

User Interface Design
Prof. Saptarshi Kolay
Department of Architecture & Planning Engineering
Indian Institute of Technology, Roorkee

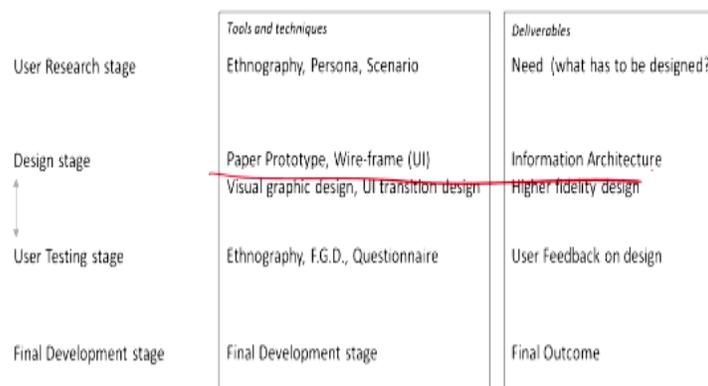
Lecture - 09
Low Fidelity Design - II

Welcome students to the online NPTEL course, User Interface Design. So in the previous class we discussed about low fidelity prototype design and creation of multivariate design options. So today, low fidelity prototype can be designed just by hand so which can be just a paper prototype. We can quickly sketch using our hand and we can cut it and create our mobile application which looks like mobile and other things which can be just made out of paper.

There are softwares which helps us to create low fidelity prototype without any color options, just the UI elements and positioning those UI elements.

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- Web design Methodology



So that give provision for tweaking within the design. So today we will discuss about one of the software which helps to create low fidelity prototype. So that will not be sketch on the paper. So this is a software, very quick software, a very quick process to use the software and very user-friendly. One of the software we will discuss how to create low fidelity prototype using a software. So this is a process of user interface design and holistic process.

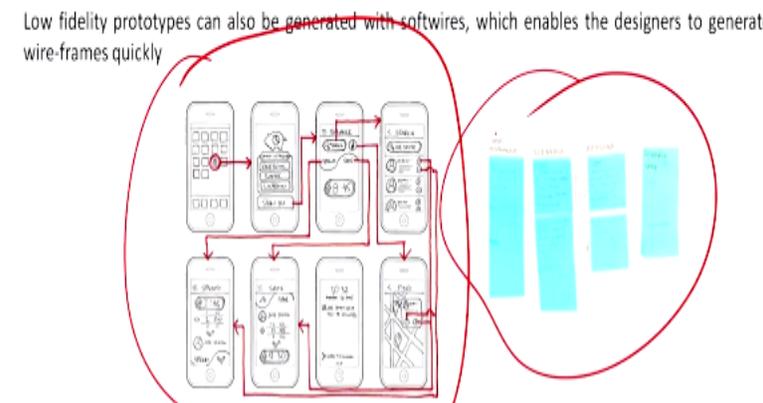
And here we are discussing the low fidelity wire-frame prototyping. After that we go for testing and then we start with the high fidelity prototype which is we add the visual design part which is color, text, particular font, style and other visual style textures and other elements of visual communication design part. So low fidelity prototype has been discussed.

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- Low fidelity Prototype (Wireframes) based on Information Architecture

After starting the design a quick and low fidelity paper mock up can be developed by the designers to test the design idea with the users.

Low fidelity prototypes can also be generated with softwares, which enables the designers to generate wire-frames quickly



It comes from the information architecture. So when the information architecture is conceptualized, what will be the hierarchy of the design, so how it will be arranged.

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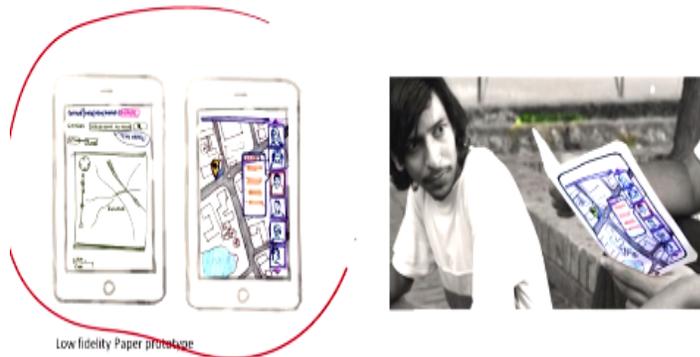
- Low fidelity Prototype (Wireframes) based on Information Architecture

- Sketchy designs of how the content will be laid out on each hierarchical display.
- A low-fidelity prototype does not include any visual design details and serves as a initial ideation to allow designers structure the content and UI navigation.
- Low-fidelity prototypes can start as hand-drawn sketches or Paper-prototypes, and later refined as computer-drawn wireframes, which are more faithful to the presentation of information on a real screen, but still omits visual design details.
- These low fidelity prototypes are used for user testing (iterative model)

Based on that sketchy design which is a derivative of this information architecture of the hierarchy of the flow and also which talks about the which is getting ready for the user testing and it can be hand drawn paper type or it can be computer generated wire-frames.

