Visual Communication Design for Digital Media
Prof. Saptarshi Kolay
Department of Architecture and Planning
Indian Institute of Technology, Roorkee

Lecture - 18
Visual Design Methodology Part-IV

Welcome students for the online NPTEL course on Visual Communication Design for Digital Media. So, in the lecture before this, we have discussed the detailed methodology, visual design part of the methodology of animation and game design. In this lecture we will talk about the visual design part of web based application and web website design.

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So, a visual design part for web based platform. So, if we think about the broader methodological call phases, first is interaction design or user experience design or human computer interaction design, from where we get the information architecture, which is mainly the part of user experience or human computer interaction designers, but which is very closely linked with visual communication design part of the website design.

So, information design what is information design, and how it is done that we will discuss in the lecture series as well. Though it is not part of mostly it is not part of visual communication design which involves the domain of designers from the domain of user experience designer or interaction designer or human computer designer design human

computer interaction designers. These are generally in design domain these are used in a similar for a similar connotation. But the visual communication designs designers work comes after the information architecture is generally is done. But in some small form visual communication designer and interaction designer they work together and then they sometimes they there might be the only one person who also does the visual communication design, the visual design for web application also who conducts the user experience design or interaction design process of the web design.

And from that we get the higher fidelity design, information architecture or paper prototype which is the lower fertility design of web based platform, and higher fidelity design is the coloured version and with all the UI transitions and every detailing of every visual detailing of this, which is a the next part where user experience designers involve visual communication designers as well. And the next part is development of the website that is the domain of web developers that is absurd is out of the scope of discussion of this course.

So, if we look into the different phases and the tools and techniques followed for that and the deliverables. So, this is the detail of this and in the pre the previous lecture we also discussed the genetic design methodology, when we started discussing the design methodology, we discussed the generic design methodology and the different forms of design methodologies like iterative design, waterfall model of design and here we are discussing the mostly the iterative model of design and there we can see the first stage is user research.

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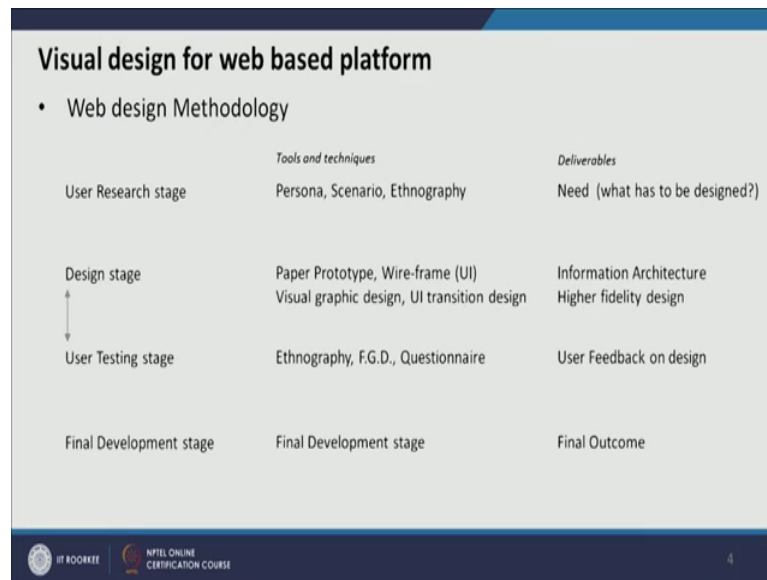
We start with the ethnography, what that is the bottom of approach or the inductive process of design we start with a user, we find out what is their need. So, that is the deli deliverable what exactly has to be designed, that actually uses users tells us users from user research by observing them we understand what is the need of the research, need of the final outcome.

So, for that the tools and techniques we apply is making persona, making then scenario building and through the process of ethnographic survey we observe the user we do the user research. So, these individual things will be discussed in this lecture series in this lecture. So, the next process from user research stage is the design stage, after finalizing the need in the deliver that is the deliverable of the user research stage, we move on to the design stage we start with the design.

Also we have seen in the first the starting lecture of visual design methodology, the double diamond method of Donald Norman there we see the defining the problem. Defining the problem is actually what Donald Norman was saying is the need identifying the need of the user and finding what has to be designed. So, next we are starting the design stage that is the next part of the diamond if you go back to that lecture and see what the model is, then we are this is the next stage the next part of the diamond which is the design stage.

In the design stage the tools and techniques which we follow is first we start with the low

fidelity design. Low fidelity design is the first stages of design where the which has to be done very quickly and where less money is involved, less manpower, less time is involved that is the first stages of design when design did not form up design did not form to the final stage that is the low fidelity design stage.

