

BUILD YOUR OWN APP



an absolute beginner's handbook

WHAT IS IT?

Zoho Creator is an online platform that allows you to build custom applications for any business need, all by yourself.

Zoho Creator offers an easy-to-use interface that lets you put together - just the application you need. To make it work the way you want, you just need to drag and drop the required elements, specify what tasks the modules should perform, and when. The intuitive drag-&-drop interface is a boon to all those without any prior experience in app-building. In addition to all this, workflow and business rules too can be specified in the same drag-&-drop way. This customized workflow adds great deal of automation to your custom application, making it ideal for all your business needs.

Everyone. Seriously. Who wouldn't want a way to automate their tasks with custom applications? Regardless of the role you play in your organization, from the front-office to CEO, you can simplify your work with custom applications that automate monotonous processes. Zoho Creator has something for everyone.

WHO IS IT FOR?

WHY?

Accessible - whenever and wherever you need it

Affordable - for small businesses and even bootstrappers

Collaborative - as it is all online

Customizable - to suit your need

Easy - as you need no technical expertise

Efficient - in automating tasks

Empowering - you to build applications yourself

Integrated - with Google Apps, Paypal, Zoho CRM, Zoho Invoice, and Zoho Reports

Scalable - grows with your business

Secure - against breaches

WHY?

CONTD...

1. NO TECHNICAL EXPERTISE NEEDED

With Zoho Creator, just about anyone can build custom applications for their unique needs. You need neither technical expertise, nor previous experience with programming languages.

2. DRAG-DROP INTERFACE

Zoho Creator demands no experience with programming languages. Not only building forms, but also defining workflow can be done using the drag-drop interface. Without having to depend on a developer, you can have the pride of building custom applications all by yourself.

3. FASTER DEPLOYMENT

Unlike in conventional software applications, there is no maintenance downtime involved. You don't have to install patches or updates manually. We do updates so that all users are on the latest version, without experiencing any outages. Plus, any modification you make to your application is resulted instantly, real-time.

4. SCALABLE

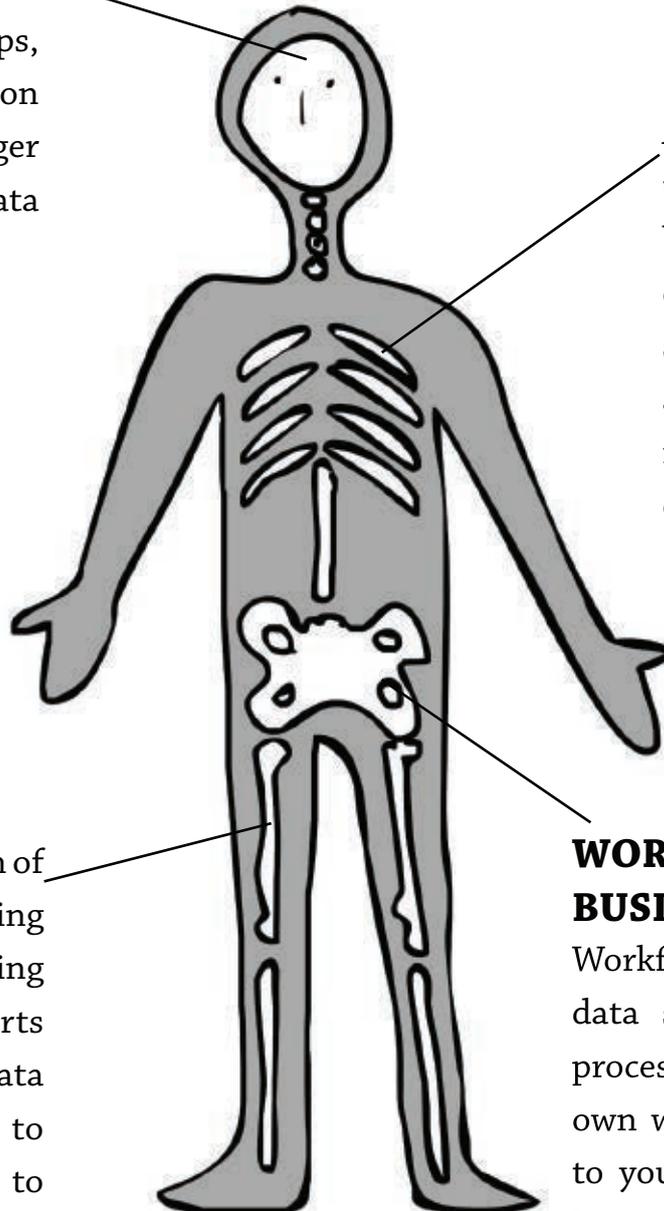
You'd like your business to grow. And when it does, your software application too has to meet new demands. With Zoho Creator, you can add new modules to expand your application as your business grows, without disrupting access to your application.

