

Fluxx Data Structure Simplified

- 1 Tables
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The information here is mostly metaphorical examples of real life to help explain complex database concepts in regards to Fluxx data model to serve a more general audience.

Tables

Imagine the database being made out of different spreadsheets which we call Tables. Every row on that table is representing one record of a type represented by that table. For example, if we are adding a Testing User (First Name: Testing, Last Name: User) as a contact to our database, an example of what that looks like can be seen below.

Table would be People (Users). It would look like this:

[illegible]

Person ID is a unique number that has no particular meaning other than uniquely identifying the record in that table/spreadsheet in our database.

In the Fluxx database, the column names are not the same as the labels we see in our views; column names are technically the **"back-end names"** of these fields (e.g. office_telephone and not "Office Telephone Number"). Everywhere else, we will see the human readable labels.

Links

Let's start this section with a story:

When we invite a guest to our house, we prepare for them. We make sure that we make space for them to come and we expect them to come. The other way around is not the case; they do not expect us to go to their house. When they show up to our house, we know what their name is and other information related to them. So, if anyone asks us who is your guest, we are able to tell them the name of our guest and their relationship to us and also their food allergies, because we were expecting them and we were cooking for them.

Imagine at the same time some birds flying and sitting on our roof. We don't expect them and we don't even know they exist. So, if anyone asks us about those birds, we would probably say "what birds?!". The birds however, know about our house. They were expecting to sit on a roof and that's what they did. There is only one way relationship between our house and the birds. Our house is going to be our house with or without the birds. But the birds need a roof to sit on.

The same idea is happening in our database. As we mentioned in Tables section, we can imagine tables as spreadsheets. So, like spreadsheets, a Request spreadsheet would not know anything about Organization spreadsheets unless we connect them together somehow. In databases, we can [Link](#) the spreadsheets that have relationship together. For example, a Request would like to know which Organization it belongs to. So, there is an empty seat in Requests spreadsheets that refers to the related Organization:

Organizations spreadsheet:

Contig ID (AKA Org ID)	Name	Acronym	Legal Name	Street Address	Street Address 2	City	State	Country	Postal Code	Phone	Email	Website	Date Created	Date Updated	Tax Class	Tax ID	tax_registration_date	Organization Total Budget	number_of_paid_staff	number_of_full_time_equivalent	Organization Type	DB A Test	organization_category_other
1665	One Test Organization			1 Test Road	Apt 123	Madison	Wisconsin	United States	53711	(608) 123-4567	testing@wisc.edu		9/20/2021	2/4/2022		XX-XXXXXXX							

R e q u e s t I D	G r a n t e O r g a n i z a t i o n	P r o j e c t T i t l e	R e q u e s t T y p e	S t a t u s	G r a n t S t a r t D a t e	G r a n t E n d D a t e	A m o u n t R e q u e s t e d	A m o u n t F u n d e d	B a s e R e q u e s t I D	D o c u m e n t T y p e s	F i s c a l Y e a r	G r a n t e O r g. S t r e t A d d r e s s	G r a n t e O r g S t r e t A d d r e s s2	G r a n t e O r g C i t y	C o n t i g I D	G r a n t e O r g S t a t e	G r a n t e O r g C o u n t y	G r a n t e O r g P o s t a l C o d e	G r a n t e O r g U R L	G r a n t e O r g T a x I D	F i s c a l O r g a n i z a t i o n	F i s c a l S t r e t A d d r e s s	F i s c a l S t r e t A d d r e s s2	F i s c a l C i t y	F i s c a l S t a t e	F i s c a l C o u n t y	F i s c a l P o s t a l C o d e	F i s c a l U R L	F i s c a l T a x I D	L e a d P O /PD	S e c o n d a r y L e a d	P r o g r a m	S u b P r o g r a m	I n i t i a t i v e s	S u b I n i t i a t i v e s	D a t e R e q u e s t R e c e i v e d	D u r a t i o n	F u n d i n g S o u r c e	F i n a l P r o p o s a l D a t e	F i n a l B u d g e t D a t e	P r i m a r y C o n t a c t L a s t N a m e	P r i m a r y C o n t a c t E m a i l	P r o g r a m L e a d F i r s t N a m e	P r o g r a m L e a d C o n t a c t E m a i l	S p a c e o f F r e e N a m e		
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Organization however, is independent from the request. Requests are like birds on its roof. It doesn't even know that they are there (we can retrieve the information when we do a query).

The following chart is showing the main linking that is in place in Fluxx Grantmaking Database:

