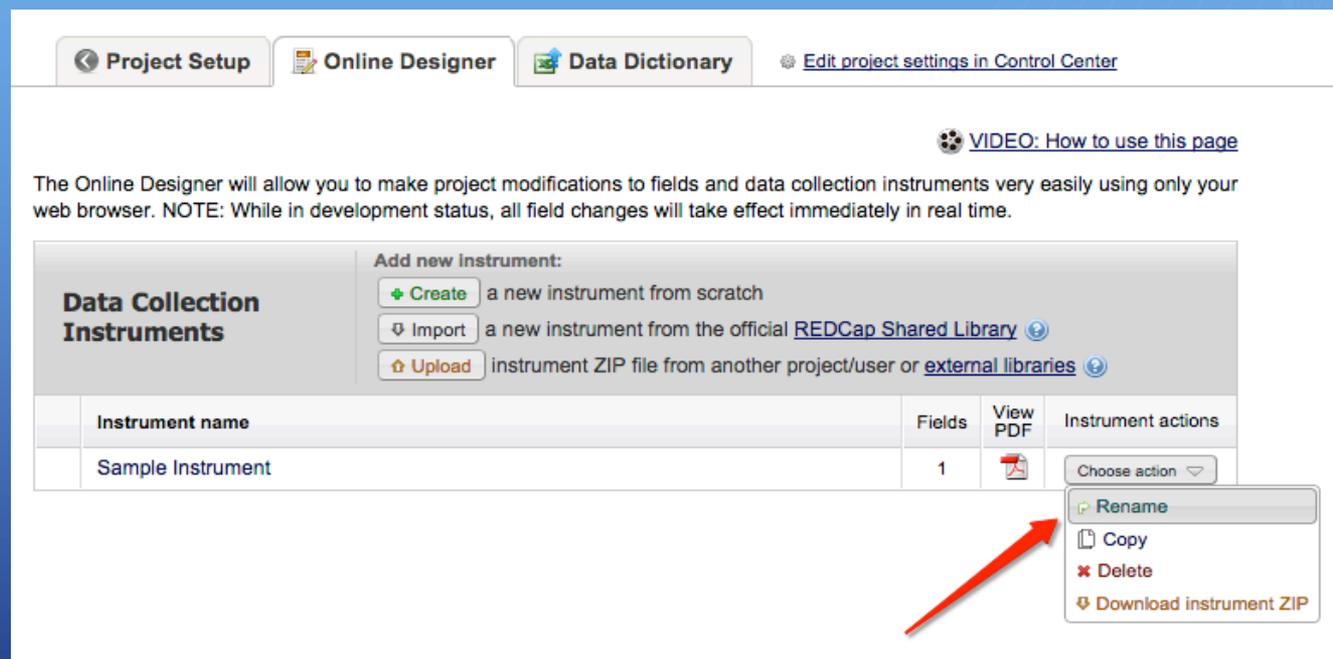
Go to  or

You may also browse for pre-built data collection instruments in the [REDCap Survey Instrument Library](#)

Have you checked the [Check For Identifiers](#) page to ensure all identifier fields have been properly configured?