5. AFFORDABLE

Even for all that it offers, Zoho Creator doesn't burn a hole in your pocket. Plans begin at \$5 per user per month. Depending upon your usage, you can switch between plans as you wish. Our flexible pay-as-you-go scheme ensures you pay only for the services you use. We also offer a 10% discount on all annual subscriptions.

FORMS

Form is the area into which users enter data. You can share it with individuals or groups, and even embed it on websites for a larger audience to enter data into.

**VIEWS**

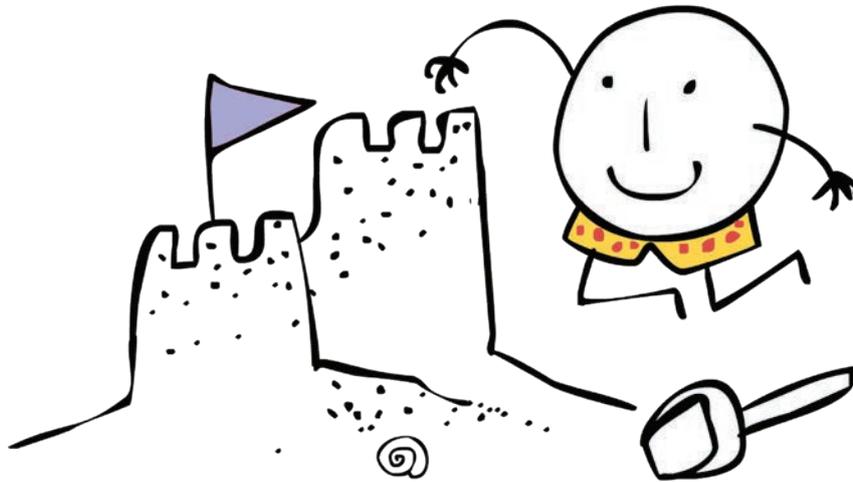
All the data entered into the forms will be listed on Views for analysis. You can search for a particular speck of data, sort them and also apply filters to restrict the displayed data to a criteria.

REPORTS

Graphical interpretation of raw data helps in analyzing information and arriving at a conclusion. Reports not only make your data visually appealing to share, but also easier to analyze trends. Instead of sharing the raw data which is monotonous, you can generate and share reports that are easier to interpret.

WORKFLOW AND BUSINESS RULES:

Workflow is how your collected data should be handled and processed. You can define your own workflow that are unique to your business requirement. It can be done easily using the drag-drop script builder. These business rules help you automate redundant tasks, eliminating your manual involvement.



Creating an application is easy, whether you build it from scratch, or you already have been using MS Excel or MS Access database.

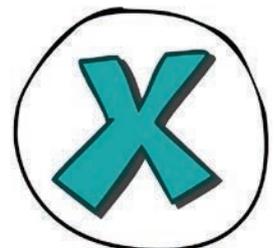


FROM SCRATCH

You can begin from a clean slate, and build your application from the very start. That way, you can customize it to suit your requirements. Drag and drop the required fields to get started

IMPORT XLS / CSV

Just import the spreadsheet or csv file that contains your collected data. Views and Forms with the corresponding fields will automatically be created on Zoho Creator. If you wish to expand the functionality of the application, you can add more fields and forms to it. This created application will also have your data in it, ready to be viewed, filtered and sorted conveniently. You can also add new records to it through the forms.





IMPORT MDB

Just as the spreadsheet, you can also import a Microsoft Access database (.mdb file) to create an application on Zoho Creator. You just need to run a utility that uploads your MS Access database, and creates an application out of it. The forms containing the corresponding fields will be created automatically, and will include the data already present on the MS Access database. This application can be altered and expanded with newer modules.

