**SAP BUILD**

Welcome to our SAP BUILD workshop!

This is a first-time tutorial, so please keep your mind open. It's a work in process.

First things first……….

**What's SAP BUILD?**

Build is a social platform created to allow anyone without former experience in UI design (user interface) to make app prototypes. Using BUILD, you can test your idea for the design of an app without having to code, using actual data and sharing your design with possible users (user research).

This tool comes incredibly handy for different kinds of people. In the case of a small business owner it could allow to evaluate if his design for a prototype will be accepted by his possible customers and it could help in the gathering of feedback from his peers. It's basically created to be of help in UX design testing.

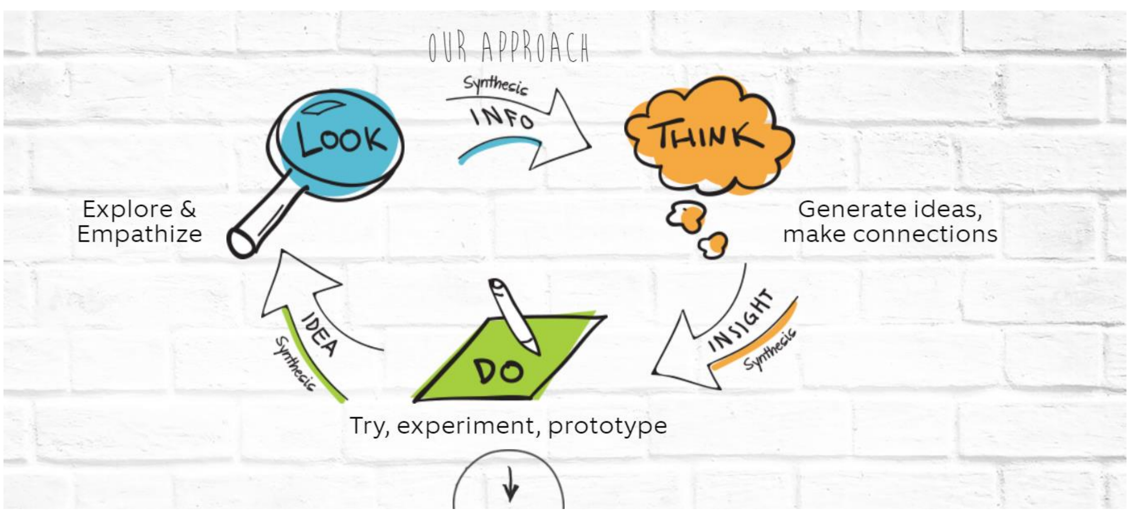
**If you're wondering what design thinking is……**

Design Thinking with SAP is a new, fresh way of engaging with SAP to find human meaning and use for technology. The flexible and collaborative Design Thinking approach will help you think differently about your business, address known pain points, explore the unknown and innovate.

If you like the subject, please check the video below. It'll give you a fun intro the subject .

https://www.youtube.com/watch?v=vvu5mgocfjg

The following image could describe the process of design thinking in one image.




If you're a developer, BUILD lets you export the code that results from the created prototype (back end). This way they can build the app in a faster way. BUILD could be use as a shortcut to define the basic structure of the app.

**If you like the subject, you can watch an introductory video by SAP BUILD themselves.**

https://vimeo.com/sapux/build

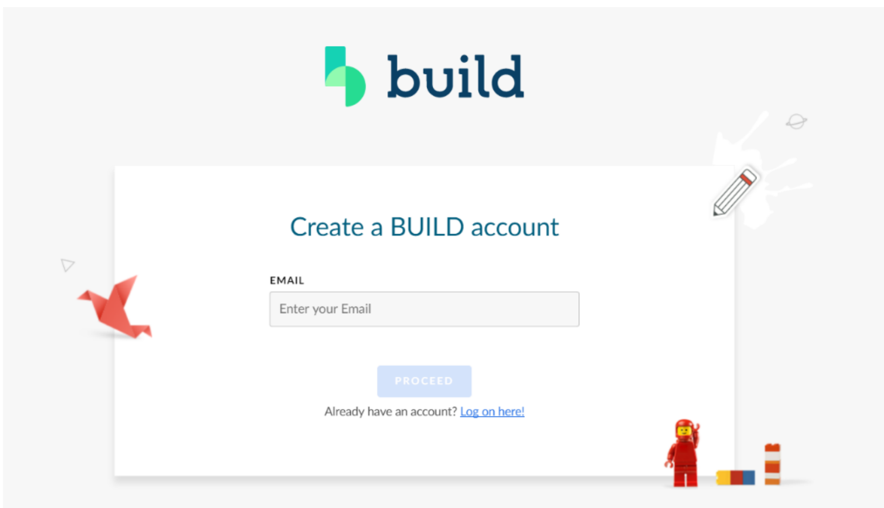
Convinced yet? Let's begin!

The great thing about BUILD is that is open sourced, and cloud based. So, you can use it on any pc with windows or with MAC OS. You just must sign in to their online access. However, this type of tool are designed for windows software, so I would recommend pc for this tutorial.

Go to the following link:

https://www.build.me/splashapp/

First, you'll have to create a BUILD account

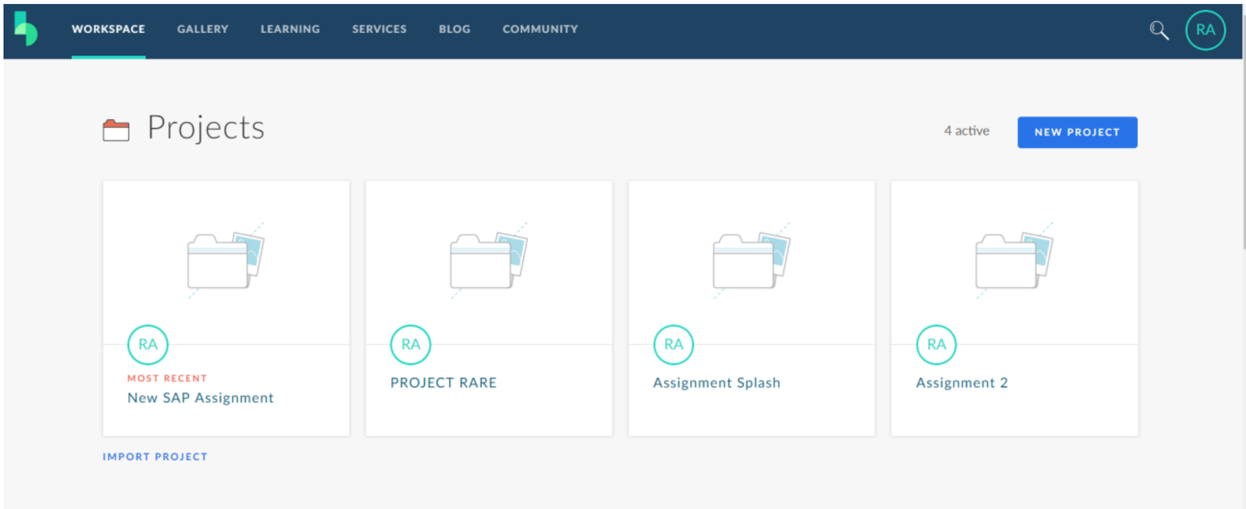



You can use your Dal-email to start it.

They will ask you to create an account. Input the following information to create an account.

- First name
- Last name
- E-mail
- Password

Once you've been authenticated BUILD will let you start. You'll begin at the center of the workspace. It looks something like this.