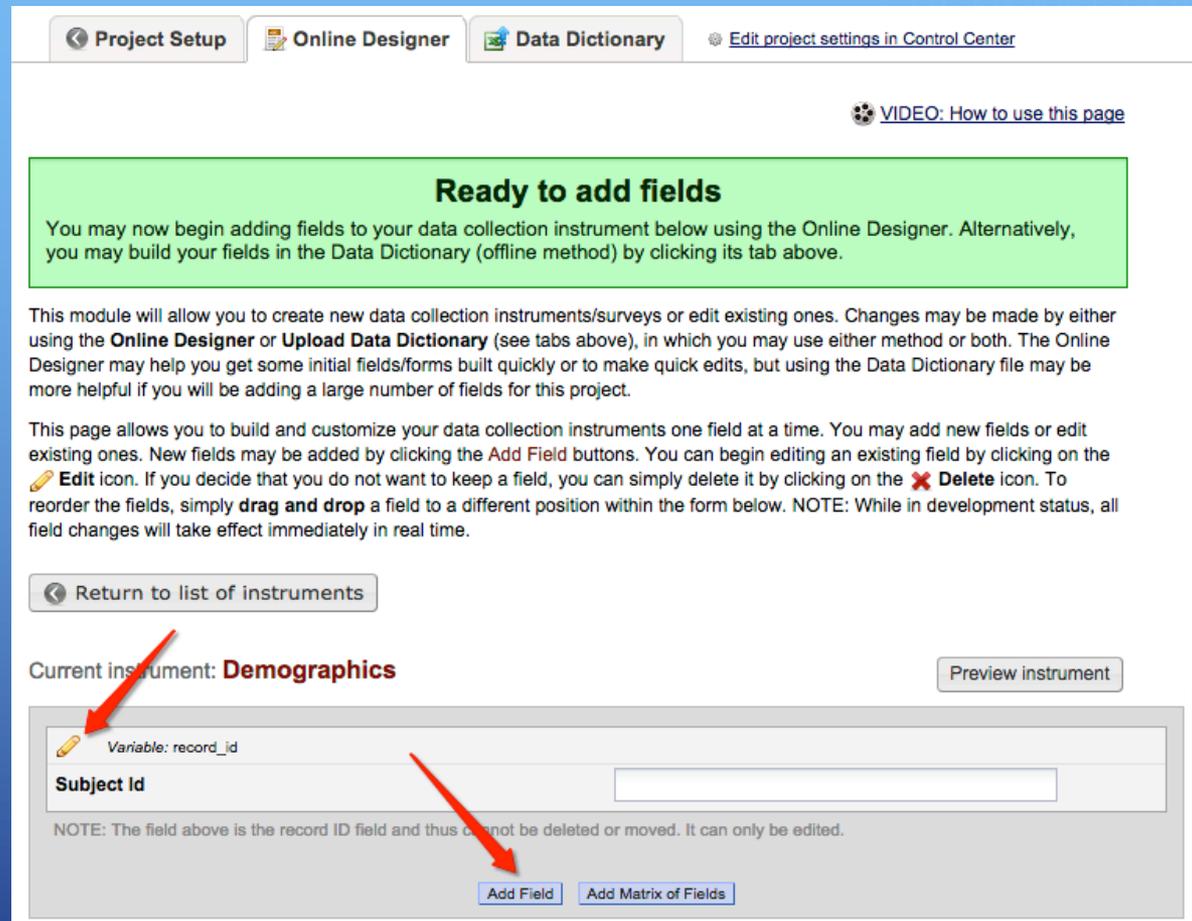
# Initial Project

- For new projects using the Fred Hutch template, you will start with a single data collection instrument, **Sample Instrument**
- Do **not** delete this instrument; rename it instead

A screenshot of the REDCap Online Designer interface. At the top, there are navigation tabs: "Project Setup", "Online Designer", "Data Dictionary", and "Edit project settings in Control Center". Below the tabs, there is a video link: "VIDEO: How to use this page". A paragraph of text explains the Online Designer's purpose: "The Online Designer will allow you to make project modifications to fields and data collection instruments very easily using only your web browser. NOTE: While in development status, all field changes will take effect immediately in real time." Below this text is a section titled "Data Collection Instruments" with a sub-section "Add new Instrument:" containing three options: "Create" (a new instrument from scratch), "Import" (a new instrument from the official REDCap Shared Library), and "Upload" (instrument ZIP file from another project/user or external libraries). Below the options is a table with columns: "Instrument name", "Fields", "View PDF", and "Instrument actions". The table contains one row for "Sample Instrument" with 1 field and a PDF icon. A dropdown menu is open for the "Sample Instrument" row, showing options: "Rename", "Copy", "Delete", and "Download instrument ZIP". A red arrow points to the "Rename" option in the dropdown menu.

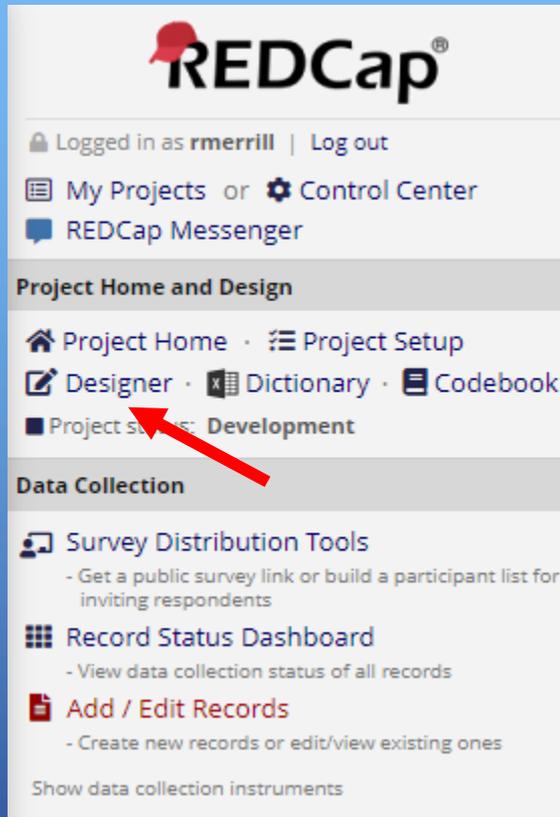
# Your first form

- It will always have the **record\_id** (**subject\_id**) field
- **Don't** delete this field; it is the primary key of your project.
- You may, however, rename it



The screenshot shows the REDCap Online Designer interface. At the top, there are navigation tabs: "Project Setup", "Online Designer" (which is active), and "Data Dictionary". A link "Edit project settings in Control Center" is also visible. Below the tabs, there is a green box with the heading "Ready to add fields" and the text: "You may now begin adding fields to your data collection instrument below using the Online Designer. Alternatively, you may build your fields in the Data Dictionary (offline method) by clicking its tab above." Below this, there are two paragraphs of text explaining the module's purpose and how to use it. A "Return to list of instruments" button is located below the text. The current instrument is "Demographics", and there is a "Preview instrument" button. The main area shows a field named "Subject Id" with a variable name of "record\_id". A red arrow points to the "Subject Id" field, and another red arrow points to the "Add Field" button. Below the field, there is a note: "NOTE: The field above is the record ID field and thus cannot be deleted or moved. It can only be edited." At the bottom, there are two buttons: "Add Field" and "Add Matrix of Fields".