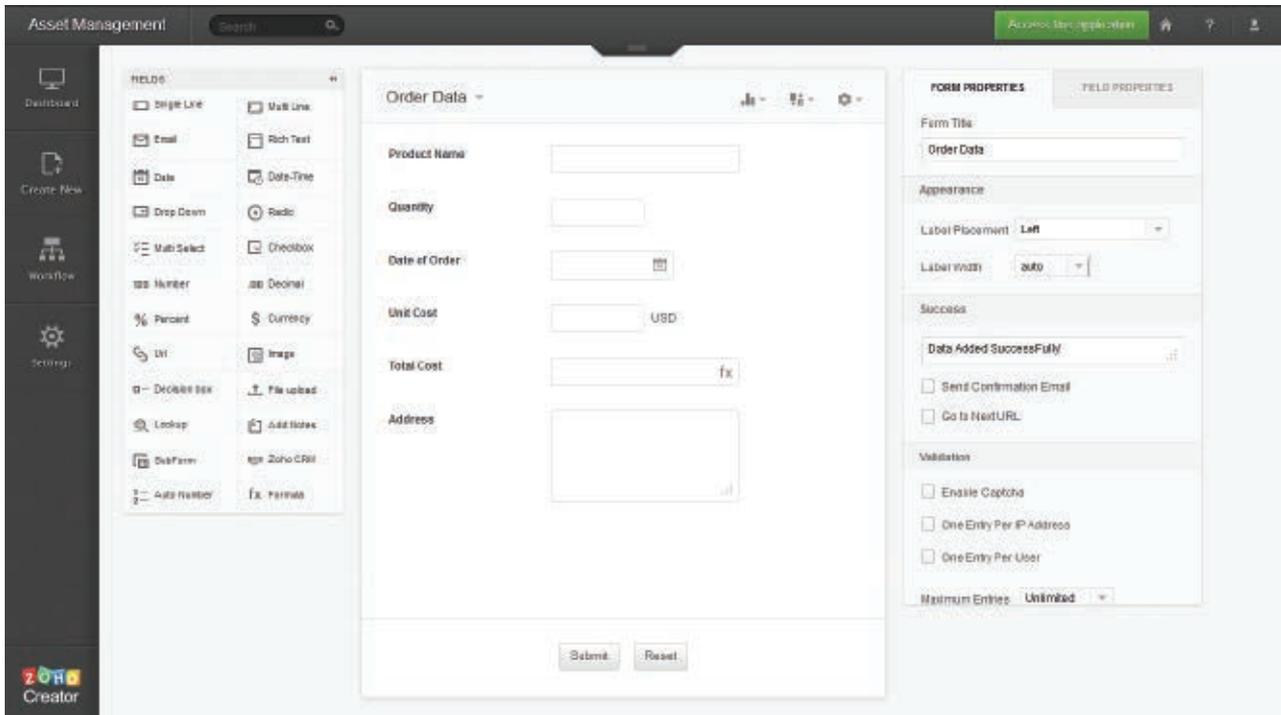
IMPORT FROM GOOGLE DOCS

Should your files reside on Google Docs rather than on your computer, you can use this option to import them directly, instead of having to download them first. Just authenticate yourself on Google Docs, and pick the file you want to import into Zoho Creator.



“Zoho Creator is incredibly ambitious. If there was ever a poster child for the Web 2.0 world, this is it!”

NETWORKWORLD



Zoho Creator supports 18 field (data) types and 5 advanced fields. Depending upon what your application should do, you can include fields simply by dragging and dropping them on the builder. Specify the field properties if needed, and you are ready to enter data into your application.

There are some basic fields which are commonly used, like text, number and email address fields. Then there are advanced fields like the file upload and CRM fields. Here is more about the advanced fields:

FIELDS (ADVANCED)

1. FORMULA

Formula field automatically calculates a value based on the input of other fields. Comes in handy on applications such as commission calculation and other monetary applications.

2. LOOKUP

“Lookup” fields are for creating a relationship between two forms. The lookup field on one form can fetch the data entered into a field on another form.

3. SUBFORM

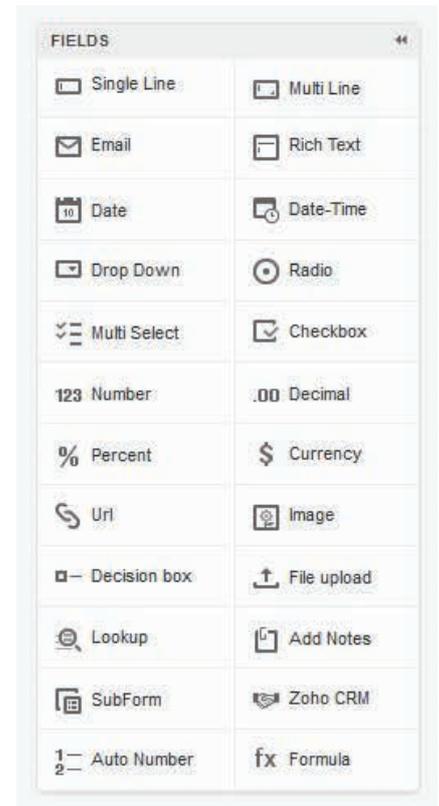
Users will be able to add data into the child form just by accessing the parent form. The entire child form will act like a single field on the parent form.

4. FILE UPLOAD

This field allows users to attach documents and files supporting the data they enter into forms. These files will be listed alongside the records on your custom tab, and can be downloaded whenever needed.

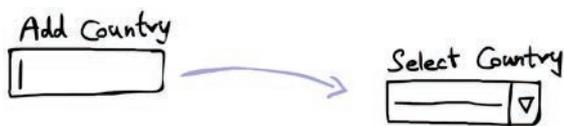
5. Zoho CRM MODULES

In Zoho CRM, your data will be categorized into several modules; Contacts, Leads, Potentials, Vendors, Users, Invoices and more. Using the Zoho CRM field, you can fetch data of any module from Zoho CRM, into your custom application. The value of a Zoho CRM module can be one of the fields on your application.