And as we go towards the timeline and also the manpower and cost increases, we move on to the high fidelity design then design turns to come up to a particular shape. So, that is going towards of high fidelity a design prototype and so in the low fidelity design prototype, which we have the first in the first line it is written paper prototype and wire frame. These are the low fidelity prototype and mostly in design process here the UI designers are in involved in this process and that is how we get the information architecture and the paper prototypes and the next stage is where the visual designers actually involved here the co visual design power domain starts from here.

Here we have the visual graphic design on that particular wire frame or the paper prototype, we start with a detailed mock-up which how the website will look like, how the application will look like with all the colours and textures and also the UI transitions will come into picture. Here the designers UI designers team with the visual communication designers then we get the higher fertility design prototype. So, here as we discuss in the starting of the visual design methodology, that inequality model design stage and user testing stage comes together. And they from user testing stage we can again go back to the design stage and change something in the design if there is something wrong, and based on the feedback of the user we can iterate the design and again test with the user and gradually the design goes to the towards this maturity and the design becomes acceptable and more user friendly in nature. And then finally, in the user testing stages the tools and techniques are involved is ethnography.

We will discuss; what is ethnography FGD or the focus group discussion, and in ethnography the processes can be making questionnaire making documentation and all these things. And so the deliverable is understanding the users feedback on design, and understanding what has to be changed in design if it is wrong and what whether the smaller iteration has to be there or the big modification has to be there or it might even happen that design does not even work.

So, we can we have to even start from the beginning. So, we again go back to the design

phase and then again do the design with all this paper prototype depends on the what was wrong in the design if there is something based on user testing, and then again we go back come back to the user testing process. So, after that the design phase is absolutely done and with the agreement of UI designers and visual communication designer, then it comes to the developers and the final development stage happens with the final development where the developers will develop and the final outcome will be there.
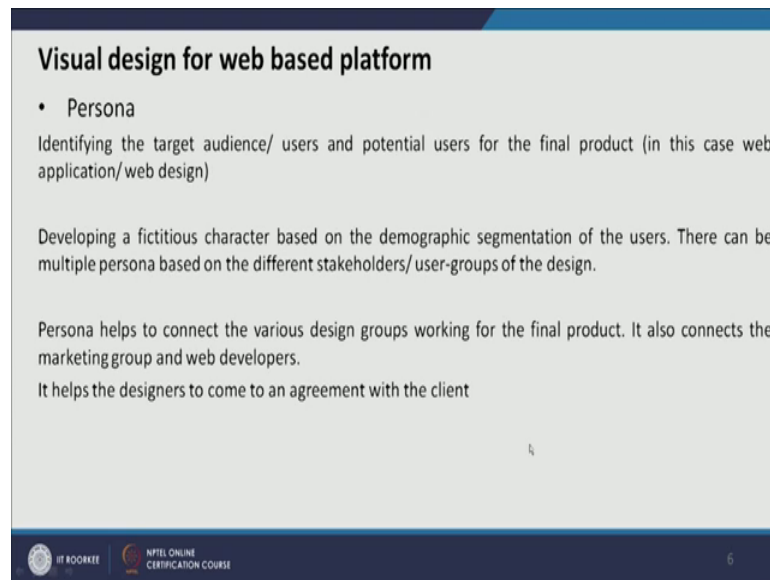
So, here mostly as we discuss this process the stages earlier in the generator generate design methodology.

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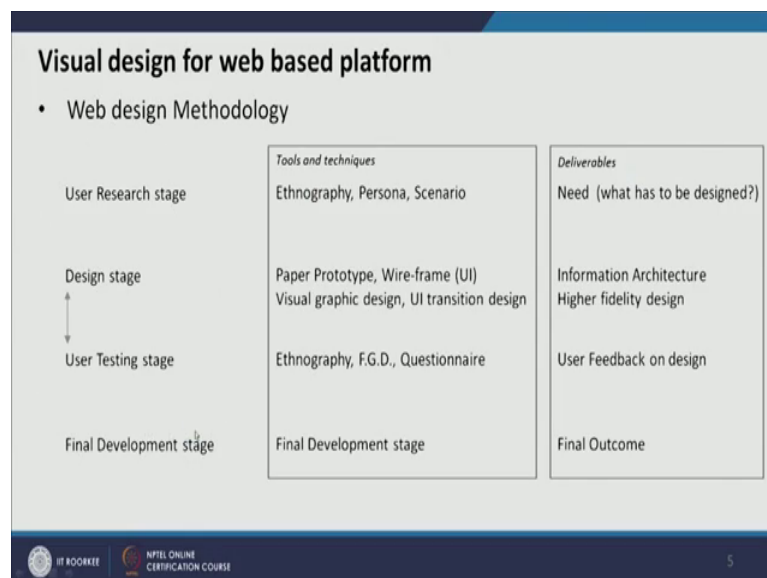
And we will discuss mostly the tools and techniques and some part of the deliverables which whichever required.