# Creating a data form using the designer



REDCap<sup>®</sup>

Logged in as **rmerrill** | Log out

My Projects or Control Center

REDCap Messenger

**Project Home and Design**

Project Home · Project Setup

Designer · Dictionary · Codebook

Project status: Development

**Data Collection**

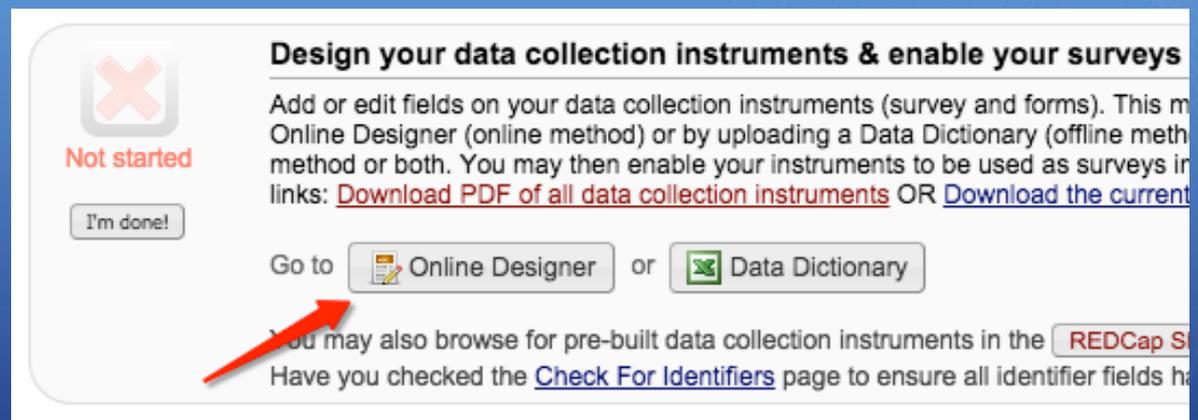
Survey Distribution Tools  
- Get a public survey link or build a participant list for inviting respondents

Record Status Dashboard  
- View data collection status of all records

Add / Edit Records  
- Create new records or edit/view existing ones

Show data collection instruments

- Starting the designer
  - Click **Designer** link under Project Home and Design on left-hand navigation bar
  - Click **Online Designer** button under Design your data collection instruments & enable your surveys under Project Setup tab



**Design your data collection instruments & enable your surveys**

Add or edit fields on your data collection instruments (survey and forms). This may be done using the Online Designer (online method) or by uploading a Data Dictionary (offline method) or both. You may then enable your instruments to be used as surveys in your project. For more information, see the links: [Download PDF of all data collection instruments](#) OR [Download the current instruments](#)

**Not started**

I'm done!

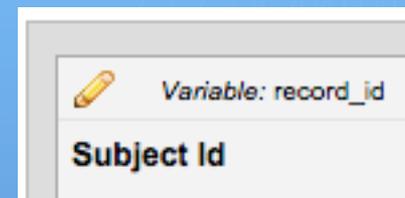
Go to  or

You may also browse for pre-built data collection instruments in the [REDCap Survey Instrument Library](#)

Have you checked the [Check For Identifiers](#) page to ensure all identifier fields have been properly configured?

# Editing a field

- Clicking the pencil icon next to a field, brings you to the **Edit Field** dialog
- This dialog will vary depending on the **Field Type** selected



### Edit Field

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#)

Field Type:

Field Label [How to use Piping](#)

**NOTE:** This field is the record ID field, which is the first field in the project. This field is special because it is used to store the names of the records in your project. Thus the record ID field cannot be deleted or moved but only edited. If you wish, you may change its field label or even its variable name.

Variable Name (utilized during data export)  
  Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

Validation? (optional)

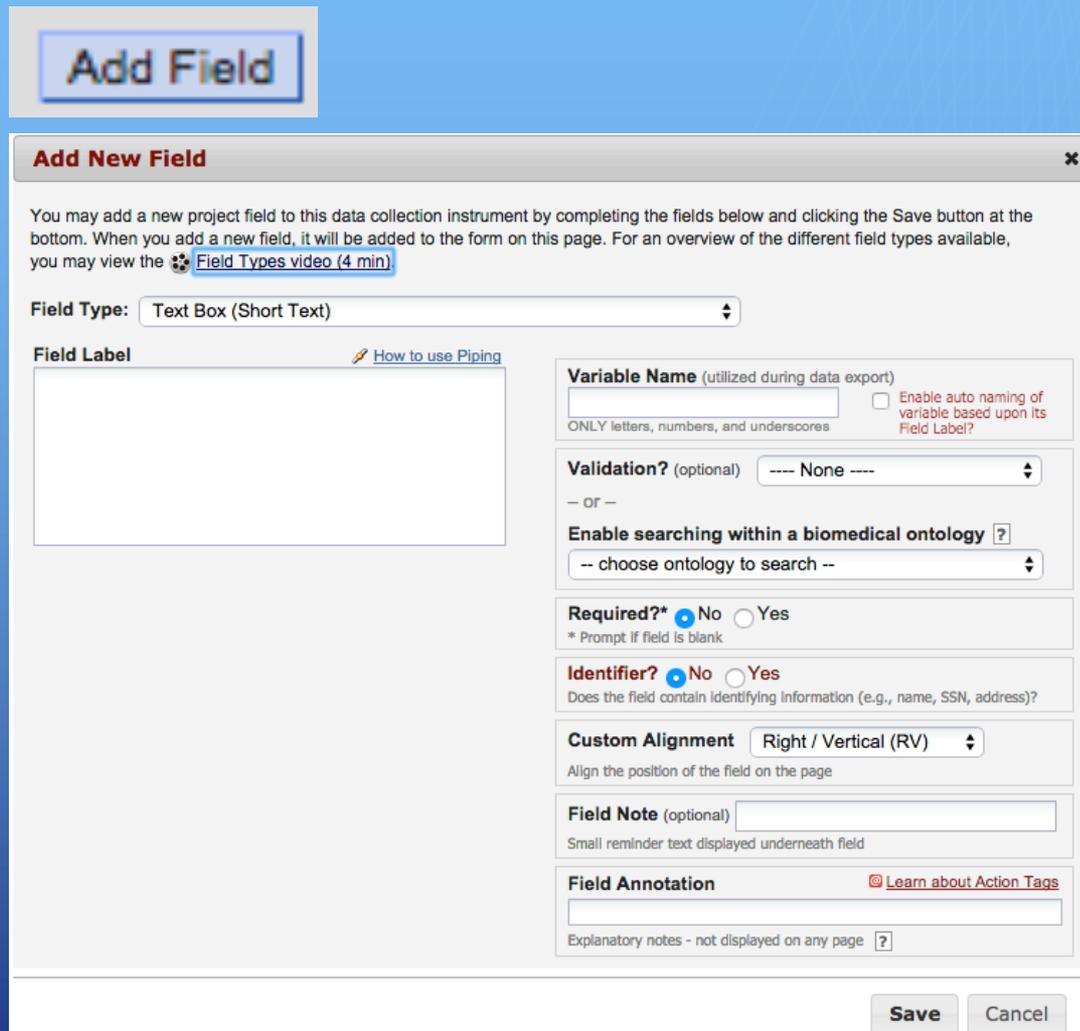
Identifier?  No  Yes  
Does the field contain Identifying Information (e.g., name, SSN, address)?