Forms are self-contained. They can function alone, and need no other form's aid to collect data. But an application is a collection of forms that are closely associated with one another. Two fields help to establish this closeness among forms.

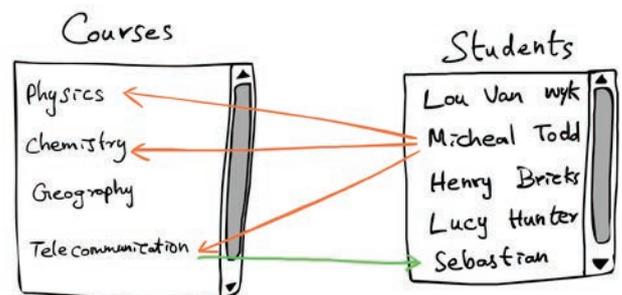
ONE-TO-ONE



Data entered into one form might also be used on another form. That is what the look up field achieves. A look up field on one form fetches data entered into a field that resides on another form. This relationship can be achieved between forms in the same application, or in two different applications.

Single-select Lookup field

MANY-TO-MANY



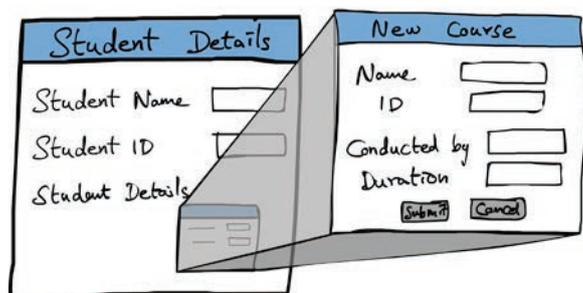
If we use multi-select lookup fields on both the forms, to lookup the *list of courses* and *names of students*, then we have established a many-to-many relationship. It denotes that a course can be followed by many *students*. And, a student can follow many *courses*.

Multi-select lookup fields on both the forms.

ONE-TO-MANY

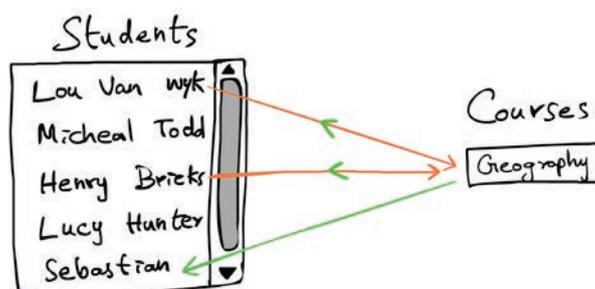
One-to-many relationship can be established using two types of fields; A subform field or bi-directional lookup field.

SUBFORM



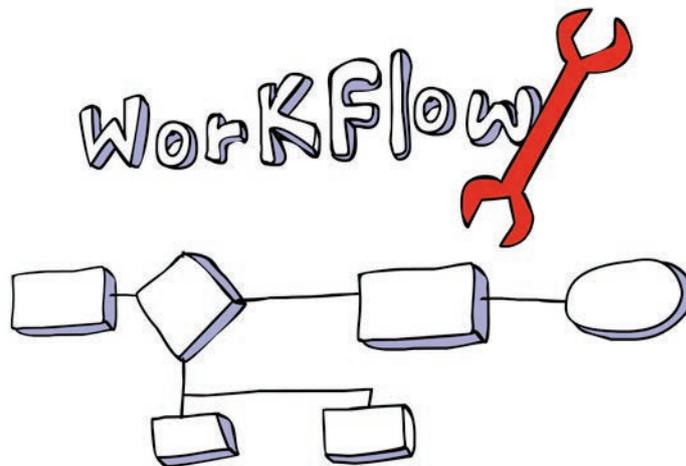
This is more of a Parent-Child relationship. One field on a main form (Parent form) can point to another entire sub form (Child form). This one-to-many relationship is achieved using *Subform* field. The child form is built first, and then the parent form. The subform field is added to the Parent form, and the Child form to be displayed as the subform is selected. You can choose a child form within the same application or from another application.

BIDIRECTIONAL LOOKUP



When we place the offered courses as a single-select field on the contact form, and place a multi-select lookup field on the courses form, then we have a one-to-many relationship between the two forms. A *student* can follow only one *course*. A *course* can be followed by multiple *students*.

Single-select lookup field on one form, and a multi-select lookup field on another form.