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So, as we discussed persona. So, to define persona it is a identity what we do in defining persona is we identify the target audience or the users or potential users for the final product final product in this cases it is the web design product does not mean the tangible product design it is the final outcome or which is in these cases is the web application or web design. So, here in this cases in some cases users can be identified user group and even in some cases we can also target some potential users, who are not exactly the user, but after launching the website who might be included in the user domain.

For example, in the case of shopping, we can see this if the website of the shopping online ecommerce website of a particular shopping site is not there. So, the users are who can visit the shop they are the user, but the potential user if we develop the website of the ecommerce site, can be also the people who are remotely who are who cannot visit the particular shop who can remotely access the online ecommerce site and purchase something from the particular brand.

So, they are the potential user of the final outcome that is the web website. So, they will be included in the persona. And then the process of developing the per persona is developing a fictitious character which represents the particular types of user based on demographic segmentation of the user, and there can be multiple persona in some cases based on the different stakeholders if there are different stakeholders or user groups are involved in the design for example, if you are developing something for the some web

application which is for the suppose for pizza delivery. So, there will be the stakeholders will be the buyers who are purchasing the pizza, even in the other end of the application there has to be the pizza delivery shops. So, they can they should receive some informations from this application, their web interface can be different, but both are the different stakeholders of the particular web application. So, there will be two different persona one will represent the user who is purchasing is the one who is purchasing the pizza, and the next will be the user two for persona for the user to who is delivering the pizza.

And even for the multiple even for different cases where the multiple stakeholders are available, there will be different personas involved. So, what the persona do? The persona helps to connect the various design groups, designers groups working for the final product like for UI designers group, visual communication designers groups. So, it also connects the marketing group which is who are not the designers, but then with the designers where there are UI design group visual design group. And that this design group also connects the persona also connects with the marketing group as well as a web developer group.

So, from the marketing group designers generally get the design brief what has to be done and the user need generally marketing group finds out what is the need of the people. So, they give the design brief to the users and also user find out user or to the designers and the designers also find out what is exactly there in the users need and then they have also pass on to the same thing to the web developers.

So, persona and scenarios are a persona and as well as the scenario which we will discuss is very essential for the communicating the marketing group, designers group and the developers group. It also helps the designer as well as the marketing group and the developers group to communicate with the client, there can be a different client for the website for example, for an ecommerce website which has the client would be the e commerce the owner of the ecommerce site and the designers will be different. So, they have to be in a common agreement how of identifying who is the real user of the ecom of the particular site. So, all this different design groups marketing groups on the developers group as and the client has to be on the agreement of finding the particular user, and everything the design UI design and visual communication design depends on the particular users need. So, identifying user and making the persona the right persona is

very important stage and the crucial stage for the web design.

So, how the person looks like? So, there will be an actual photograph of a user. So, users photograph and his age location and details has to be there. So, he will the user for a photograph the user will stand as a will do the role play or the stand as a communicator between the different-different user group, and they will it the persona will make a clear communication and if we add a photograph and all these details of a particular user. So, this is a very important stage and from that we move on to the scenario. Scenario is actually how each and every persona behaves in a natural context.

So, this is actually story fictitious narrative of how user interacts with the product; in this case this is the web or web application. So, in the absence of the web application what problem the users are facing and in the presence of the web application what help what benefit can the user get that has to be narrated in the section of scenario, that has to be built and this also communicates between the marketing group designers and the clients, and they also have has to be happy in a common agreement that how the scenario will act and how the scenario will change if there is the website design.

So, it predicts the effect ability of the website so that before designing. So, we need how much impact it has the website should do, and what is the task particular task a website should do and based on that every everything like information architecture the wireframes everything will be designed based on that.

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So, this is a typical scenario, it can also be a sketch, it can also be a doc movie, it can also be a storyboard where we can depict on a scenario with storyboard or our move or just it can be just a write up. Some of the advertisement which targets the user also directly derive from the persona and scenario of the final outcome for example, OLX if you look at some of the OLX advertisement.