Field Annotation [@ Learn about Action Tags](#)

Explanatory notes - not displayed on any page

# Adding a field

- Clicking the **Add Field** button, brings you to the **Add New Field** dialog
- This dialog will again vary depending on the **Field Type** selected



**Add Field**

**Add New Field** ✕

You may add a new project field to this data collection instrument by completing the fields below and clicking the Save button at the bottom. When you add a new field, it will be added to the form on this page. For an overview of the different field types available, you may view the [Field Types video \(4 min\)](#).

Field Type:

Field Label [How to use Piping](#)

**Variable Name** (utilized during data export)

Enable auto naming of variable based upon its Field Label?  
ONLY letters, numbers, and underscores

**Validation?** (optional)

— or —

**Enable searching within a biomedical ontology** [?](#)

**Required?\***  No  Yes  
\* Prompt if field is blank

**Identifier?**  No  Yes  
Does the field contain Identifying information (e.g., name, SSN, address)?

**Custom Alignment**

Align the position of the field on the page

**Field Note** (optional)

Small reminder text displayed underneath field

**Field Annotation** [Learn about Action Tags](#)

Explanatory notes - not displayed on any page [?](#)

**Save** **Cancel**

# Field Types

- **Standard fields**

- **Text Box**

- REDCap supports autocomplete based on biomedical ontologies (e.g., ICD-10 codes).

- **Notes Box** – paragraph of text

- **Calculated Field** – numeric calculation

- **Multiple Choice – Drop-down List** (Single Answer)

- **Multiple Choice – Radio buttons** (Single Answer)

- **Checkboxes** (Multiple Answers)

- **Yes – No** – yes/no radio button

- **True – False** – true/false radio button

- **Signature** – draw signature with mouse or finger

- **File Upload** – attach documents to form

- **Slider / Visual Analog Scale** – slider from 1 to 100

- **Descriptive Text** – does not capture data

- **Begin New Section** – also does not capture data

- **Dynamic Query (SQL)** – dropdown hooked up to another project. Requires admin to setup

- **Matrix fields**

- Adds a group of radio button or checkbox fields sharing same set of responses

# Field Properties

- **Field Type** – type of field
- **Field Label** – the prompt the user sees
- **Variable Name** – the field name used at export and when branching and piping; *must be unique across entire project*
- **Validation** – simple validation
- **Required** – is field mandatory in order to save record?
- **Identifier** – does this contain PII?
- **Custom Alignment** – positions field (answers) on page
- **Field Note** – help text displayed underneath field in smaller font
- **Field Annotation** – note to designer or way to designate special field status; not displayed to data entry user

# Required fields, identifier, & validation

- **Required**

- Any field can be marked as required
- Can be over-ruled by user at data entry time

- **Identifier**

- Any field can be marked as Identifier
- Will be stripped from exports (unless user has see “full data set” right)

- **Validation**

- Only for textbox fields
- Constrain user to entering valid date, integer, number, email address, phone number, zipcode, etc.
- You can also specify min and max values for numeric/date types; but boundaries can be overridden at data entry time

# Calculations

- Numeric calculations
  - **No text or date calculations!**
  - *Possible workarounds:* use branching logic to display alternate text messages; use Data Entry Triggers (a programming extension) for date calculations
- Reference field names using **[field\_name]** syntax
- Can reference fields on other forms!
  - *When using longitudinal project (discussed in 301 seminar), you need to modify this syntax if field is from a different event*
- REDCap has a number of numeric, datetime, and boolean functions to support calculations (and branching, reports, and DQRs)

# Copy value of field from another data form

[bas\_height]

## BMI Calculation (lbs/inches)

- Without rounding

```
([bas_weight]/([bas_height]*[bas_height]))*703
```

- With rounding

```
round((([bas_weight]/([bas_height]*[bas_height]))*703,1)
```

Example from **Baseline Interview** in **Training -- Classic Project**

# Action Tags

- Originally added to REDCap in version 6.7
  - Goes in Field Annotation property of field
  - More added every so often

## All available action tags and their descriptions:

<input type="button" value="Add"/>	<b>@HIDDEN</b>	Hides the field on both the survey page and the data entry form. Field will stay hidden even if branching logic attempts to make it visible.
<input type="button" value="Add"/>	<b>@HIDDEN-FORM</b>	Hides the field only on the data entry form (i.e., not on the survey page). Field will stay hidden even if branching logic attempts to make it visible.
<input type="button" value="Add"/>	<b>@HIDDEN-SURVEY</b>	Hides the field only on the survey page (i.e., not on the data entry form). Field will stay hidden even if branching logic attempts to make it visible.
<input type="button" value="Add"/>	<b>@READONLY</b>	Makes the field read-only (i.e., disabled) on both the survey page and the data entry form so that its value cannot be changed.
<input type="button" value="Add"/>	<b>@READONLY-FORM</b>	Makes the field read-only (i.e., disabled) only on the data entry form (i.e., not on the survey page) so that its value cannot be changed.
<input type="button" value="Add"/>	<b>@READONLY-SURVEY</b>	Makes the field read-only (i.e., disabled) only on the survey page (i.e., not on the data entry form) so that its value cannot be changed.

