SalesForce Admin

Module 3

Data Modeling

Data Modeling in Salesforce

Topics to be covered

- Database and Objects in Salesforce
- Fields in Salesforce
- All Data types of SalesForce Fields
- Apps and Tabs in Salesforce
- Record Id in Salesforce
- Global Picklists and Field Dependency in SalesForce
- Relationship in Salesforce
- Types of relationship in salesforce
- Roll-up Summary Fields in SalesForce
- Cross Object Formula Field
- List Views

Topic:
Database and Objects in Salesforce

Trailhead

Once your trailhead Account is created, go to the following URL:
https://trailhead.salesforce.com/content/learn/modules/trailhead_basics

Log in using your credentials and complete the aforementioned Trailhead module to get started.

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Topic:
Database and Objects in Salesforce

Database

A database is an area for structured data. And a database should ensure that data can be organized, and managed, and ultimately manipulated. To do this, databases leverage tables. Most of you are probably familiar with table format.

For example If you think about how Microsoft Excel organized data, that's similar to how databases organize data. There are **tables, rows, columns** and everything is contained within one tabular system that's organized and structured.

	A	B	C	D	E
1	Student ID	First Name	Last Name	Age	Program
2	ST348	Max	Calone	21	Engineering
3	ST349	Mathew	Chase	20	Engineering
4	ST350	Gavin	Belson	23	Science
5	ST351	Lisa	Paige	23	Medical
6	ST352	Carol	Marks	22	Liberal Arts
7	ST353	Stewart	Gear	19	Science

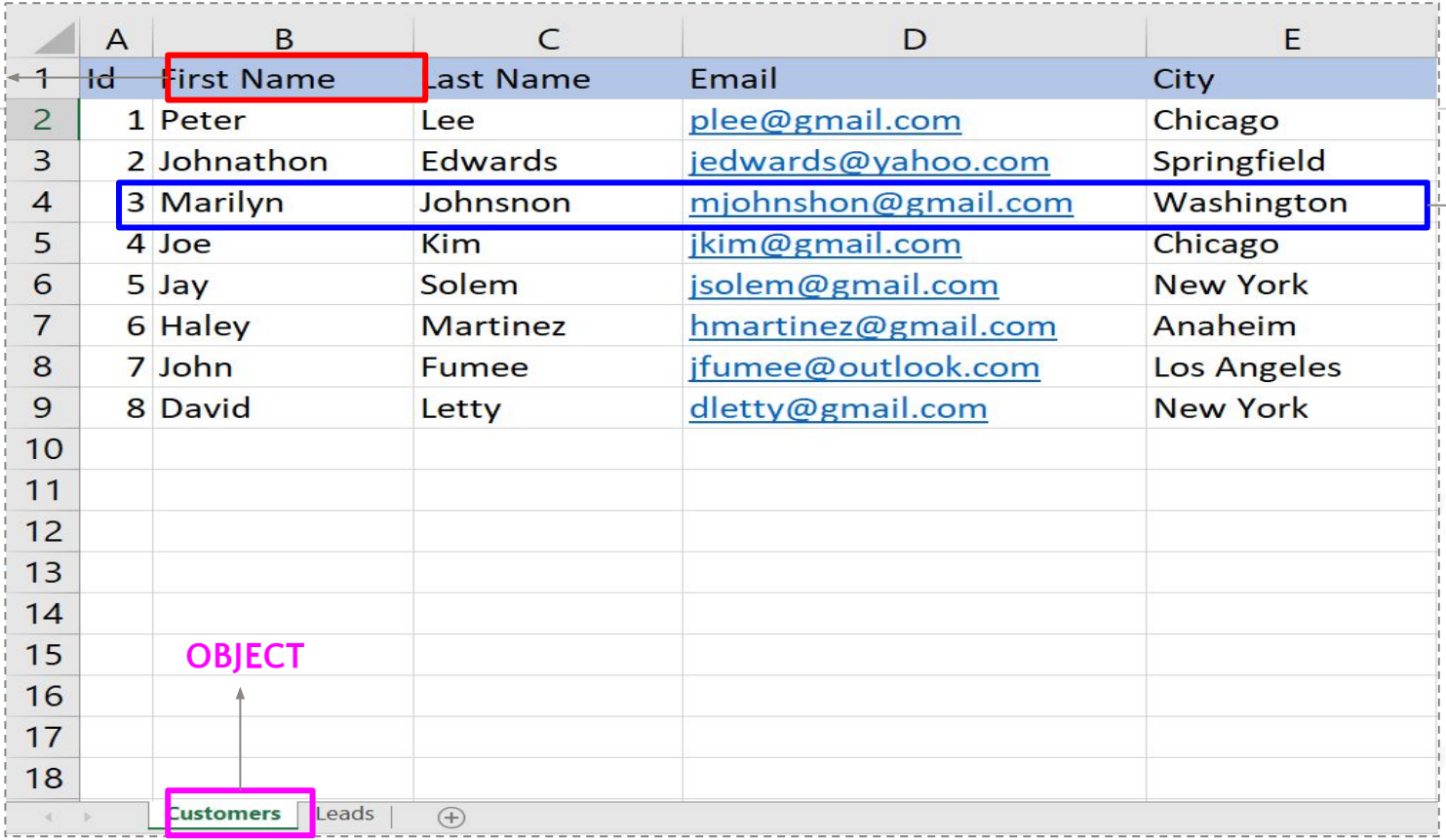
Excel isn't a database.

- Excel isn't a database. It's a spreadsheet. Not only do databases help structure and organize data via tables, but they are utilized for storing large amounts of data for multiple users.
- So, if you tried to boot up a 1GB Excel file, you would probably be sitting at your computer for.. well, forever.
- Databases don't use Excel's cell-based storage system, and they load up data fast.