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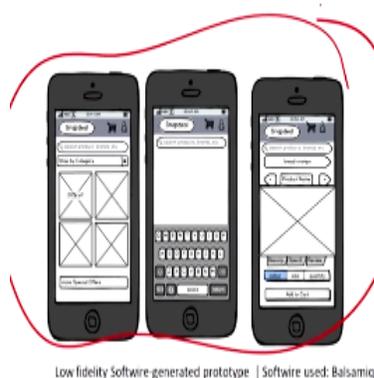
- Low fidelity Prototype and user testing



So hand drawn prototype will look like this.

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- Low fidelity Prototype (Wireframes) based on Information Architecture



And then computer generated prototype will look like this. So this prototype has been designed through Balsamiq. So today we will discuss about the software Balsamiq.

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- Low fidelity Prototype (Wireframes): Tools

Balsamiq

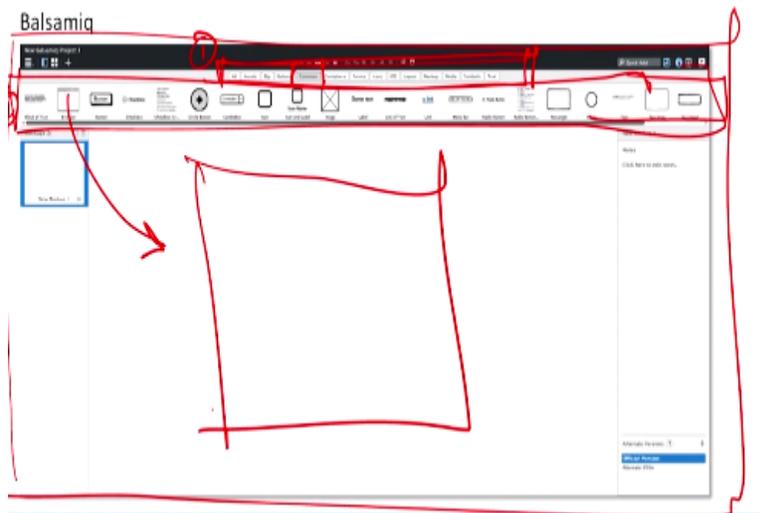


So this is some of the prototypes which has been discussed using the software which is Balsamiq. So it can be webpage layout. It can be a mobile application. It gives a provision to add different pie charts, bar charts. It also has a provision to add maps, sticky notes and other elements. So lot of elements are there. Even the different buttons, scrollbars, everything is there, different style of design.

It can be iOS style of design which is on iPhone and iPad and Apple platform. It can also be Android style of design. It can also be just webpage and also not just the low fidelity prototype. Using this software, Balsamiq you can also create information architecture or the hierarchical chart using that software.

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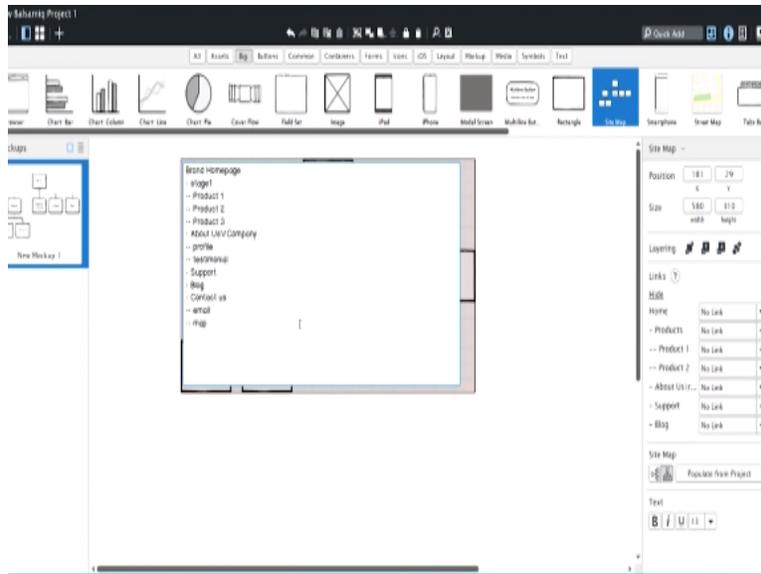
- Low fidelity Prototype (Wireframes): Tools



So if we launch the software, this will be the main page of the software and we see lot of buttons which is the main tabs and then within that the next options are there. So this is the main selection process what you want to select, the hierarchy 1. And the next is hierarchy 2. So within if we select the common option, so this will be the options which we will have and this is just a drag and drop.