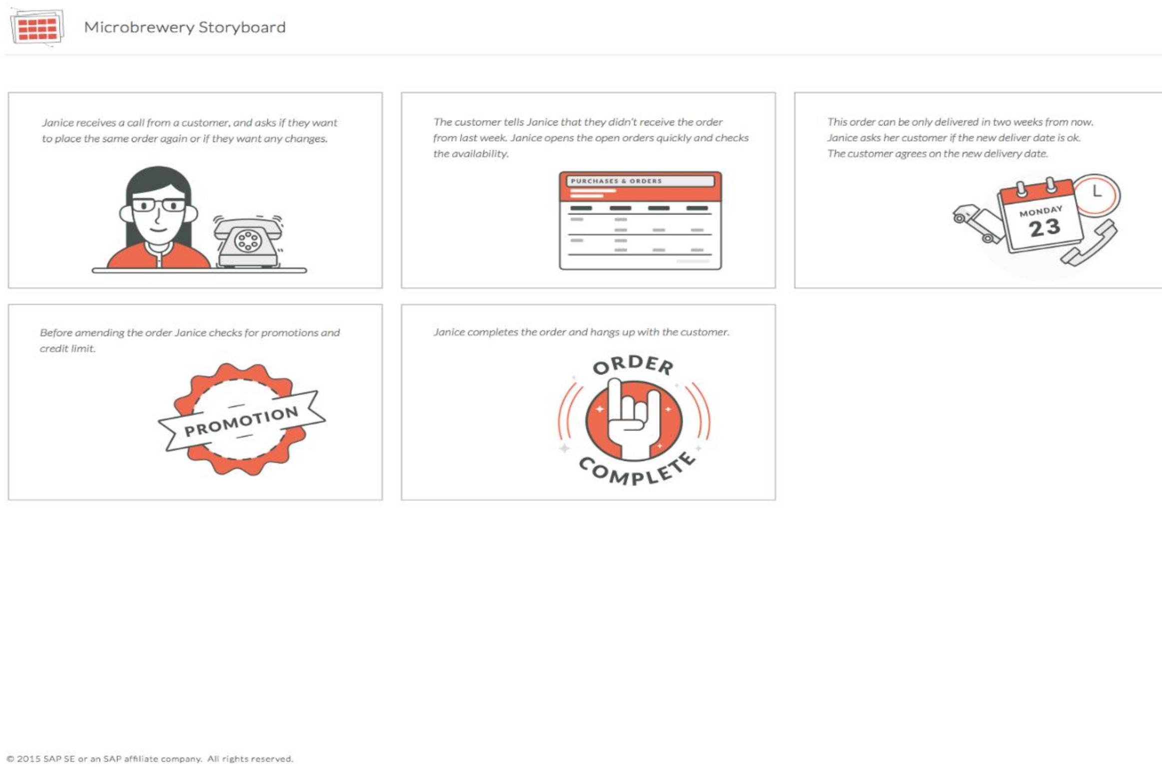

On this workshop, we'll be using BUILD as to create a template for a small company. I've always like breweries, so we'll use an example of a small brewery that needs to create an application to view customer orders and detailed information on them.

Take in count that SAP BUILD is directed to businesses and most of the interfaces that you'll be able to create always have the goal of managing information within the company.

**A little bit of history. –**

On this tutorial we'll look at the story of Janice. She works at a microbrewery as a CRM (customer relationship manager). Why Janice? well, that's the first part of our process. To create a persona who we'll be designing to. If you wander what a persona is. Don't worry, it will be explained below on the workshop. Trust me, it will make sense.

On this graph we focus on Janice's average routine. It helps to understand how a customer app would help her.




After you understand her daily routine, we can start working on creating a persona for her.

## Defining the user. -

### Create a Persona. -

A persona is a composite character. This is the first part of the process of designing a valuable app. If you don't understand who you're designing for. The app won't meet the expected needs.

### How to create a persona?

If you wonder how to define the main characteristics, needs and values of the group of people your developing for, here are a couple of basic guidelines:

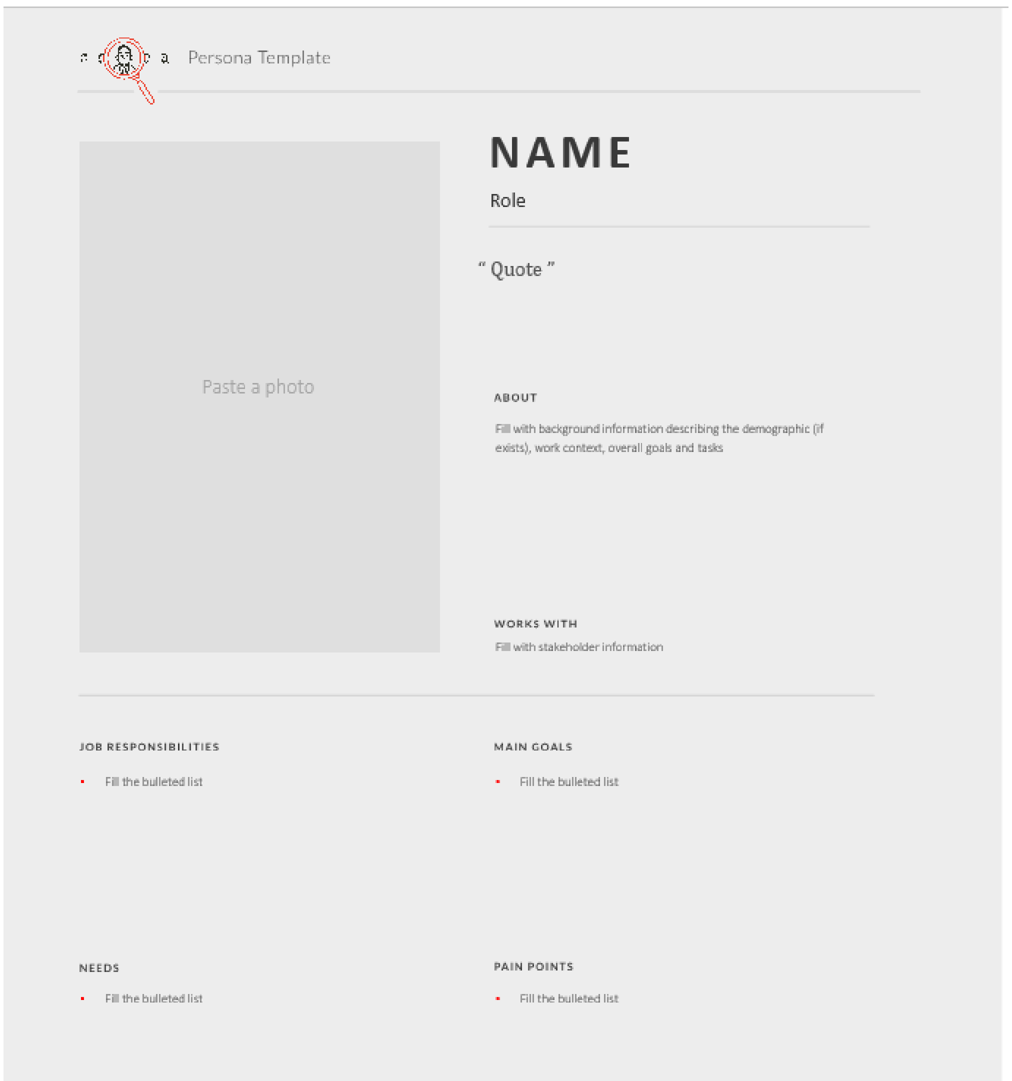
- Give the persona a name, and add a photo or sketch that illustrates that persona's characteristics.

- Create a short quote - real or pieced together from various real quotes - that illustrates the user's goals or motivations.
- Outline needs, goals, characteristics and tools and include anything else that might be important for the design of your solution.
- Validate your persona with your end users.

If you enjoy videos. Below you can check one that explains the whole deal in a nutshell.

https://vimeo.com/183363510

As part of our workshop I'll post below a basic template for a persona. If you're interested in knowing more about the subject. There's a SAP .pdf file on the subject in my GitHub account. It gives you the main steps on how to create one and how it would look like.



That is the usual template that you can use to develop a persona as to understand the main requirements of the group of people this app will be targeted to. Below you can see how Janice's persona looks like. Keep in mind how the template focuses on her needs, goals, responsibilities and main characteristics. These are the main characteristics of people like her, that work in similar or related industries

Persona

# JANICE

Customer Relationship Manager

"There are always weekly changes that I have to deal with."

### BACKGROUND

Married to Jack the master brewer

15 years with this company

### STAKEHOLDERS

Production Manager, Warehouse Personnel, Distribution Personnel

### JOB RESPONSIBILITIES

- Take customer calls
- Place orders on behalf
- Expedite late deliveries

### MAIN GOALS

- Keep financial exposure within credit limit of customers.
- Explain current promotions to customers.