Workflow is the set of rules that you define, based on which of your data should be managed. You can add very unique conditions and rules that are unique to your business. Zoho Creator supports Workflow which ranges from simple if-else scenarios to user-role based sharing and approval modules, and these too can be inserted by dragging and dropping. Best thing about it is that you need not be a programmer to build the right custom application for you

ACTIONS:

You can configure more than 40 tasks to be performed at different stages of your application. For instance, When new records are submitted into a form, when a form is being loaded, when a user enters data into a field and so on. Two broad classification of these custom actions are,

Condition	Client functions	List manipulation	Map manipulation
if	hide show	create list	create map
else if	enable disable	add	put key
else	add append item	remove index	put all keys
conditional if	select	remove element	remove key
Data access	deselect	add all	clear map
add record	clear items	remove all	Web data
delete records	alert box	clear	get url
for each record	Reload form	sort	post url
for each list value	Miscellaneous	for each element	open url
fetch records	set variable	for each index	Xml manipulation
update records	call function		executeXPath
aggregate records	send mail		
	share unshare		
	add comment		

TYPE OF ACTIONS:

1. FORM ACTIONS 2. FIELD ACTIONS

FORM ACTIONS

Any task that needs to be performed at the form level, has to be specified within these cases. For example, the email address field in a form can be automatically filled with the email address of the person accessing it. These scenarios are form-specific, and are carried out whenever an action is done on a form (Adding, editing or deleting a record in a form.)

On Add:

Tasks defined within this case are executed when a user adds data into a form. As and when they click on the submit button, these tasks are carried out.

On Edit:

When editing a record, tasks within case are executed. For instance, in a travel request form, when a user edits his request, the approval modules can be hidden.

On Delete:

Tasks in this case are performed upon deletion of a record. The owner of the application might want to be notified whenever a record is deleted by users. Then he can configure an automatic email notification within the On Delete case.

ON ADD → Set Date Field's default value to the Current Date

ON EDIT → Enable Approval module to the Admin only

ON DELETE → Notify Admin when a record is deleted by the Users

FIELD ACTIONS

The other scenario is performing custom actions whenever an action is done on a field. For example, based on which of the two options he selects on a radio button, the next field can be displayed or remain hidden.

ON USER INPUT → When a User enters an email address, validate if it is a duplicate entry and display 'Email already exists' message

ON UPDATE → Notify User when his travel request is approved by his Manager

On User Input:

When a user enters data into a field, it can be analyzed and based on predefined conditions, and the specified custom tasks can be carried out.

On Update:

The value of a field can be set to any default value, initially. And, it can be modified later - or updated to a new value. When it is updated, set of tasks defined under this case can be performed. For example, when a travel request is raised by an employee, the approval status would initially be "Pending". But once the manager makes a decision, the value is changed to either "Approved" or "Rejected". In either case, the value has been updated, and the requester needs to be notified via an email notification.

CRITERIA AND VARIABLES

Whenever you are checking a condition, you need to define some criteria based on which condition can be checked. Criteria is a condition, based on which tasks are executed. To define a criteria, you just select the field whose value you want to check, specify what value should be checked against it, and the operator to compare the two.

For example, if you want to let users see only the data which they have entered into the database, then the criteria you set is:

`input.Added_User == zoho.loginuser`

```
IF (INPUT.ADDED_USER == Zoho.LOGINUSER)
{
  DISPLAY ONLY THOSE RECORDS ENTERED BY THIS USER
}
```

CONDITIONAL STATEMENTS

Conditional statements mostly are the if-else statements. You define a condition, and two sets of tasks; one to be executed if the condition holds good, and the other if the condition fails. The second set of actions is optional.

For example, you check if it is Christmas Eve today. If it is, then you trigger a Christmas greeting to all your contacts. If it isn't Christmas Eve, then you do nothing. This condition is checked everyday, but holds good only on one day of the year, and the email is sent on Christmas Eve only.

```
IF (TODAY IS CHRISTMAS EVE)
{
  SEND GREETING EMAIL TO ALL USERS;
}

ELSE IF (TODAY ISN'T CHRISTMAS)
{
  DO NOTHING. CHECK AGAIN TOMORROW;
}
```

HIDE/SHOW & ENABLE/DISABLE FIELDS

ARE YOU BRINGING ANY GUESTS?
 YES NO

HOW MANY?
2

THANKS FOR SAVING US SOME MONEY!

ARE YOU BRINGING ANY GUESTS?
 YES NO

At times, some fields might have to be hidden to users. As in a questionnaire, based on the option users pick to the gender question, you can display two different sets of questions. Another instance is, approval modules, which should only be visible to managers.

To prevent users from modifying default values of a field, it should be disabled. For example, in an event registration form, the user should be able to see the date, but not alter it.

MORE ACTIONS...

EMAIL NOTIFICATION

Apps can be shared to any number of users. To see the data entered by them, you need not access the App every time. Stay updated on what data is entered into the forms, by configuring email notifications. Whenever a user submits data, you will instantly receive it as a notification email, in your preferred inbox. It can be sent to multiple recipients too.

CUSTOM ACTION BUTTON

When clicked on, the custom action button performs any action that you specify. Just like the add and delete buttons, this too is displayed on the View. Select the records that you want to operate on, and click on this button.

If you want to thank customers who have made this month's payment, define a custom button to trigger an email. You then select the records, and click on this button. The email will be sent to all those contacts you selected.