## Action Tags

- Version 7.6 added a bunch of useful action tags, including
  - @HIDEBUTTON – use to hide today/now button for a date/time field
  - @HIDECHOICE – use to retire one or more choices for a multiple-choice field (radio, drop-down, checkbox)
  - @MAXCHECKED – specify max no. of checkboxes that can be checked
  - @MAXCHOICE – causes choice to be disabled after so many records have selected the choice
  - @NONEOFTHEABOVE – allows for a checkbox to designate one (or more than one) choice that is mutually exclusive of all other choices
  - @CHARLIMIT, @WORDLIMIT – for text & notes fields
  - @RANDOMORDER – randomizes order of choices



# Branching (a.k.a. skip logic)

- You can use Drag-N-Drop or Advanced syntax

**Add/Edit Branching Logic**

Branching Logic may be employed when fields/questions need to be hidden under certain conditions. If branching logic is defined, the field will only be visible if the conditions provided are true (i.e. show the field only if...). You may specify those conditions in the text box below for the Advanced Branching Logic Syntax or by choosing the Drag-N-Drop Logic Builder method, which allows you to build your logic in a much easier fashion by simply dragging over the options you want. You may switch back and forth between each method if you wish, but please be aware that since the advanced logic allows for greater complexity, it may not be able to be switched over to the Drag-N-Drop method if it becomes too complex.

Choose method below for the following field: **os\_foodallergy** - *Do you have any food allergies, food intolerances...*

**Advanced Branching Logic Syntax** [\(How do I use the advanced syntax?\)](#)

Show the field ONLY if...

— OR —

**Drag-N-Drop Logic Builder**

Displaying field choices for the following data collection instrument:  
Online Screener

**Field choices from other fields**  
(drag a choice below to box on right)

subject_id = (define criteria)	⇒
os_pg1 = Yes (1)	⇒
os_pg1 = No (0)	⇒
os_consent = Yes (1)	⇒
os_consent = No (0)	⇒
os_date = (define criteria)	⇒
os_gender = male (1)	⇒

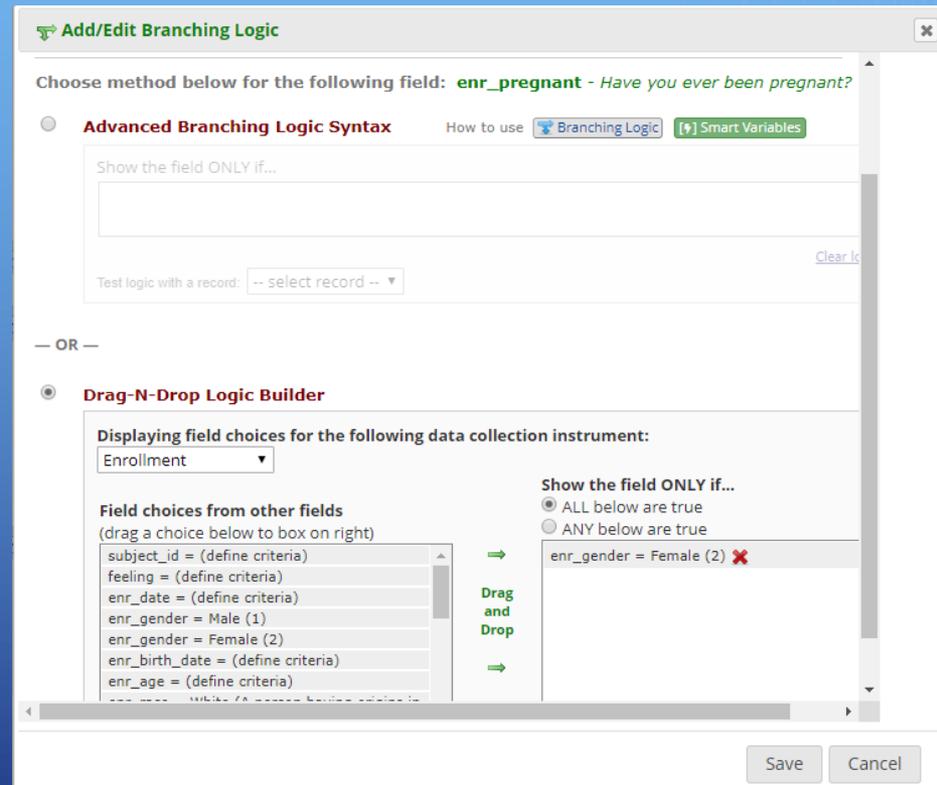
**Show the field ONLY if...**

ALL below are true  
 ANY below are true

Save Cancel

# Branching

- Example: displaying or hiding pregnancy question



**Add/Edit Branching Logic**

Choose method below for the following field: **enr\_pregnant** - *Have you ever been pregnant?*

**Advanced Branching Logic Syntax**    How to use [Branching Logic](#) [Smart Variables](#)

Show the field ONLY if...

Test logic with a record: -- select record --

— OR —

**Drag-N-Drop Logic Builder**

Displaying field choices for the following data collection instrument:  
Enrollment

Field choices from other fields  
(drag a choice below to box on right)

- subject\_id = (define criteria)
- feeling = (define criteria)
- enr\_date = (define criteria)
- enr\_gender = Male (1)
- enr\_gender = Female (2)
- enr\_birth\_date = (define criteria)
- enr\_age = (define criteria)

Drag and Drop

Show the field ONLY if...

