

Re: Data Normalization

Source:

<http://www.tech-archive.net/Archive/Access/microsoft.public.access.queries/2008-10/msg01424.html>

- *From:* John Spencer <spencer@xxxxxxxxxx>
 - *Date:* Fri, 17 Oct 2008 08:53:03 -0400
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In Response to your question on Invoices and customers.

You came pretty close, except the INVOICES table would contain a CustomerID foreign key. The Customer table would not have an invoice id.

One Customer has (or could have) many Invoices. The many side gets the Foreign key.

In response to your question on Primary keys

The Primary key should meet the following constraints:

- A) It must be UNIQUE. No duplications
- B) It should be stable (that is it should not change over time). There are ways to handle changes in the value but if possible (in my opinion) they should be avoided.
- C) It must be available for every record.

Social Security Numbers (SSN) for people in the US are problematic. New Borns don't have them immediately, visitors from overseas don't have them, sometimes people won't share them, etc. It depends on the purpose of the database whether an SSN would be a good candidate for a primary key.

Names of people are not unique and are not stable (marriage, divorce, etc). Names of the States in the United States are stable and probably will not change. Abbreviations for names of the States are stable and do not change frequently (To Date: once in my lifetime).

So there is nothing wrong with using a Natural Key (some item or items of data in each record) or with using an artificial key (autonumber or other unique value that has no relation to the contents of the record). This subject Natural vs Artificial can become a holy war with some individuals. I use both depending on the table and situation.

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R Tanner wrote:

On Oct 16, 4:57 pm, John W. Vinson
 <jvinson@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote:

Re: Data Normalization

On Thu, 16 Oct 2008 14:51:30 -0700 (PDT), R Tanner
<tanner.ro...@xxxxxxxx>
wrote:

I understand what the purpose and value of data
normalization is, but
I just have one thing I am confused about. If you split up a
table,
then it w