FETCH RECORDS FROM ONE FORM AND DISPLAY IN ANOTHER

If you have multiple forms to manage your customer contacts, their purchases and payments, not every form needs to have all the fields. The contact form alone can have the name and email address. The other forms can fetch data from the contact form, and display it on their View. By this, there will be no duplication of data in a database.

DYNAMIC PICKLIST

Of two picklists, one lists categories, and another lists subcategories. When a category is picked, only those subcategories of that main category should be displayed in the second.

The first picklist has list of countries, and you select U.S. Then only those states in the U.S. should be listed in the second picklist.

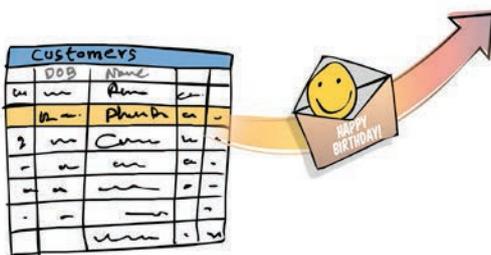
If the user cannot find his country or state, he should be able to add it to the list first, and then select it. New values can be dynamically added by clicking on the + button beside the picklist.

Schedules are the automatic execution of those redundant tasks, whenever they should be, with the set of data that it needs to be executed upon. To configure schedules, you just need to tell it what to do, and when to do. It will be periodically executed, without your manual intervention.



FORM SCHEDULES:

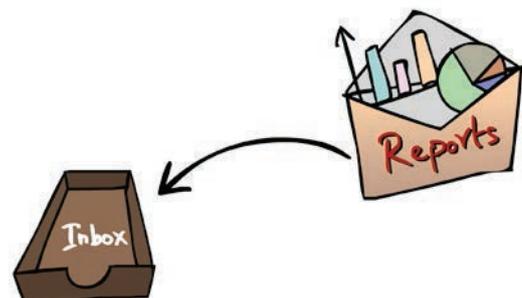
Form Schedules depend on the date field on your form. They are executed based on what its value is. The condition has a date, which is compared with the values of the date field on every record of a form. Whenever the condition is met, the defined tasks are executed. The same can be executed if the form has a date-time field instead of the date field.



SCHEDULE BIRTHDAY GREETING TO YOUR CUSTOMERS

REPORT SCHEDULES:

Report Schedules are based on a View of your application. When a configured report schedule for a particular View is executed, an email will be triggered to all the specified email addresses. This email will have the reports of all the data stored in that View. With Report schedule, no custom actions can be defined. It is exclusive for emailing reports.



RECEIVE TRAVEL EXPENSE REPORT FOR EVERY MONTH

CUSTOM SCHEDULES:



Custom Schedules is immensely flexible and powerful, because you can perform any validation using scripts, on any form or view. In short, you can do anything you would normally be able to do with the script-builder. All user-defined actions fall under custom schedules.

Making smart decisions is the purpose of collecting data. To analyze data and predict trends, Zoho Creator provides options to drill down as you want. By default, a View lists all the data entered into it, in the order it was entered. The following Data analysis options makes it easier to order and categorize data in the desired order.

SEARCHING

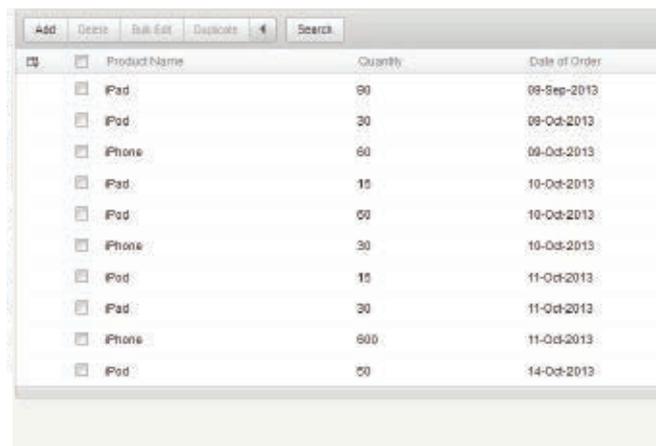
Data in Zoho Creator is easily searchable. You can search for, and find that tidbit of information from an entire warehouse of data, in no time. Search by value of any one or multiple fields on your form, so that you can narrow down accurately.



Product Name	Quantity
iPad	90
iPhone	60
iPhone	30
iPhone	600
iPhone	60

SORTING

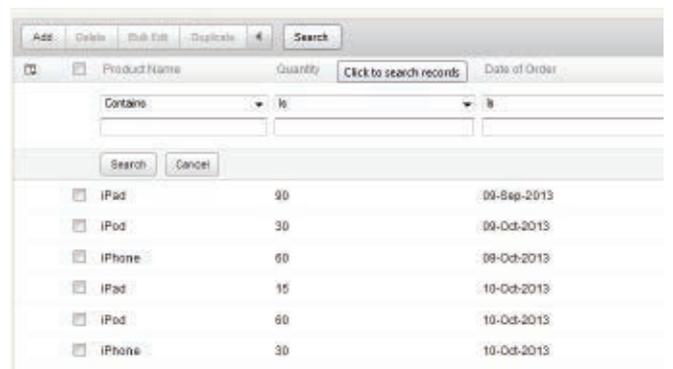
With sort functionality, you can rearrange data in either ascending or descending order, by any one or multiple columns. That way, you can ensure that the most relevant data is arranged at the top of the view.