Database in Salesforce

- Database in salesforce uses objects (like SQL Tables) to store data.
- Each object comprises a number of fields → which correspond to columns in a database.
- Data is stored in records of objects → which corresponds to rows in a database.
- Objects can be related to other objects using relationship fields.

FIELD



	A	B	C	D	E
1	Id	First Name	Last Name	Email	City
2	1	Peter	Lee	plee@gmail.com	Chicago
3	2	Johnathon	Edwards	jedwards@yahoo.com	Springfield
4	3	Marilyn	Johnsnon	mjohnshon@gmail.com	Washington
5	4	Joe	Kim	jkim@gmail.com	Chicago
6	5	Jay	Solem	jsolem@gmail.com	New York
7	6	Haley	Martinez	hmartinez@gmail.com	Anaheim
8	7	John	Fumee	jfumee@outlook.com	Los Angeles
9	8	David	Letty	dletty@gmail.com	New York
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RECORD

OBJECT

Objects in Salesforce

Objects in Force.com are represented in the form of a table and it is here referred as what an entity in a database.

Table: Customers

Id	First Name	Last Name	Email	City
1	Peter	Lee	plee@gmail.com	Chicago
2	Johnathon	Edwards	jedwards@yahoo.com	Springfield
3	Marilyn	Johnsnon	mjohnshon@gmail.com	Washington
4	Joe	Kim	jkim@gmail.com	Chicago
5	Jay	Solem	jsolem@gmail.com	New York
6	Haley	Martinez	hmartinez@gmail.com	Anaheim
7	John	Fumee	jfumee@outlook.com	Los Angeles
8	David	Letty	dletty@gmail.com	New York

Types of Objects:

There are 2 types of objects:

- Standard Objects:

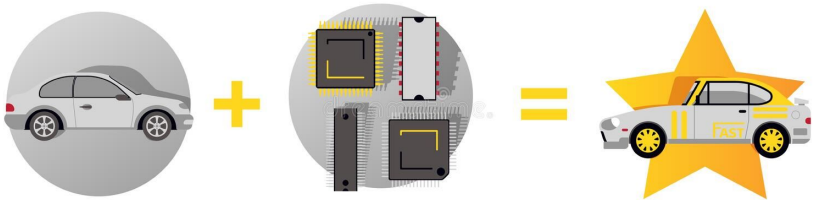
  Standard Objects are included with the Salesforce by default. Example: Accounts, Contacts, Leads and Opportunities.

- Custom Objects:

  Custom Objects are created to store information unique to an organization. Custom objects extend the functionality that standard objects provide.

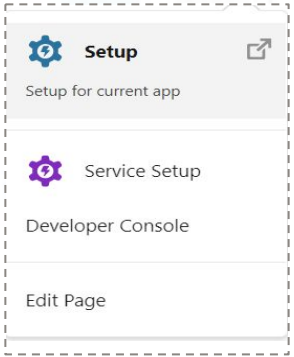
Standard and Custom Objects Example

- Take an example of car in which you have almost everything provided as a standard feature for driving (Consider them as a standard object in SF),
- but you need to install a multimedia system or a safety tracker or custom rims in your car and for that you need some custom modifications separately (Consider it as a custom object in SF).



Steps to Create a Custom Object

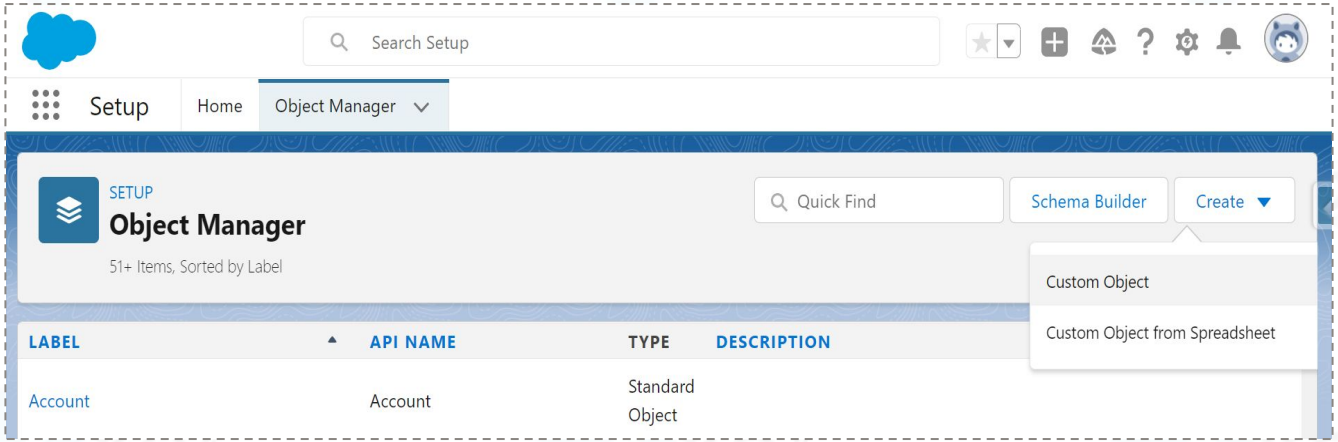
- In your Salesforce org, click on the top right and select Setup to open Setup.



- Click the Object Manager tab. If you don’t see it, enter Object Manager in the Quick Find box.

Steps to Create a Custom Object

- On the Object Manager page, click Create | Custom Object



Steps to Create a Custom Object

- For Label, enter whatever you want to call your custom object. Notice that the Object Name and Record Name fields auto-fill.
- For Plural Label, enter the plural form of your custom object name.
  - E.g: Customers is plural for Customer
- Scroll down and leave the rest of the values as default and click Save.