ALL below are true

ANY below are true

enr\_gender = Female (2) ❌

Save    Cancel

## Branching logic examples

- Checking if a field is not null (i.e., answered)

```
[bas_packs] < '2' and [bas_packs] <> ''
```

- Checking if a field is null

```
[enr_birth_date] = ''
```

- Referencing checkbox field

```
[enr_race(6)] = '1'
```

For quotes, you can use either single (') or double ("), but be consistent in same expression!

# Matrix Fields

✚ Edit Matrix of Fields
✕

You may add or edit a matrix (i.e. grid) of project fields on this data collection instrument by completing the fields below. By providing all necessary info below and clicking Save, the new matrix of fields will be added to the form on this page. A Field Label and Variable name must be provide for each field in the matrix, and you must also set the Choices (i.e. matrix column headers) and answer format (Single Answer vs. Multiple Answers) for the entire matrix. [View a matrix example](#) or [Read more about matrix fields on the Help & FAQ](#).

**Section Header Text (optional)**

**Matrix Rows**  Enable auto naming of variable based upon its Field Label?

Each row represents a different field with its own label and variable name.

Field Label	Variable Name <small>ONLY letters, numbers, and underscores</small>	Required?* <input type="checkbox"/>	Field Annotation <span style="font-size: small;">?</span>
<input style="width: 90%;" type="text" value="Happiness "/>	<input style="width: 80%;" type="text" value="happiness"/>	<input type="checkbox"/>	<input style="width: 80%;" type="text"/> ✕
<input style="width: 90%;" type="text" value="Sadness"/>	<input style="width: 80%;" type="text" value="sadness"/>	<input type="checkbox"/>	<input style="width: 80%;" type="text"/> ✕
<input style="width: 90%;" type="text" value="Anger"/>	<input style="width: 80%;" type="text" value="anger"/>	<input type="checkbox"/>	<input style="width: 80%;" type="text"/> ✕

**Matrix Column Choices**

Choices (one choice per line)

1, very likely

2, likely

3, neither likely or unlikely

4, unlikely

5, very unlikely

[How do I manually code the choices?](#)

**Other Matrix Info**

**Answer Format:**  
 ▾

**Ranking:** What is a ranked matrix of fields?

Allow only 1 choice to be selected per column (radio buttons only)

**Matrix group name:** ONLY letters, numbers, and underscores stuff

 What is a matrix group name?

# Copying fields & choices

- Copy field



- Copy choices

**Choices (one choice per line)** [Copy existing choices](#)

0, No  
1, Yes

# Piping

- Allows you to copy the value from one field into various other places on a form
  - Field Label
  - Field Note
  - Section Header
  - Matrix field column headers
  - Option labels for multiple choice fields (radio, drop-down, checkbox)
  - Slider field labels (i.e. text displayed above slider bar)
  - Custom record locking text (if defined, displayed at bottom of form)
  - Survey Instructions
  - Survey Completion Text
  - Survey invitation emails (sent via Participant List or Automated Invitations) - includes both subject and message
  - ...
- Simply use same syntax as when referring to fields in calculations and branching, i.e. **[field\_name]**

# Piping Example

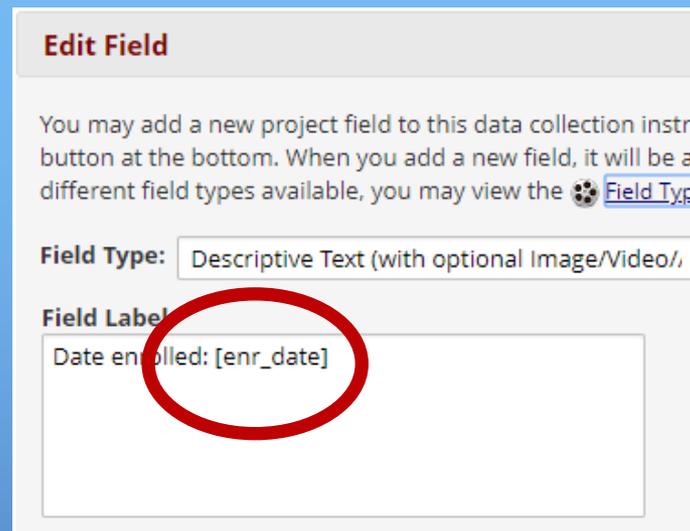
- Designer
- Data entry time

**Edit Field**

You may add a new project field to this data collection instrument by clicking the **Add Field** button at the bottom. When you add a new field, it will be added to the list of fields. There are different field types available, you may view the [Field Type](#) page for more information.

**Field Type:** Descriptive Text (with optional Image/Video/...

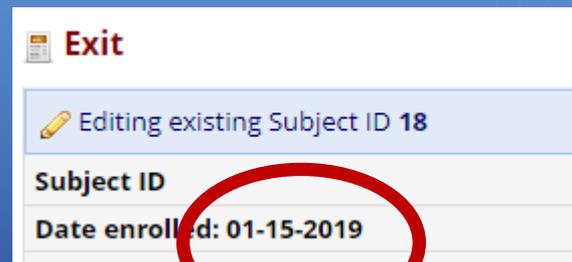
**Field Label:** Date enrolled: [enr\_date]



**Exit**

 Editing existing Subject ID 18

<b>Subject ID</b>
<b>Date enrolled:</b> 01-15-2019



# Using the Data Dictionary to create/edit forms

# Data Dictionary

- Everything discussed using Designer can also be done using the downloaded data dictionary
- You can develop projects using either...
  - Designer
  - Data Dictionary
  - or both!
- My style
  - I like to use Designer most of the time
  - But I use the Data Dictionary when I need to create similar fields multiple times on same form or on different forms or fix a bunch of fields because a change in field name used in branching logic in multiple places

# Data Dictionary

[Project Setup](#) [Online Designer](#) **Data Dictionary** [Edit project settings in Control Center](#)

 [VIDEO: How to use this page](#)

This module will allow you to create new data collection instruments/surveys or edit existing ones. Changes may be made by either using the **Online Designer** or **Upload Data Dictionary** (see tabs above), in which you may use either method or both. The Online Designer may help you get some initial fields/forms built quickly or to make quick edits, but using the Data Dictionary file may be more helpful if you will be adding a large number of fields for this project.