Product Name	Quantity	Date of Order
iPad	90	09-Sep-2013
iPod	30	09-Oct-2013
iPhone	60	09-Oct-2013
iPad	15	10-Oct-2013
iPod	60	10-Oct-2013
iPhone	30	10-Oct-2013
iPod	15	11-Oct-2013
iPad	30	11-Oct-2013
iPhone	600	11-Oct-2013
iPod	20	14-Oct-2013

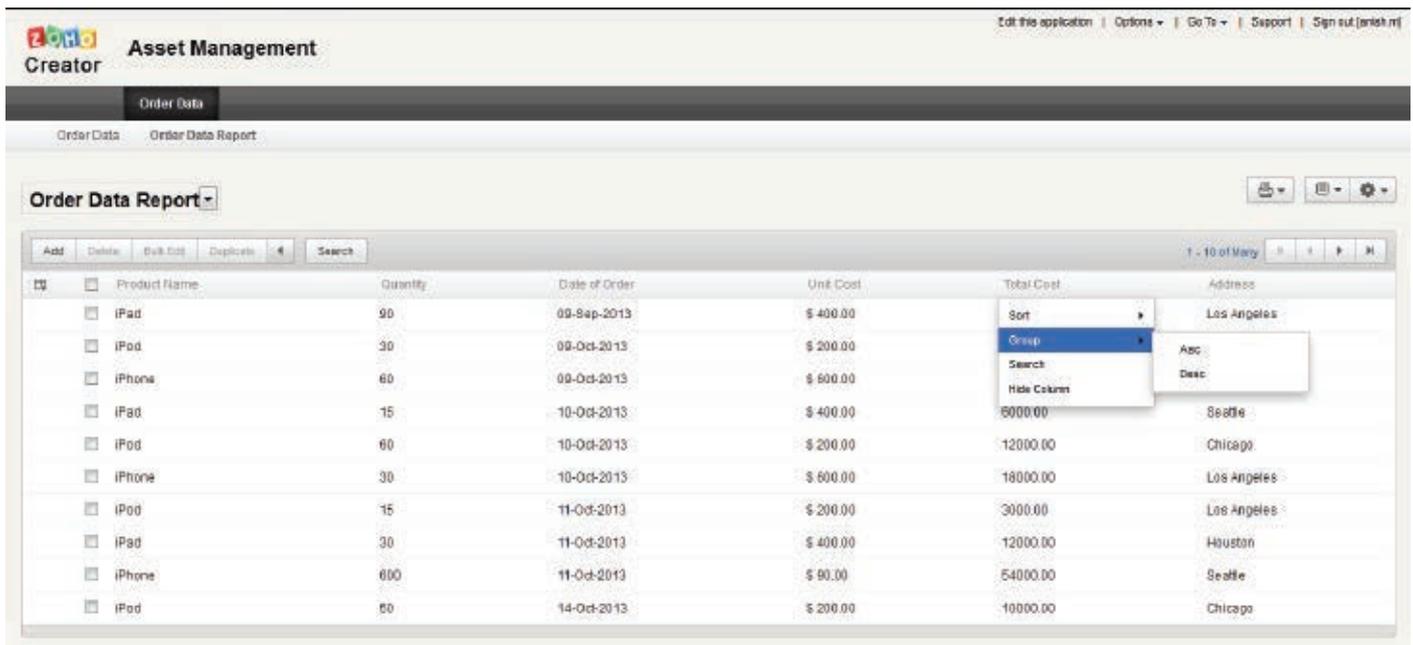
FILTERING

When a View is accessed, it displays the entire list of data in the database. Filters are used to restrict the records displayed on the View. For example, you can display only those records entered between a time frame. Filters will be automatically created for dropdown lists, multi select fields, look-up fields and Date-Time fields. You can create your own ones as well.