### NEEDS

- Simple one stop shop to give a 360 view of the ctustomer and any ongoing and past activities.

### PAIN POINTS

- It takes a long time to complete an order.
- Too many transactions to use for the different tasks.

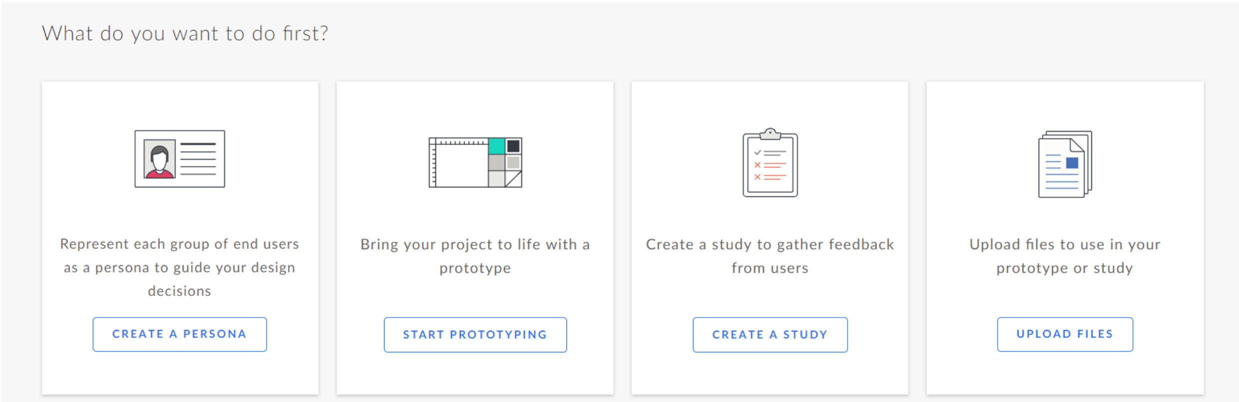
### COMPETENCIES

| | |
|---|---|
| Catual User | Power User |
| Proactive | Reative |
| Work in Team | Lone Fighter |
| Global Focus | Local Focus |
| Innovative | Conservative |

*Sometimes competancies are **not necessary to fill out.** If you don't have the data you can leave this section blank.*

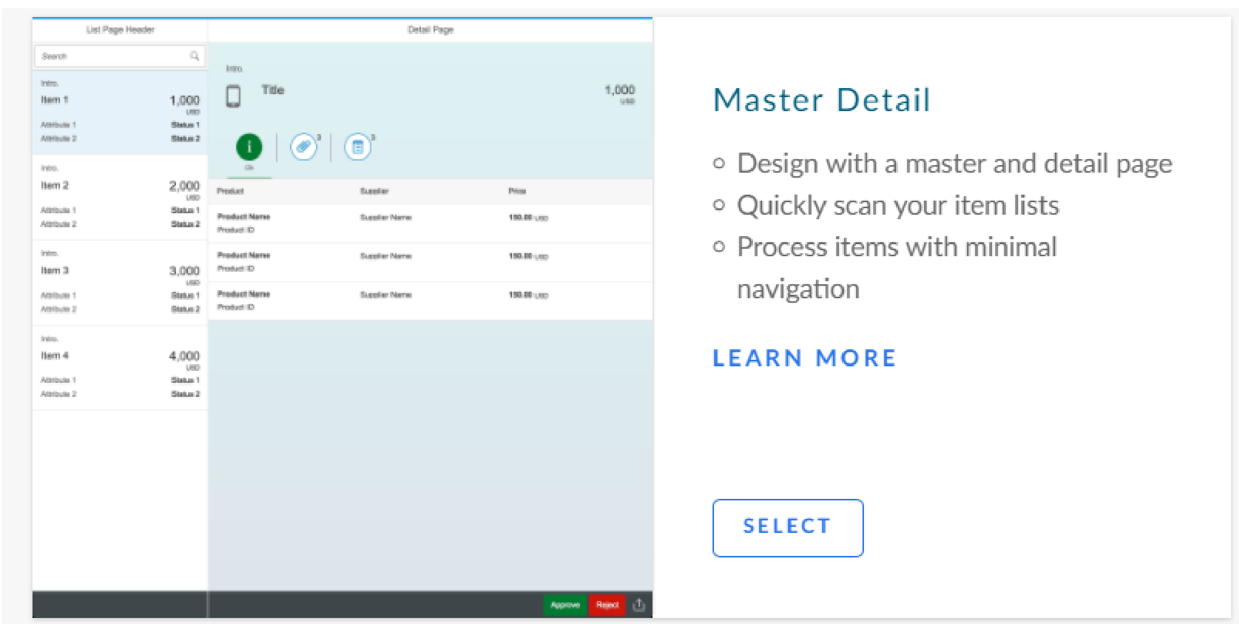
**Creation process. -**

**Step 1: Start Prototyping**




Once you pick the prototyping image, you'll have selection of various possible activities. Choose start prototyping.

After doing so, you'll get a different screen on the type of format you wish to use to create your interface's prototype. For this exercise, we'll be picking the master-detail template.

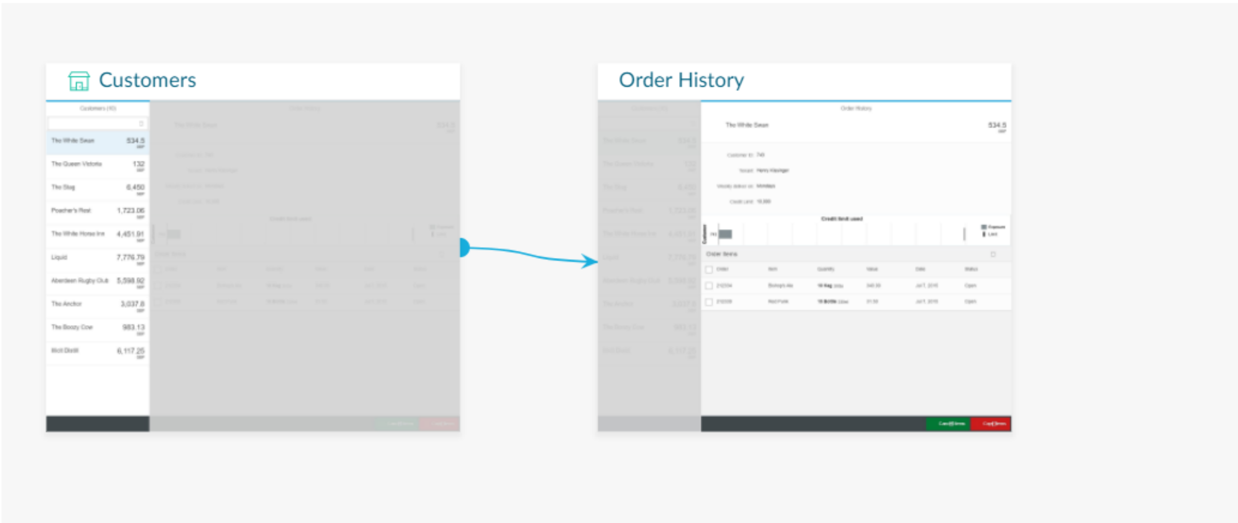



When you do so, you'll have to types of templates, one name master and the other named detail. Go into the master one and change its name to customer.