So you drag and drop it in your worksheet and you change the value, add some name of the tab and it will be done. So that is a very simple process of design. So now we will launch the software and I will give a very brief demo of the software and it is a very user friendly software if you start and it is a free software if you download it and it has a trial version. It has for 7 days and then you have to pay for it later. So you can see the trial version and start using the software for your user interface design process.

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So this is the first page if you open the software. So this is how the interface here. So here as we were discussing the main tabs are over here. So within that if you click these buttons which is big then common container so you will get different icons, different templates which is already there. So you can drag and drop the template and create your wire-frame. So this software also provides you the option to create information architecture.

Let us see that first how to create an information architecture which is a diagram of hierarchical options of how different pages will open. So that is the first stage we do in the UI design and then we create the wire-frame. So first let us see what will be, how we can create a information architecture. So we have to click here which is the button is big and within that the main options are there and also there is a site map.

So site map is nothing but the information architecture, how the site layout is. Now if you look at the site map, this is how it will look like which is a diagram of information architecture and this is how you can create the diagram. So here the main button is home. So from home button there are different options. So whenever we open websites, so we launch a document button. You can rename the home button or you can rename it the name of the in anything.

The name of the brand or brand home, homepage. So that will be renamed. So whatever you write that will be named in the first hierarchy. And within that home button there can be right

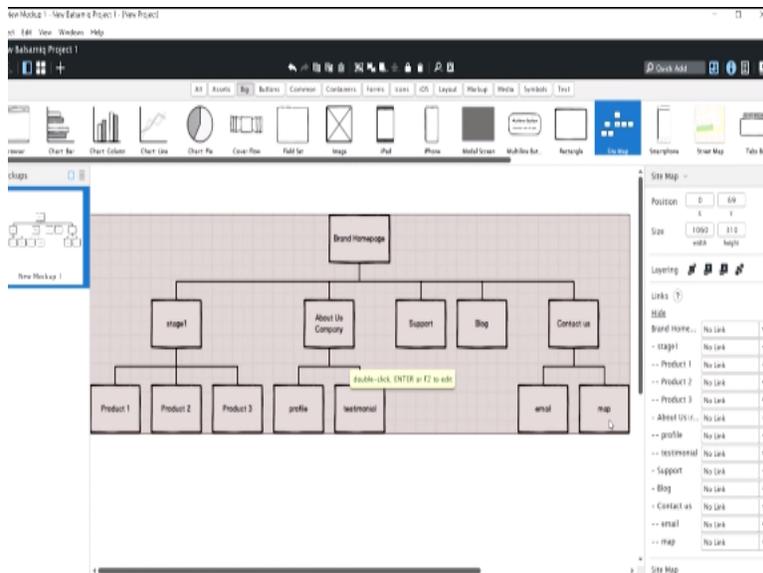
now it is, by default it is written product. So we can write stage 1. Within that stage 1, this is this button within the first from this branching out what will be there. So within that we can have the product 1, product 2. Let us add another product 3. Now you cannot just write it.

So if you look at, there is 1 dash. So that goes within the first hierarchy. If there are 2 dash, that goes in the second hierarchy which is here. Now you have to create another hierarchy which is another part of the same hierarchy then you have to add these two dash over here. Then it will be created as another part which is here. Now after that there is another about us or company. There is support, there is blog. Let us create another one. It is in next hierarchy dash contact, contact us.

Then it will be created in the next hierarchy. And now within that company you can also create next level hierarchy. So right now, there is no options from this about us or the company. So now this options will be created. So within that we can create the company profile. Company profile is in the next hierarchy. Also we can create the testimonial. Now let us see how we have achieved this.