Product Name	Quantity	Date of Order
iPad	90	09-Sep-2013
iPod	30	09-Oct-2013
iPhone	60	09-Oct-2013
iPad	15	10-Oct-2013
iPod	60	10-Oct-2013
iPhone	30	10-Oct-2013

GROUPING

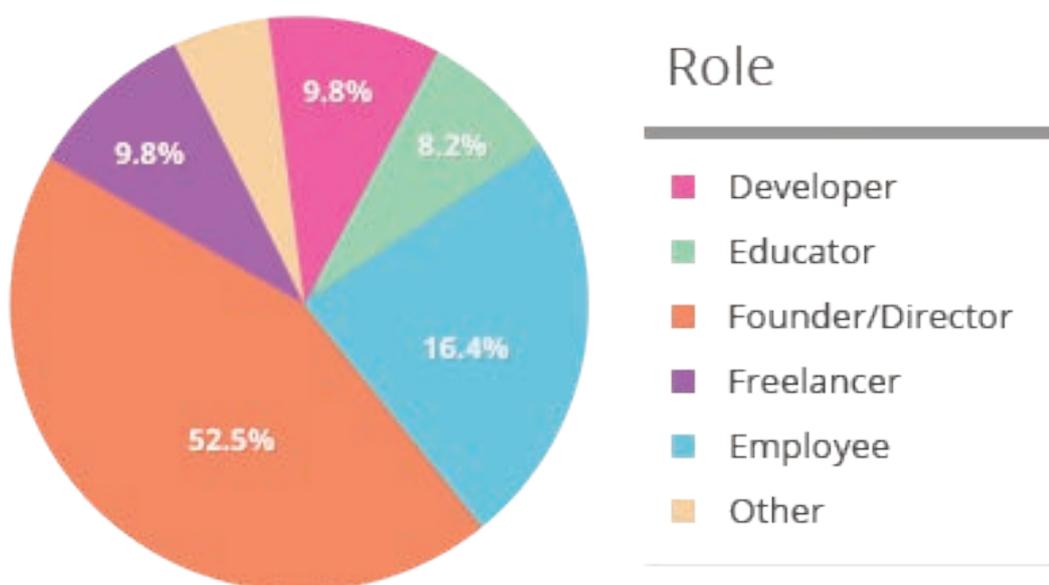


The screenshot shows the Zoho Creator Asset Management interface. At the top, there's a navigation bar with 'Asset Management' and 'Order Data' tabs. Below that, there's a search bar and a table titled 'Order Data Report'. The table has columns for Product Name, Quantity, Date of Order, Unit Cost, Total Cost, and Address. A context menu is open over the 'Total Cost' column, showing options: Sort, Group, Search, and Hide Column. The 'Group' option is highlighted. The table data is as follows:

Product Name	Quantity	Date of Order	Unit Cost	Total Cost	Address
IPad	90	09-Sep-2013	\$ 400.00		Los Angeles
IPod	30	09-Oct-2013	\$ 200.00		
iPhone	60	09-Oct-2013	\$ 600.00		
IPad	15	10-Oct-2013	\$ 400.00	6000.00	Seattle
IPod	60	10-Oct-2013	\$ 200.00	12000.00	Chicago
iPhone	30	10-Oct-2013	\$ 600.00	18000.00	Los Angeles
IPod	15	11-Oct-2013	\$ 200.00	3000.00	Los Angeles
IPad	30	11-Oct-2013	\$ 400.00	12000.00	Houston
iPhone	600	11-Oct-2013	\$ 90.00	54000.00	Seattle
IPod	50	14-Oct-2013	\$ 200.00	10000.00	Chicago

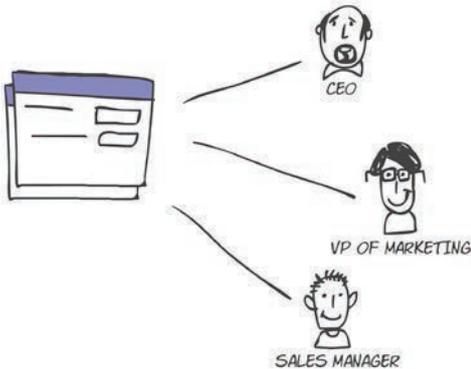
Grouping makes large volumes of records easily manageable. Records can be categorized based on the value of any field. For instance, if your records are the details of students in a college, you could group the records based on the field of study, so that all Science grads are grouped together and listed consecutively. Likewise, the other streams too, making it more organized.

REPORTING



Reports graphically display data that is otherwise-monotonous. Visually appealing data is easier to interpret, and helps you arrive at better conclusions, faster. With Zoho Reports, you can plot pivot charts and tables based on the data you have collected, and share the reports with people. Reports are customizable to suit the color scheme of your websites which you embed them on.

Sharing your App



Forms are always private to begin with. To enable others to enter data into your forms, you'll need to grant them access to the form. That is what sharing is about. Options are, you can share it with individuals by specifying their email addresses, or with a group by specifying the group email alias, or make it public so that anyone around the globe can enter data into it. Public forms can be embedded on blogs and websites too.

Zoho Creator offers a range of options and access permissions, enabling you to selectively share even modules of an application, like a particular form or view, instead of the entire application.

We're with you all the way!



A warehouse full of materials to help you get to the bottom of Zoho Creator.



Gallery of videos that walk you through the basics of Zoho Creator.



Get your concerns addressed by a team of experts who share app-building experiences and expertise.



For questions on App Building , please contact:

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