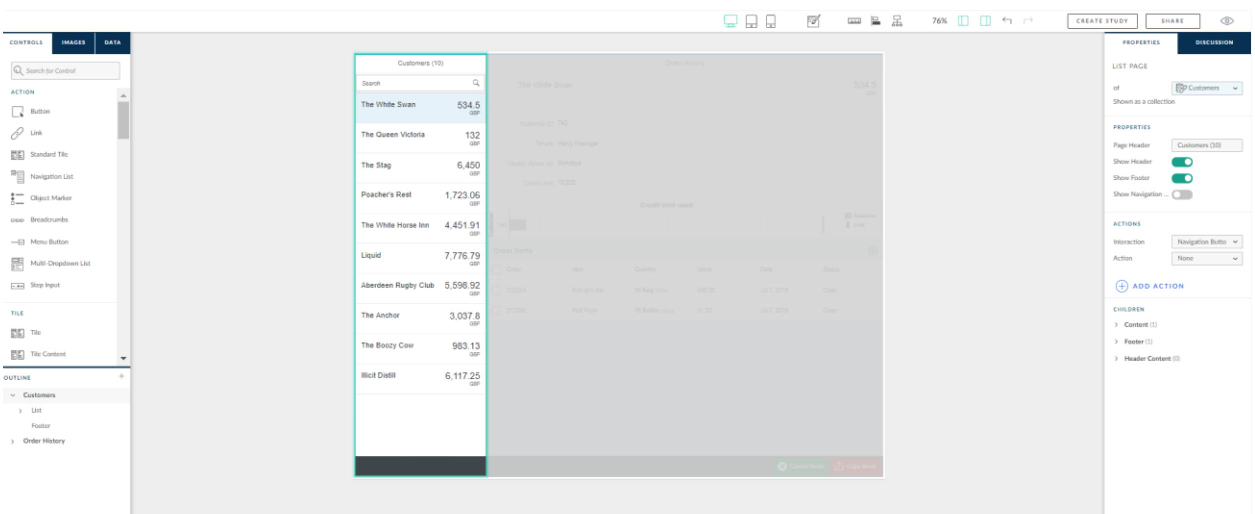
Click into it, to be able to edit it.

**Step 2: Master page**

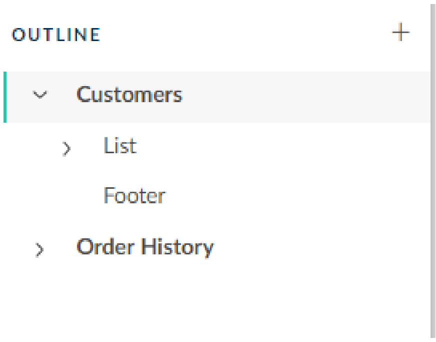
In this page, we'll create the customer's list. By default, the master page will come up first. You can rename it "Customers" by clicking on the right side "options", it will let you delete it or change its name. Then put your mouse on top of it to be able to edit it.




If you choose customers, it should look something like this.



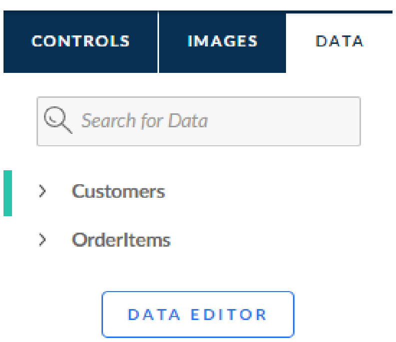

On the bottom left, you'll have a small box named "Outline". Keep an eye on it. It shows you the entire structure of your work. Its very important, since all changes on the attributes or formatting of the templates will be done from this part.




From this part, you'll modify from the type of text that is presented in your template to the links that are created to the next page (detail page). So always make sure everything is on the right order. At this point, we are on the Customers 'page which is form of two parts. As you can see there is a list and a footer.  We'll dig down deeper into this two part as the workshop progresses.

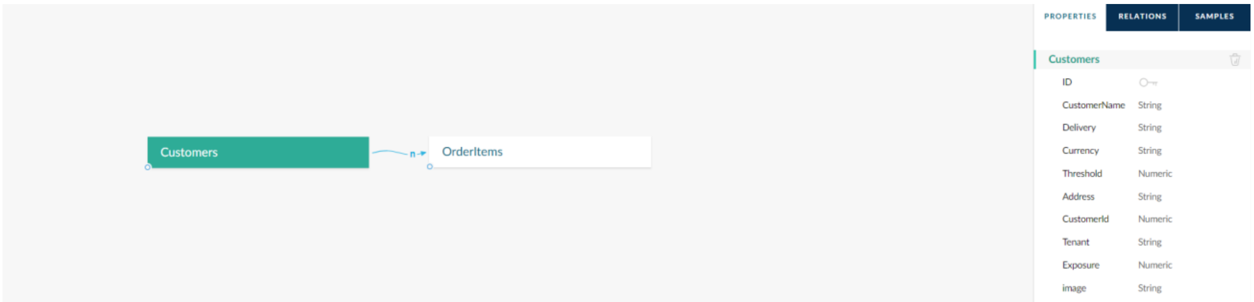
**Step 3: Upload a sample data set**

On the left side, there a box with three tabs that help you select from a variety of tools to modify the template. On this part you can also upload images as to modify your UI design and upload a personal data set to work with. BUILD is very good at this, since it gives you a set of practice data sets and the capacity to work with your own data.

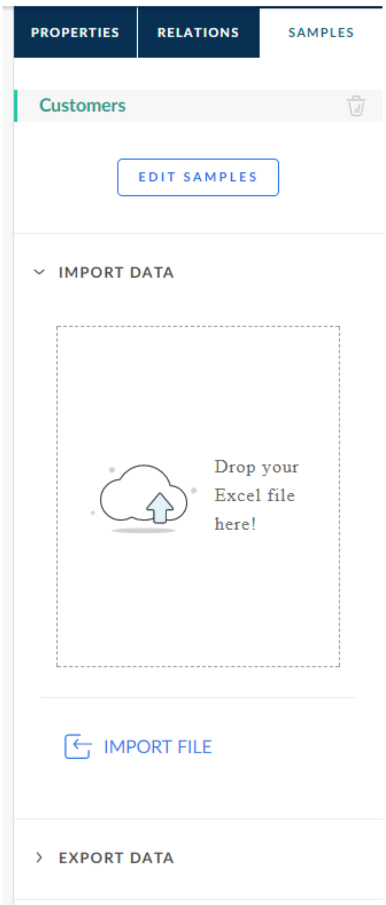



On this side we can go to Data Editor and upload a practice data set that will be perfect to show you the advantages of SAP BUILD.

If you click on the button "DATA EDITOR", you'll get a new screen with the information regarding the data sets relationships.



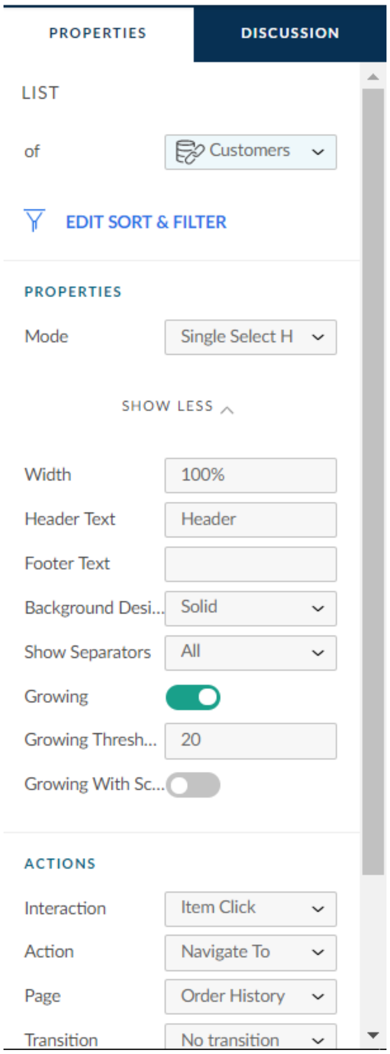

Given the focus of this tutorial, we won't go that deep into the relationships of the tables, but if you are interested in the subject, you can always read about" *relational databases".* On the right side, there is a button called "samples", click on it and upload the sample data set for this tutorial.




The samples tab is useful if you want to use your own data or even if you want to export data from a project that has been shared with you, you can do it from here. Once the data set has been uploaded you can press the top left button to go back to the workspace.

**Step 4: Modify the customer's list**

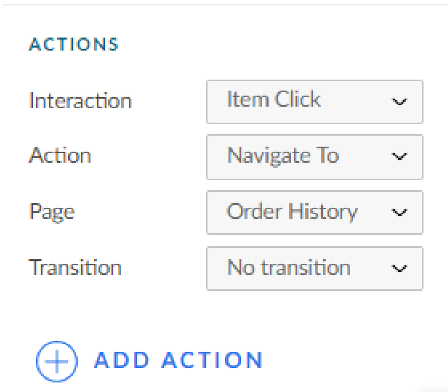
When you go back to the master's page, you'll see that the template has taken the information and has been adapted to the format shown by the template. However, this is a very general format. We'll modify this next. This is possible to do, using the outline box. Set up your mouse and click on the list section (Outline). Once you do that, the right screen with the settings will show you the details of the data that you are presenting on the list. It should look like the image below.




This is set up by default, but needs to be modified to reflect the information that you want. If the data set was uploaded properly, you should be able to select on the top of the right the column of customers. If you do so, the list of customers will show up on the template.

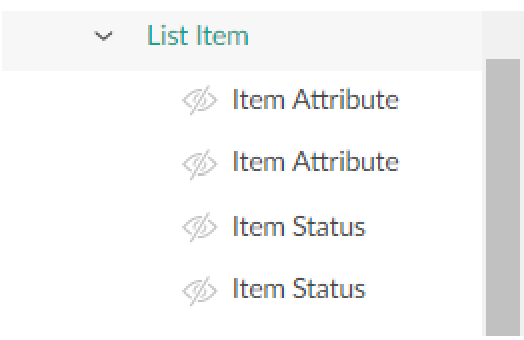
**Step 5: Linking Master template to Detail template. -**

This part is incredibly important, so make sure you got it right. On the list's settings make sure that you go to the bottom and set up the attributes for each button. All of the items on your customer's list are the companies who you procure to, right? You want to make sure that whenever you press one of these clients, all their information is presented on the right side. To be able to do so, you must link each "button" or customer to the template you want to use. On this case we'll be using the detail (responsive) template.




This is how that part should look like. We're setting up the type of interaction for each button and where to navigate to (where to go when clicking). Make sure you leave this page well set up.

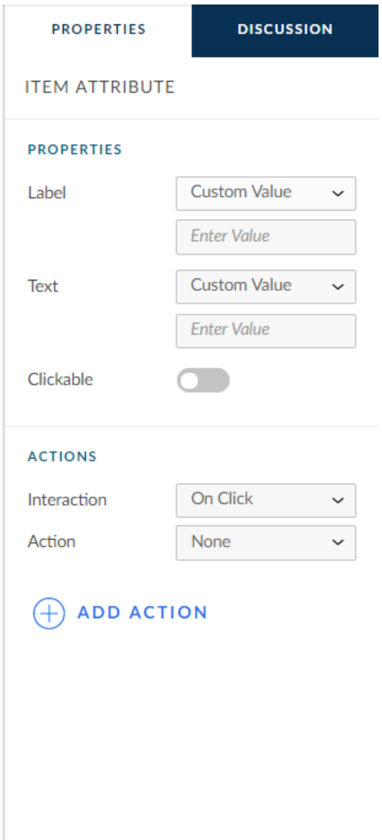
**Step 6: Customers List formatting**




If you click on the List item section, you'll deploy all of the item attributes that are presented in every customer of the List. In this case, every customer box has more detailed information that what we need.

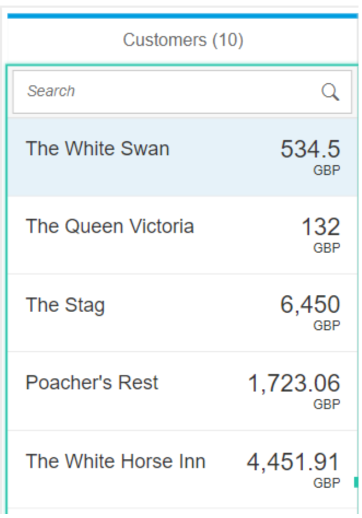
We'll proceed to get rid of some of these attributes that we do not need. To do so, just click on each item attribute and/or status. Immediately, the right detail screen should appear to reflect the settings of that element.

Proceed to modify as to get rid of some of these elements that we are not using on this template. Remember, they are very useful, but on this specific case. We do not need them.




This is how the right screen should look like. The label must be set up to custom value and don't enter any text. That way we'll get rid of the extra text. If you need to input any extra information these attributes can come in handy.

Make sure you do this with the rest of the attributes of the list.



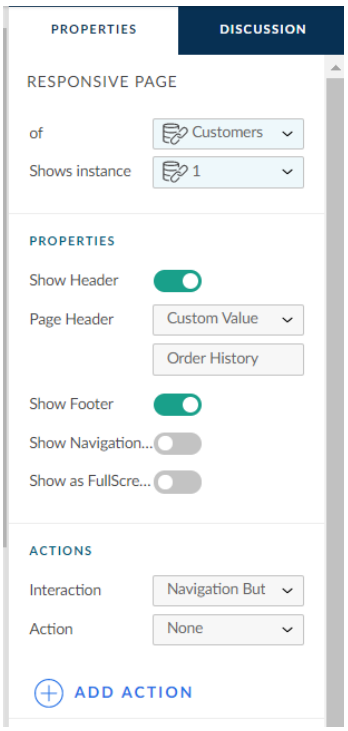

The final list should look like this. Only show the customer, the amount of money and currency.

**Step 7: Detail page. -**

On your Outline, select the detail (responsive page) and rename it "Order History". If you properly selected the detail responsive page, you should have an empty page. If not, you can always go back to "Outline" and press the "+", it will deploy a selection of page's for you. Select detail (responsive) and a new blank page will be set up for you. If this is the case, make sure you go back to step 5 and link the master page to this new detail page, rename it and move back to step 8.

**Step 8: General setting of the Detail page. -**

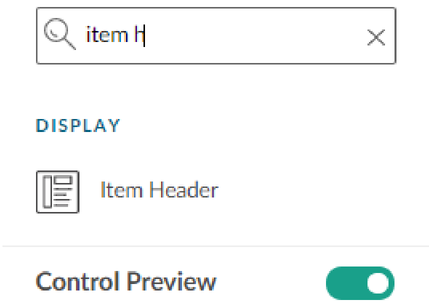
If you click on Order history (Outline", you'll get to you right the general settings page. It should look like this. Make sure you select the customer's list and number of instances "1". On the page Header input the name "Order History".




Make sure you select show footer and leave the navigation button on "none". Since this page will be used as to only show information.

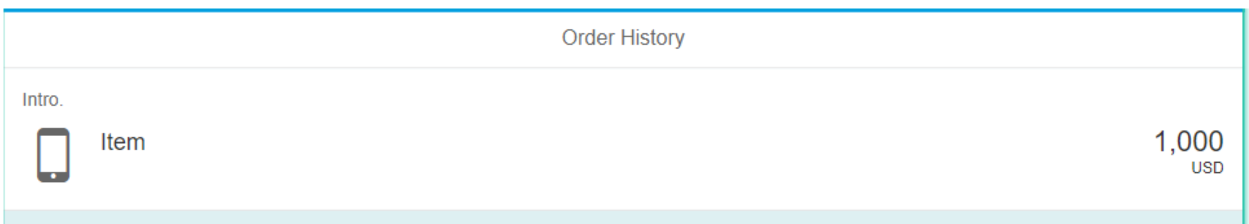
**Step 9: Item Header. -**

So far, on your page there should only be a title or header that comes with the page settings by default. Now, we'll use the controls tab to your left to start adding different objects to this page. Use the search bar to find the "item header" object.

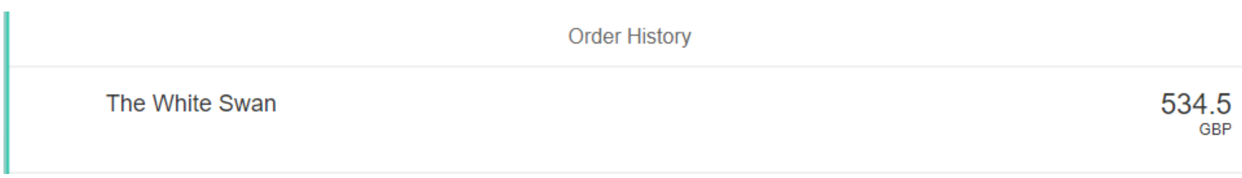



Once you see it on the screen, you can easily drag and drop the object on your detail page screen. This great about BUILD, it simply allows you to modify and play with the objects you select.