This module may be used for making changes to the project, such as adding new fields or modifying existing fields, by using an offline method called the Data Dictionary. The Data Dictionary is a specifically formatted CSV (comma delimited) file within which you may construct your project fields and afterward upload the file here to commit the changes to your project.

Click the 'Browse' or 'Choose File' button below to select the file on your computer, and upload it by clicking the 'Upload File' button. Once your file has been uploaded, changes will NOT immediately be made but will be displayed and checked for errors to ensure that all the formatting in your Data Dictionary is correct before official changes are made to the project.

**Need some help?**  
If you wish to view an example of how your Data Dictionary may be formatted, you may download the [Data Dictionary demonstration file](#), or you may view the [Data Dictionary Tutorial Video \(10 min\)](#). For help setting up your Data Dictionary, you may also see the instructions listed on the [Help & FAQ](#).

**Steps for making project changes:**

- 1.) [Download the current Data Dictionary](#)
- 2.) Edit the Data Dictionary (see the [Help & FAQ](#) for help)
- 3.) Upload the Data Dictionary using the form below
- 4.) The changes will be made to the project after the Data Dictionary has been checked for errors

**Upload your Data Dictionary file** (CSV file format only)  
Format for min/max validation values for date and datetime fields:

No file chosen

## Data Dictionary

- Each column maps to a property in the designer
- Download and upload using CSV format
  - Not TSV!
  - Not Excel!
- **Note:** if you use non-English language characters in your field labels or choices, you will want to save using the "CSV UTF-8" format. Otherwise, non-English language characters will turn into funny ? characters

# Data Dictionary (1 of 2)

	A	B	C	D	E	F	G	H	I	J
1	Variable / Field Name	Form Name	Section Head	Field Type	Field Label	Choices, Calc	Field Note	Text Validati	Text Validati	Text Validati
2	record_id	demographics		text	Subject Id					
3	dem_firstname	demographics		text	First Name					
4	dem_lastname	demographics		text	Last name					
5	dem_gender	demographics		radio	Gender	1, female   2, male   3, prefer not to answer				
6	dem_dob	demographics		text	Birthdate			date_mdy	1/1/60	1/1/85
7	dem_thankyou	demographics		descriptive	Thank you, [dem_firstname], for you time in completing this form!					
8	happy1_align	alignment_demo		yesno	Are you happy?		RV			
9	hungry_align	alignment_demo		yesno	Are you hungry?		RH			
10	thirsty_align	alignment_demo		yesno	Are you thirsty?		LV			
11	angry_align	alignment_demo		yesno	Are you angry?		LH			
12	demo_firstname	validation_demo		text	First Name					
13	dem_lastname	validation_demo		text	Last name					
14	dem_gender	validation_demo		radio	Gender	1, female   2, male   3, prefer not to answer				
15	birthdate_ba	validation_demo		radio	Birthdate (gi/go)					
16	dem_dob_va	validation_demo		text	Birthdate (with validation)			date_mdy	1/1/60	1/1/85
17	age	validation_demo		text	Age		Enter an inte	integer	18	65
18	email	validation_demo		text	Email			email		
19	mobile_phor	validation_demo		text	Mobile phone		Enter a valid	phone		
20	bmi_weight	bmi		text	Weight (in pounds)			number	50	300
21	bmi_height	bmi		text	Height (in inches)			number	48	200
22	bmi_bmi	bmi		calc	BMI	((bmi_weight)/((bmi_height)*(bmi_height)))*703				
23	bmi_bmi2	bmi		calc	BMI	round(((bmi_weight)/((bmi_height)*(bmi_height)))*703, 1)				
24	bmi_bmi3	bmi		calc	BMI	round(((bmi_weight)/((bmi_height)*(bmi_height)))*703, 1)				
25	race	checkbox_branching_demo		checkbox	Race	White, White (A person having origins in any of the original people)				
26	race_other	checkbox_branching_demo		text	Other race					



## Data Dictionary

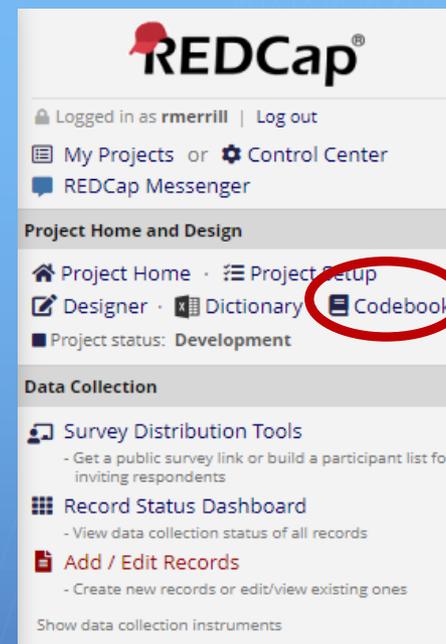
### • **Uploading Changes**

- REDCap will list out any errors and/or warnings before you can commit your changes
- Don't forget to click **Commit Changes**

# Creating Codebook & PDFs of forms

# Codebook & PDFs

- Codebook
- PDFs of forms (with or without data)
  - Open form (in data collection mode)