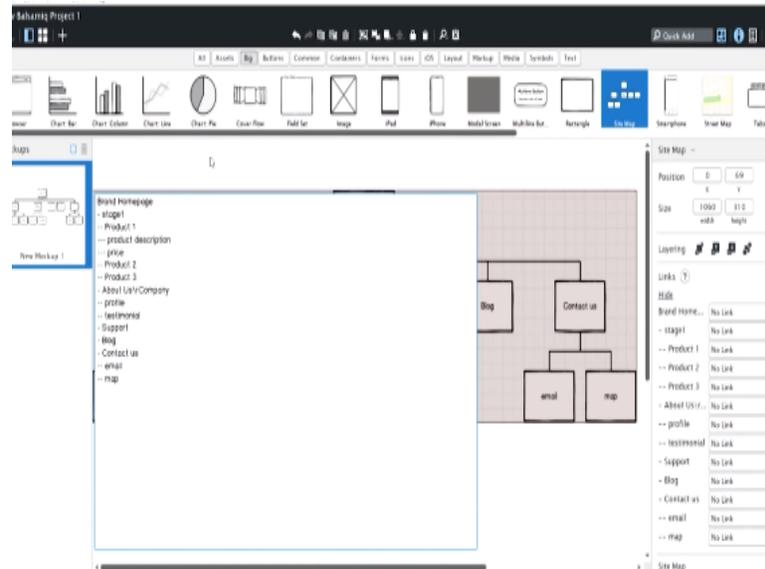
Maybe in the contact us we can create few other options which is email, navigational map. So let us see how does it look like now.

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Okay, now it has created all this. So within the brand home page stage 1, product 1, product 2, product 3 is I have added product 3. You can see this product 3 is added. About us, the company again profile and testimonial this has been added. Then support and blog. And within contact us, email, and map is added.

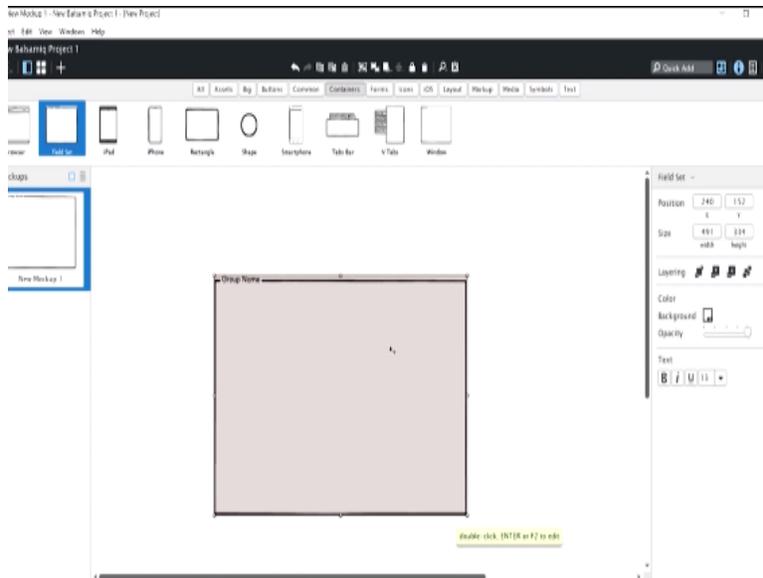
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Now we can again create another layer within this product 1. You can create different layer which is next hierarchy you have to create 3 which is let us talk about the description, product description. Next can be price or the way you design the information architecture it will be based on that. So if you select, so yeah within the product 1, now product description, product price is there. So using this software you can create the information architecture.

And what will be the different layers based on different layers and based on hierarchy you can create the information architecture. Now we will see how to create the main wire-frame. So this is one part which is the information architecture. Based on that you will select the wire-frame. And you can already see different tabs and different already designed templates are already there. So using that we will create the wire-frame.

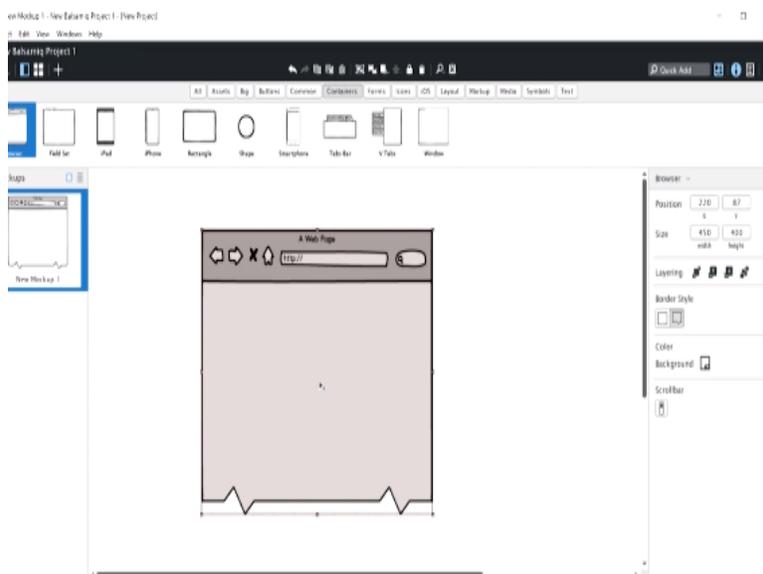
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Now we will select the main style of design. So we have to click in the container. Within the container there are many options. So there are website, so which is browser. There are just tab, just the digital interface. It might not even be a website. You can even start designing with a UI frontend of any product. So it can be a different gadget you are designing. So that gadget can have a digital display.