If you do so, you should get something like this.



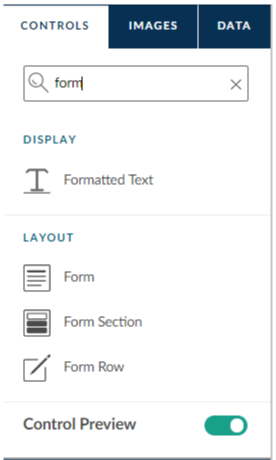

We'll modify this next, so it looks like the way we want to. If you click on item header, you can see the settings for the header and start modifying each part. We want to get rid of the currency and money. Also make sure to take out the iPhone image. Once you do that, it should look like this.




We're looking to show the customer's name, money amount and currency. That's all. Once you're finished with that, we'll move to the next section.

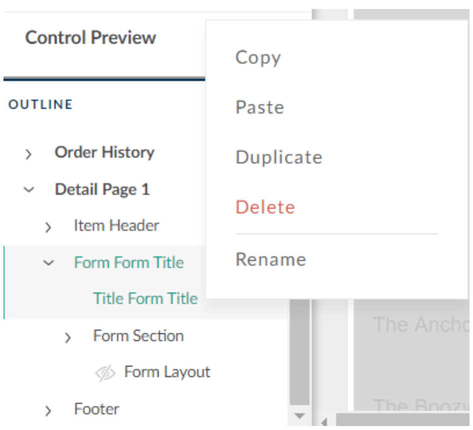
**Step 10: Form**

**Go back to the control tab and search for "form". It should look like this.**




Pick the first one. Just drag and drop it. We'll work on modifying this item next.

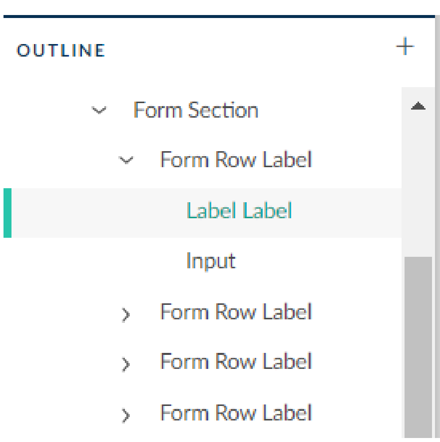
The first modification that we'll do on this new element, is to take out the title page. You can easily do this, by deleting it.




Once you get read of it. We'll start modifying the rest of the form. We're going to use this to show the detailed information of each client.

Go to the Outline, and click on the "Form Section", it will deploy 4 different labels. If you click on this section, you'll get a Form row Label, and if you click on it again, it will bring you to a Form label label. This is the most detailed object within this part.

So you get an idea, you can check this out.




This is the most granular level of the form and if you click, the right section with the settings, you'll be able to modify.

What we want to do in here, is to change word "label" to show the different customer details. On the part where it says "text" , we can input the name for the label. Make sure its always set up on "customer value".

We want to show the following elements:

- Customer ID
- Tenant
- Weekly deliver on
- Credit limit

On the Outline section, if you check below label, you'll find "TEXT". Click on it, as to be able to link the exact information that you want to present which each label. This information will be taken from the data set that we were given. You want to link it the following way

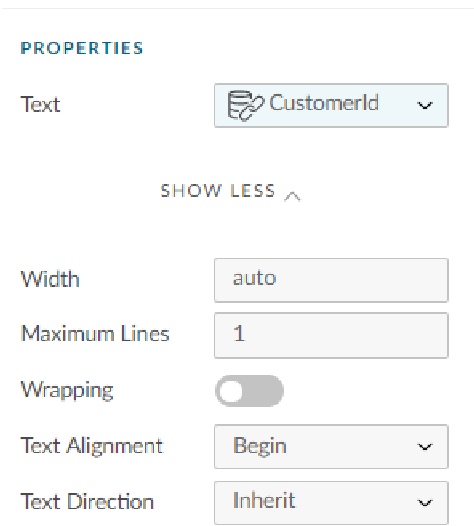
Customer ID: customer ID

Tenant: Tenant

Weekly deliver on: Delivery

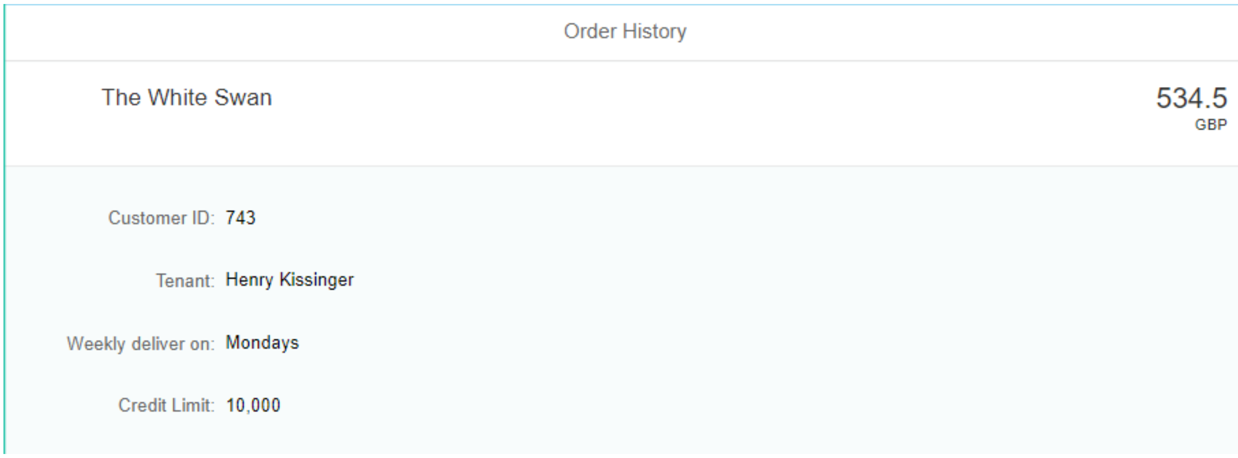
Credit limit: Threshold

As to present an example of this part, I'll show you the customer ID link.




Make sure you do this, with each element of the data set.

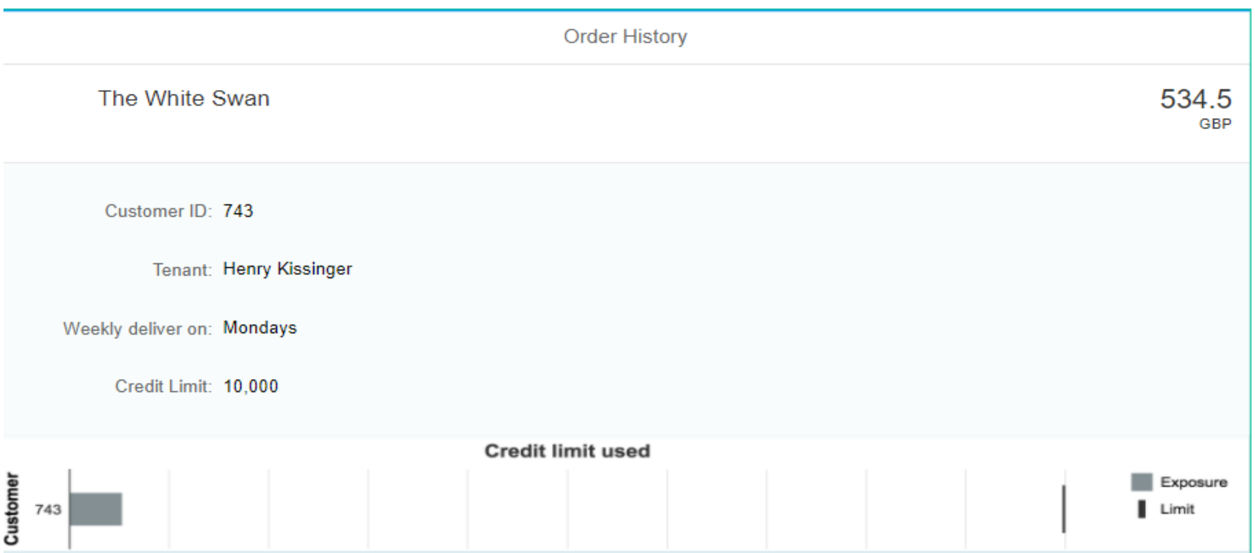
So far your detail page, should be looking like this.