REDCap®

Logged in as **rmerrill** | Log out

My Projects or Control Center

REDCap Messenger

**Project Home and Design**

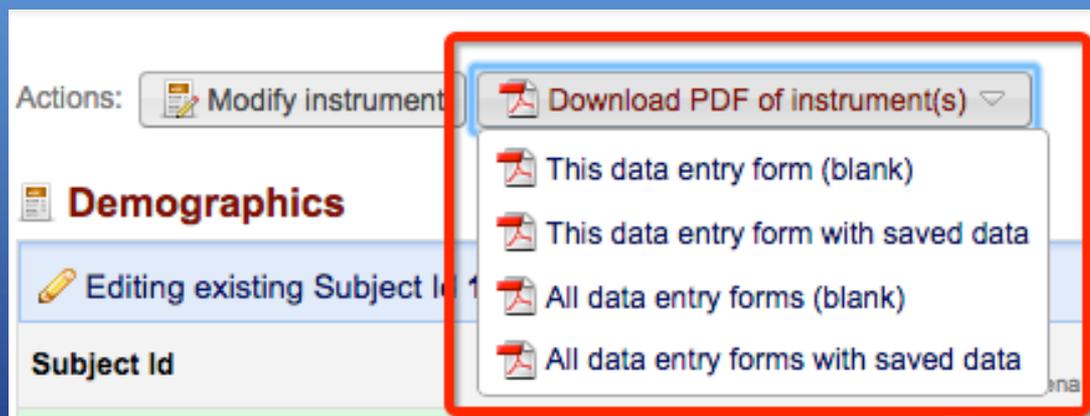
- Project Home
- Project Setup
- Designer
- Dictionary
- Codebook**

Project status: **Development**

**Data Collection**

- Survey Distribution Tools
  - Get a public survey link or build a participant list for inviting respondents
- Record Status Dashboard
  - View data collection status of all records
- Add / Edit Records
  - Create new records or edit/view existing ones

Show data collection instruments



Actions:  Modify instrument

 **Demographics**

 Editing existing Subject Id 1

**Subject Id**

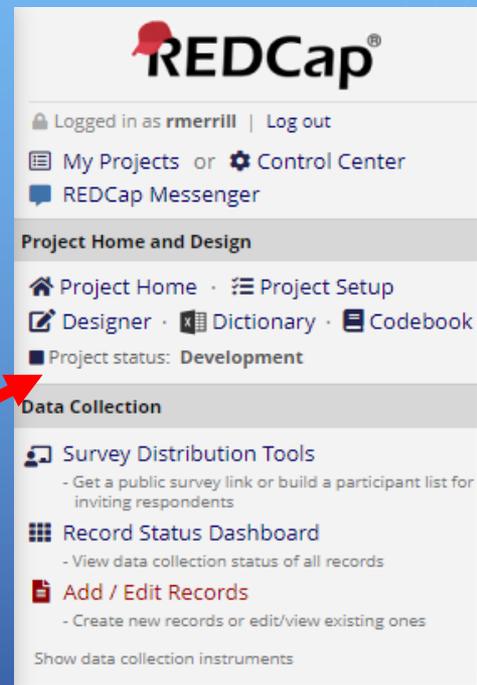
**Download PDF of instrument(s)**

- This data entry form (blank)
- This data entry form with saved data
- All data entry forms (blank)
- All data entry forms with saved data

# Development vs. Production

# Development & Production Modes

- Indicated in Navigation bar (and a few other places)

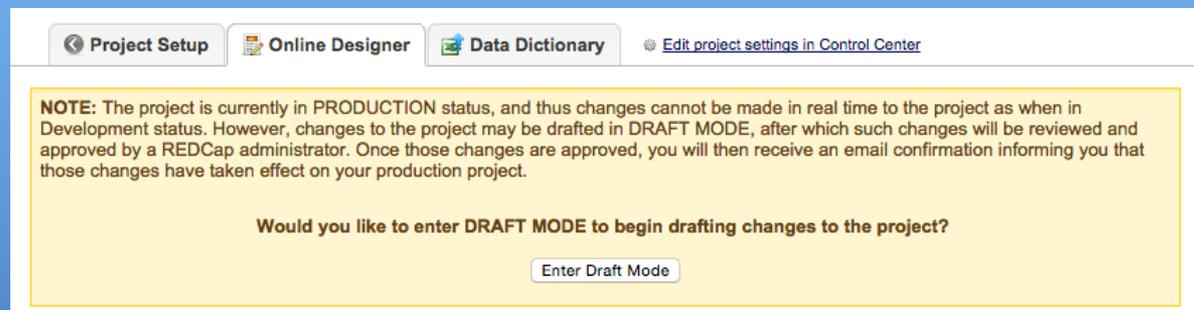


- You can do anything in Development mode

# Development & Production Modes

- **Once in Production Mode**

- Click on Online Designer from Project Setup tab



The screenshot shows the REDCap Project Setup interface. The 'Project Setup' tab is active, with other tabs for 'Online Designer', 'Data Dictionary', and 'Edit project settings in Control Center'. A yellow warning box contains the following text:

**NOTE:** The project is currently in PRODUCTION status, and thus changes cannot be made in real time to the project as when in Development status. However, changes to the project may be drafted in DRAFT MODE, after which such changes will be reviewed and approved by a REDCap administrator. Once those changes are approved, you will then receive an email confirmation informing you that those changes have taken effect on your production project.

Would you like to enter DRAFT MODE to begin drafting changes to the project?

Enter Draft Mode

- Changes will be held in draft mode and need to be **submitted & approved** before going live (production)
- CDS approves all production changes (except for automatically approved ones!)
  - This is for your data safety!

This topic discussed in much greater detail in RC 302 class



# Thank you!

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Collaborative Data Services (CDS)