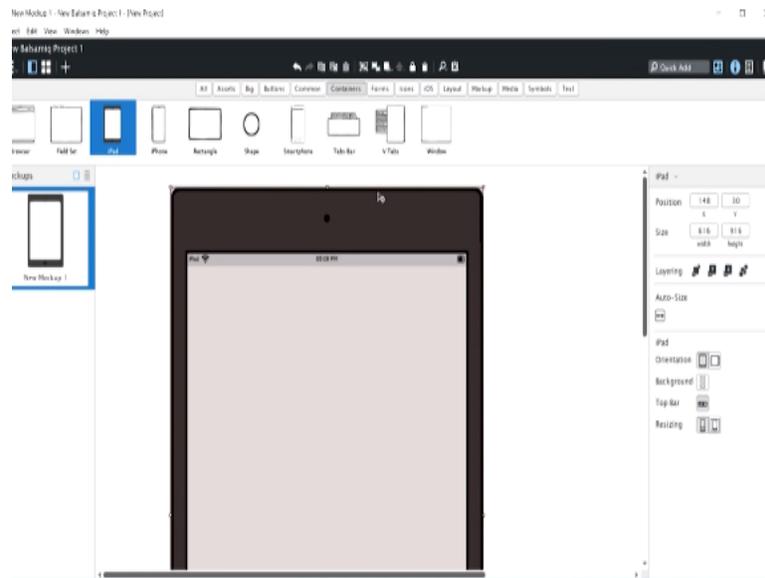
So that can be digital display of this. So you can select or you can drag or you can change the width of this. You can put the value of that digital display. And you can select a digital display window and within that you can create different design.

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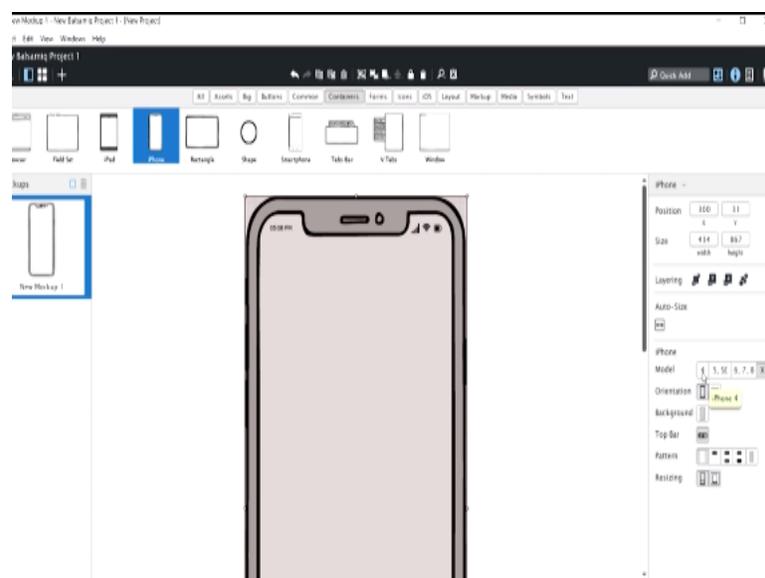
Or you can just create a browser, you can rename the browser here and you can select the browser. Now in this webpage you can also have a static webpage or you can have a scroll option so which is you can scroll down. So there is a break option of this webpage. So it gives you the option to scroll down and which is like a endless scroll. So that also the option is also there.

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Now you have different sets of iPad. So this is the format of the iPad. You can change the iPad's width based on different model of the iPad and now you also have the iPhone.

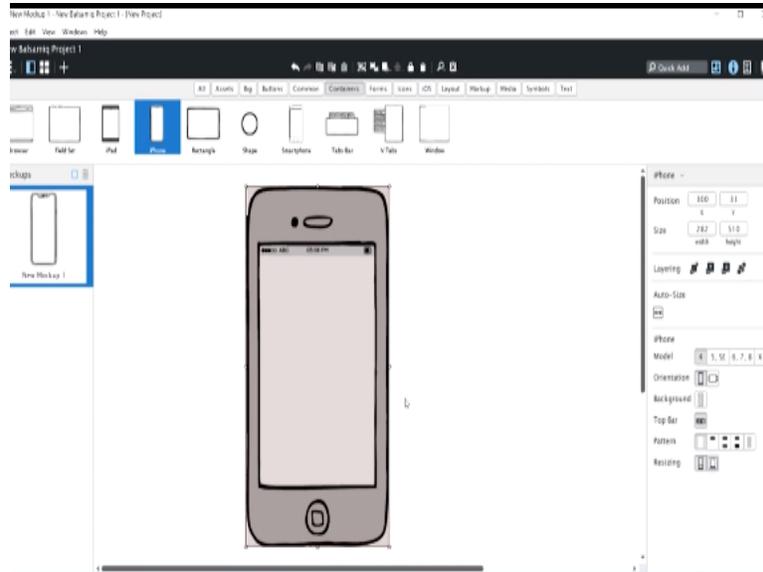
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You can also change the iPhone's width based on the model of the iPhone but you are not designing based on the model but based on design. So it is not required to change and even you

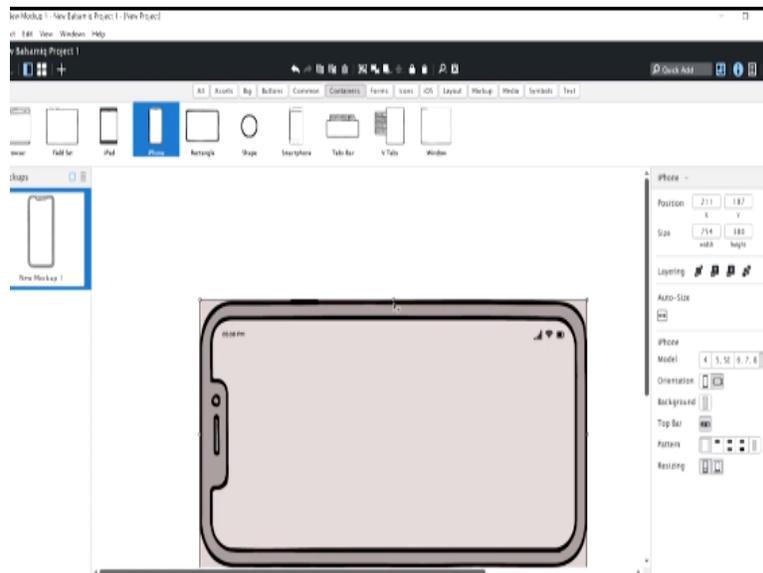
can change the iphone's orientation and you can directly click on the iphone like if you want to design for the iphone 4, you click over here.

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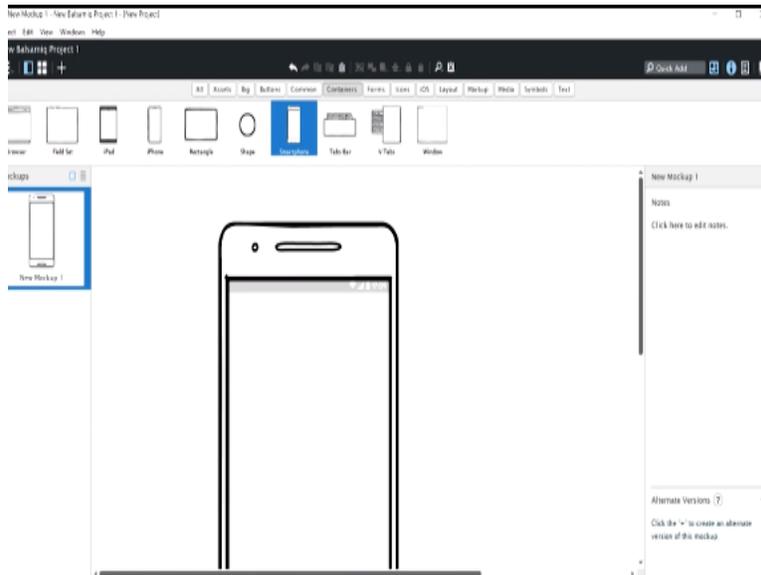
So this is iphone 4. So this is iphone 5 and SE which has the same display window, how will it look, you want to see how will it look like in iphone 5 and SE or you can go for iphone 6, 7, and 8 which has the same width and height and you can change the position. You can see the position is getting changed. So that will not matter. If you want to change the width so this will be the button to change the width over here. Or you can have a iphone X which is like this.

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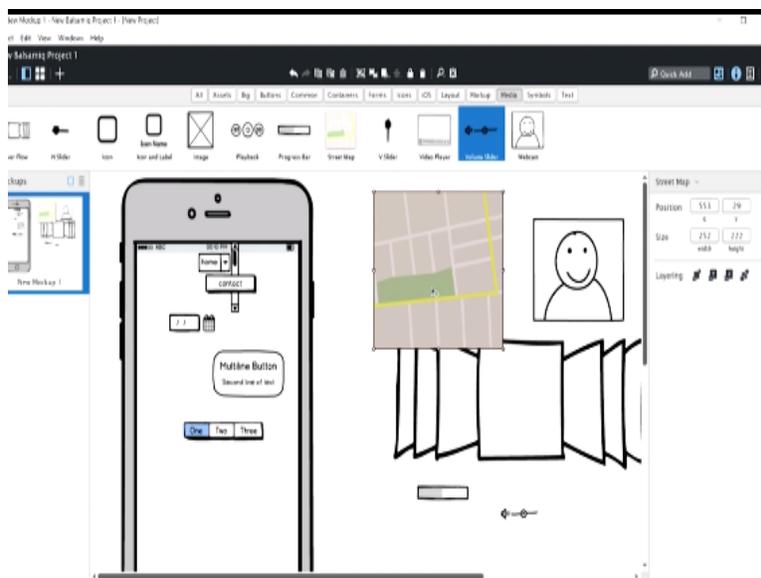
Now you can also have a different orientation whether it will be on the landscape mode you are designing or you want to design in a portrait mode. Or instead of iphone you also have the android phones over here.

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The other smart phones over here and you can also select the orientation of the smart phone or you can change the width of the smart phone over here from width and height. Now let us design something on iphone 6S.

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Now this is the base model. From container we go to the common. Within this common tab we will see all this buttons which are common to us which are most commonly used for example

this circle button, this different buttons and you can rename this button whatever you want to type. So these buttons will be there. And other basic shapes, rectangle, circles are there. Text areas are there. Text input and scrollbars are over there.

Now different elements you can create. Now within that button you get larger variety of different buttons and again you can rename the button using that and you can position the button. You can change the button's position from here x and y coordinate or you can just drag if you are not sure about the position or you can change the size of the button from 70 let us do it like 100. So you will automatically see how it is changing.

So always it is good to use this numbers because then it will be easier for you to translate these buttons into high fidelity design. So you will know what is the shape and weight of this. So you also have things like dates and calendars. Other buttons, help buttons, search buttons and different elements are there, almost everything what you want to have. Other than that if you want to create something from there so you can select this regular shapes which is there in the common.

So you have the image, you have this circular rectangles and circles. Through that you can create this images. There are markups. You can have different other elements which is not part of the UI but for your own understanding you can add this to that. Now within media you will have this folders which is like this. Different videos, how the different videos comes if you are designing something which plays like for example YouTube or other things.

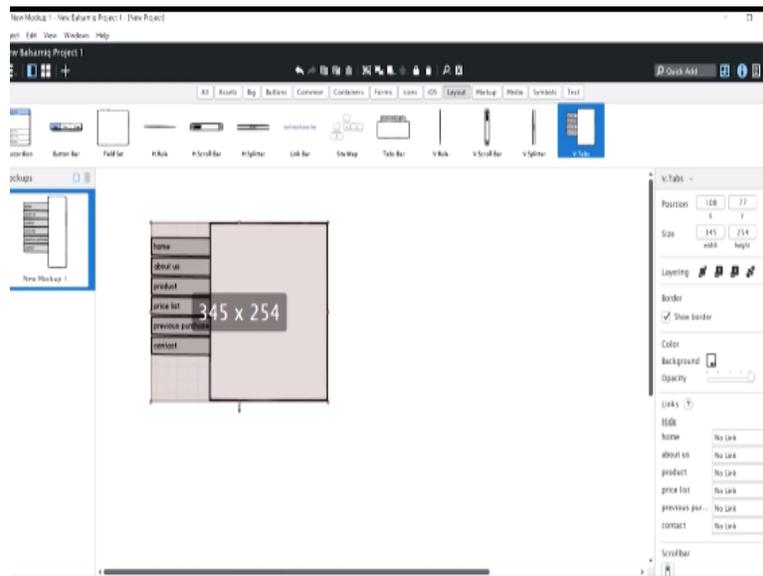
And the progress bar within the media, what is the download progress or play progress which is there. And images and street maps which is if you are designing something with maps the profile pictures or webcam within that how things will be there, the volumes. So all this media related elements are there within the media. And if you look at the symbols again different signs and symbols and icons are there which you can download later and put it there.

Different text related things which is grid data and common text box, menu, lists are over there. So you can again rename everything and type according to your design element. Similarly, if you

want to design with some web based platform, so again you go to the common. You start using the browser. And within that you can again start using all this elements which is there in the thing. So again there are few icons which is only common to iOS platform which is there.

And so you explore more through this Balsamiq which is a very easy software to explore. You can explore more and create a very quick wire-frame mockup using this software. So within this layout you also have a different options of layout. So there is a interesting thing called tab.

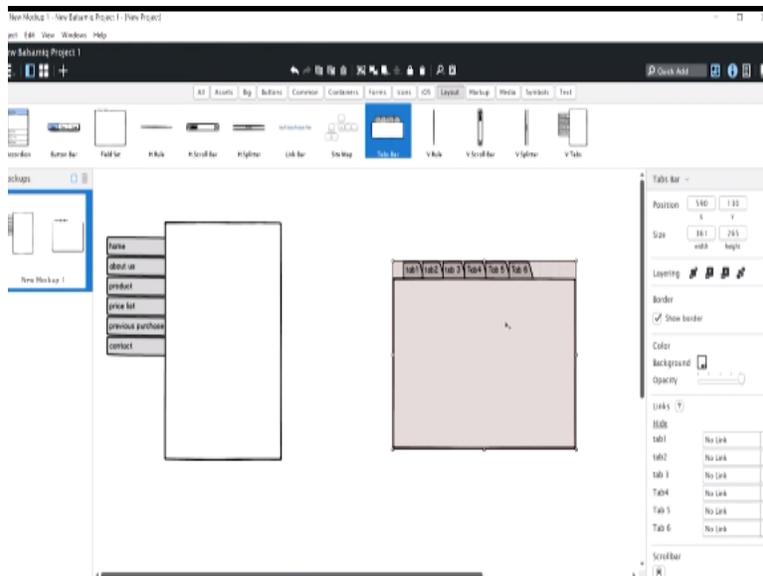
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So there are 2 different ways of tab. This is a vertical tab. Within this vertical tab you can have different tabs which opens vertically. So first tab you can also rename that. This can be contact. Then next can be about us. First should not be contact. Contact can be later. So it might be home. Last can be contact. Third can be product description. You can add another tab right now. There are 4 tabs. You can add another tab which is price list, previous purchase.

Now we have 5, 6 tabs, vertical tabs let us see. So this is the vertical tabs. And now you can change this, the display size based on this. Or you can change it from here, the size, width and height. So this is how you create the vertical tab option.

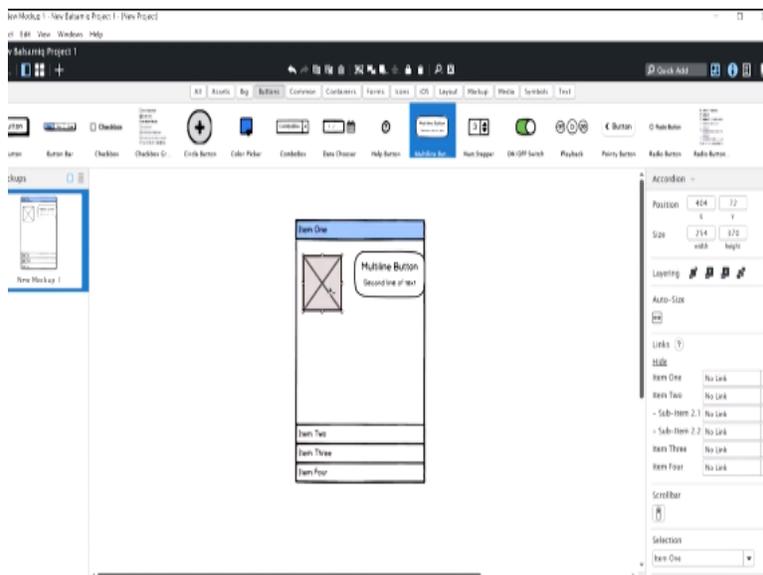
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So there is also horizontal tab. You can change the horizontal tab area based on you can just drag or you can change the area from here. And similarly within this also you can add this horizontally. So which is tab 1 and next is tab 2 and you have to put comma after that. Then tab 3, tab 4. Let us create another tab, tab 5. Another tab 6. So you can see there will be 6 tabs with the name what you want.

Based on that the tabs will be created. So there are many other options you can start using which is a dropdown selection.

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So here you can see this item 1 is the description of item 1 is open over here. So you can instead of this you can create item 1, you can change the name or you can put a picture of they are different icons of main important companies are there like Amazon and other. Then within that you can create the photograph. Put the photograph within that. Image in icon 1 and create the text description and other elements over here.

And then within item 2 you can write even start writing the other things within this. So within item 2 you can rename sub item if you want to create, so you can add that item 3 and item 4 you want to add more items. So you can start adding. It is added, item 5. So this is how you can customize everything what you have designed through your information architecture. There are many other options.

Almost every options you want to create through which you can translate the information architecture into low fidelity prototype. All this options are there in this software. So you can use this software as a tool to create wire-frame or the low fidelity prototype. There are other softwares which also provides you the options. So you can explore those softwares which helps you to translate the information architecture into wire-frame. Those other softwares also can be explored. Thank you.