**Step 11: Insert image**

This is very simple. Just go to the image tab on the left, and upload from your computer the image that comes with this tutorial. It's a format as to show how much credit can a customer have.

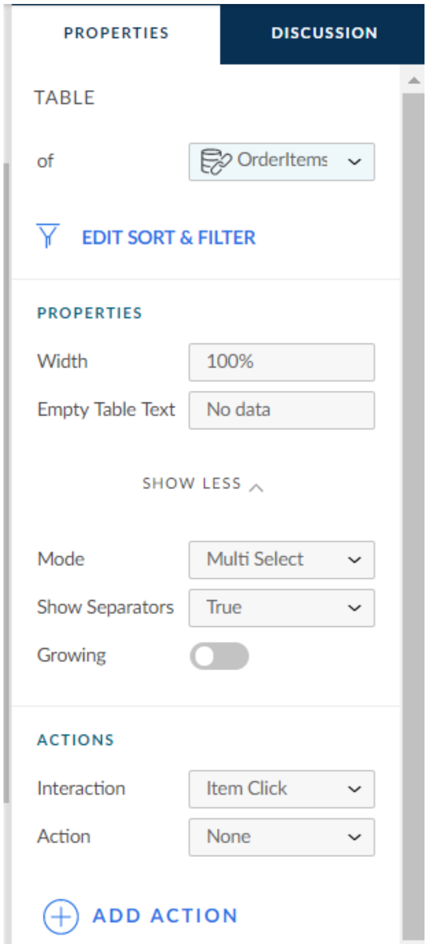
Your page should be looking like this.




The image helps to have a clear image on where is your customer and where is the given limit.

**Step 12: Insert table**

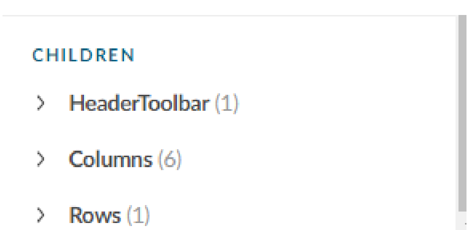
Go to your left, on the control tab and insert the element" table".




On the right, you can see the properties or settings of the table. Make sure you link the table with our data set. Select "orderitems" and go below. On the final part, you'll see a part that says childs. This is used to modify the content of the table. We'll go to this part next.

Make sure you use "multi-select" as mode. This will enable the selection to the left of each row.

**Step 13: Modify table of contents. -**

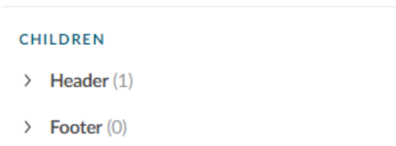



Use this are to modify the content of the table. If you clicl on header toolbar, you can modify the title of the table. If you click on it, you'll see the detail for this element.

You'll again see the sign of "Children" Click on this part and you'll be able to work with the elements of this section of the table. Select "Title" to modify the name of the table. Name it "Order Items". There is also another option named "buttons", you can use it to modify, or simply delete the buttons on the right top of the table. I chose to left the "wheel" button, but that is up to you.

Go back to the table and select Columns as to be able to specify the content that you want to show per column. You should have 6 columns on your table. If it doesn't, you can add them in this section. If you click on a column already created, you can format it.

By clicking on the column, you can get the division of the column in header and body. Use this as to make sure that the info popping out is the want you're looking for. It should look like this.

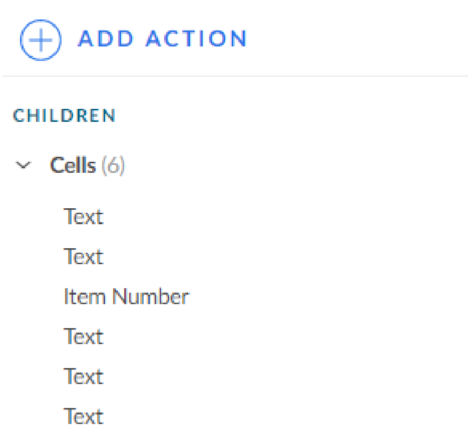



If you click on header, you can see an option that says text and that allows to modify the name of the column. Finally, we'll dig on the row section. Which is where you can change the values of the columns.

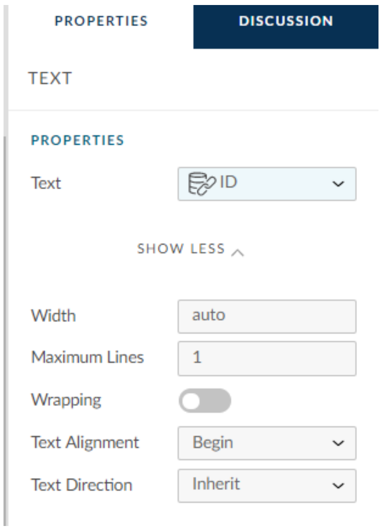
Keep in mind that the information that we're going to show is the following:

- Order
- Item
- Quantity
- Value
- Date
- Status

To go back to the beginning, you can go to outline again and select on table. Repeat the step that will lead you to the selection of rows at the bottom. Once you're there click on rows. Once you click on rows, you'll be able to see the number of cells. There should be 6 cells, right? 1 table, 6 columns and rows with cells for each column. In the cells part, where you can check where the info is coming from and modify it , if necessary.




If you don't have enough cells, you can always add more. Remember, each one of these cells, will match to the info of you table. So, make sure the match that you make, makes sense. As an example, if we click on the first "text" cell . Text being the format, we'll see the following information.




This is the “text” cell corresponding to the ID column, so I’ll be linking the ID from the data set to the text property.

Make sure you link each cell to the corresponding information on each column. You can repeat this process with each of the row and columns respectively.

The Final result should look like this.

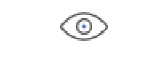

**Step 16: The footer**

The final part of this template is the footer. This is usually set up by default, so you don’t need to do much in here. However, if you want to erase one of the buttons at the end of the page or change the icons in each button you can.

Just go to Outline, click on it, the two buttons should be deployed. Pick the one that needs to be modified and to the right you’ll see the settings needed to do so. I made mine look like the following.


**Step 17: To have a previous of how it looks like. –**

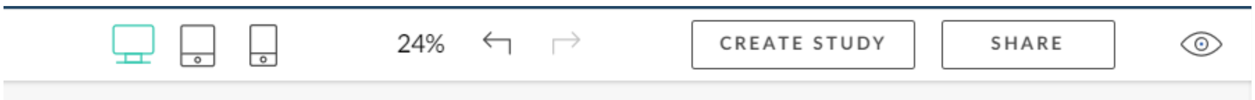
So, if you’re wondering how everything looks so far, you can use the preview tool to see how the interface would look after been published (before actually sharing with anyone). This is great, since it allows to correct any type of bugs of mistake in the developing part.



Use the icon that looks like an eye. Its located at the right top.

**Step 17: Share it with your peers. -**

There's a button that allows you to share your work with your colleagues. You can take the URL as just pass it to your peers, so they can give you their insight on your work.

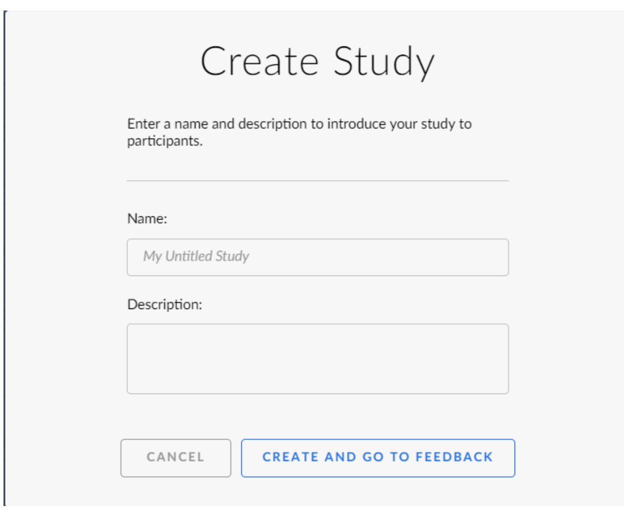



This the example that I created.

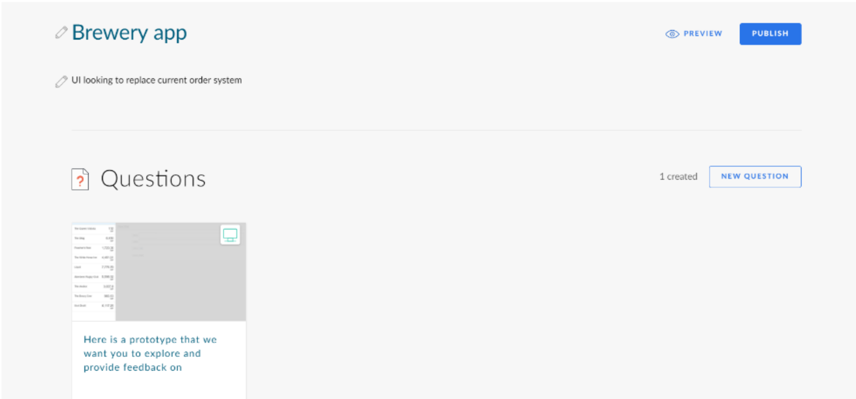
https://standard.build.me/prototype-editors/api/public/v1/snapshots/fcbe9cab5d9579770e943a5f/artifacts/latest/index.html#/Customers

**Step18: Gather feedback with it. -**

SAP BUILD is a great tool to gather feedback on a possible UI design. Create an online survey that helps you further understand if the app covers the main needs of its users or if still needs some polishing. To do so, just go to the top of the screen where you created your design and press "create study".

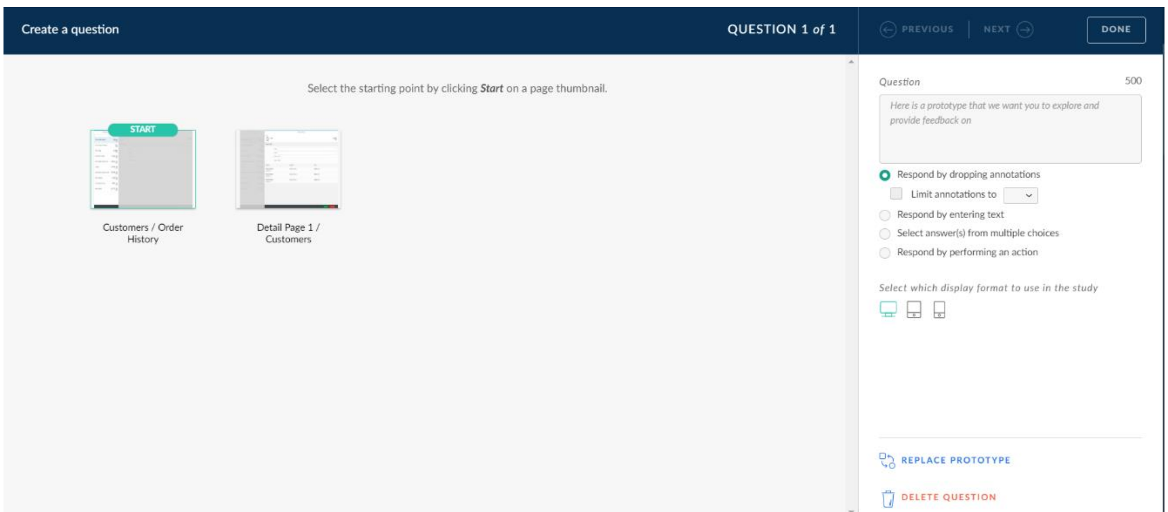



You'll get the following screen. You can input the name that you want for the survey and a small description of the question that you need analyze. Once you do so, you'll go to the next pate. I'll look like the following.

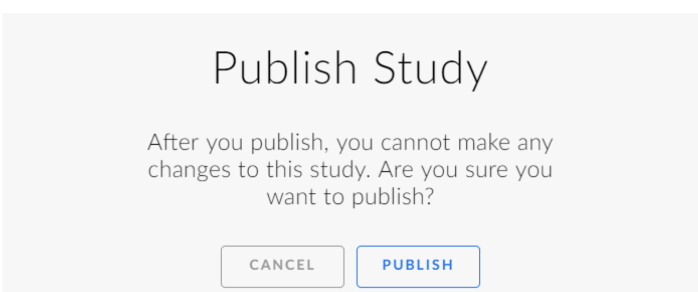



The main page for the survey, should look something like this. In this part you can use the icon to the right to ask questions about the UI design that you just created. Once again, BUILD gives you the opportunity to have a preview before publishing.

If you click on the template in the main page, it will take to another screen, explaining the whole of process of the survey. In other words, it will ask you where to begin and it will let you set up the questions that you feel necessary. Below you'll see an example.

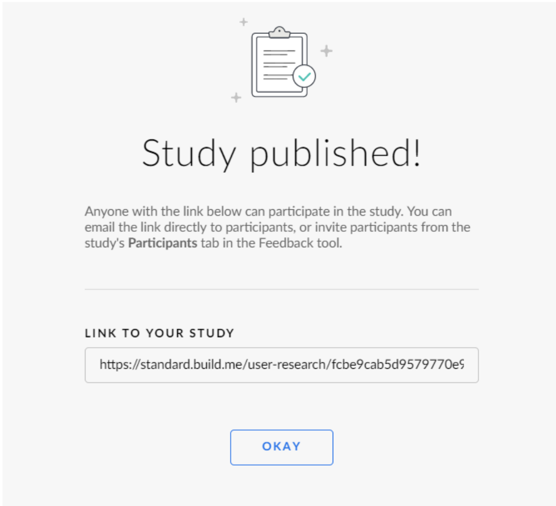



Once you're done with it you can hit the button publish and send it to the e-mail of your possible customers or colleagues.




Take in mind that once published, you can't go back. Whenever in doubt use the preview tool before publishing.

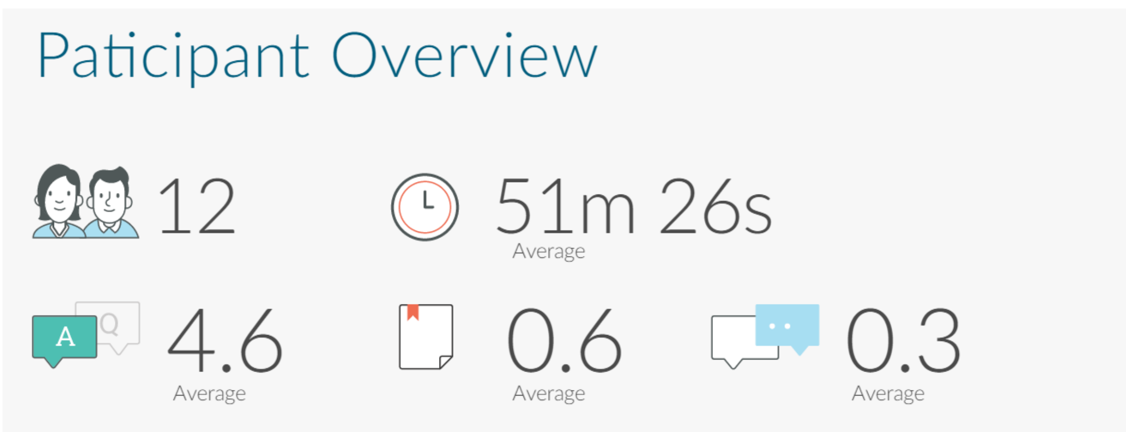
Once you've hit the published button it should look like the following.




You can take the url to take a pick at it or just hit the okay button.

Once you have distributed this survey, you'll the feedback and make the changes, if necessary.

You can check the details of your study and the questions made, on the following screen



**References. -**

- This workshop was based on one of the apps presented in 2015 OpenSAP Fiori Ux App Challenge.
- Created by Bjorn Harzer from Absoft Limited.
- Pattern: Master-Detail