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There is a particular scenario depicted in the advertisement and is a particular persona in enacting in the scenario. In some advertisement we can also see some of the advertisement directly is derived from the persona and scenario of a identify a user. So, there is the communication based on the communication of the designers and the marketing group. Marketing group directly adopt the personal scenario which user designers and marketing group together have made.

So, for example, of OLX advertisement if you see the advertisement, the there will be a particular scenario depicted in the advertisement and the persona will be enacting the enacting in the scenarios. So, one of the OLX example the housewife a lady needs some cash and creates in clicks photograph of different old furniture's which they do not need and upload that in the OLX and they get sold.

That is exactly what OLX web application does, and that is the scenario of the OLX web application and the persona is a housewife who needs money and who can sell who is trying to sell some of the old furniture's and trying to get something new in the exchange

of the older furniture. So, that is the function of the web application of OLX, and that is how the scenario of a of the web application is depict a great (Refer Time: 19:02) in the advertisement in the many of the other cases. In other cases also, you can see the translation and marketing group directly borrowing from the persona and scenario from the designers created persona and scenario.

So, ethnographic survey what is also a tools tool of studying user. So, that is the field visit ethno means people and graph is the how people, the term ethnography means how people react in a particular scenario in a natural setup.

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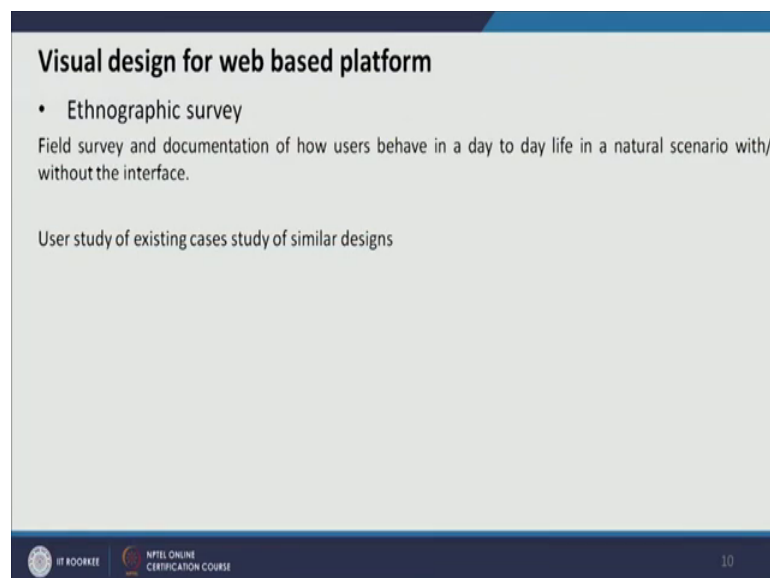
So, in terms of design what designers do is the designers are identify what problem people are facing in day to day life, what the web design how the web design and web application can solve this. So, this is how designers identify the need. So, ethnography through ethnographic survey is actually the need of the user and persona and scenario is developed. So, ethnographic surveys of broader umbrella and under that from that user persona and scenario are developed.

So, moving on to the next design stage we will first discuss the low fidelity design, where the UI design part is more and also some visual in some cases visual communication designers can add to the sit with the UI designers.
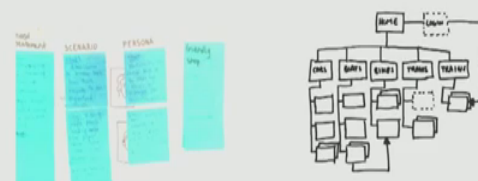
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So, low fertility design in this particular case of web design will be wireframes which can be which is derived from information architecture. So, information architecture as here we can see in the graph is nothing, but a formation of structure of the web application or website. So, here we have first the home page which will open first, and from home page there will be links of the first which is there in the first row, the links will be available in the home page and. So, if we take this link which is cars this might be a information architecture of car web website of a car.

So, from that car there can be different a link of this, there can be different multiple links which will be there in the next hierarchy. So, if we go to the next page, we can then go to the next page which is there in the next row below. So, this is nothing, but the structure of the website. So, which are when this is created by the UI our interaction designers, then we start then UI designers or visual communication designs starts designing the wireframe.

Wire frame is how each and every page for example, home page will look like and this is depicted by single line drawing and a very quick prototype it can be also the designed by hand on a paper or there are some softwares which is very user friendly and quick reference can be there designed based on that software as well. So, this is an example of a paper prototype, this is very sketchy very rough and there can be some colours added to this where the visual communication designers play a role for selecting the colours so,

but that is the most important is the information architecture how this is translating in the first wireframe.
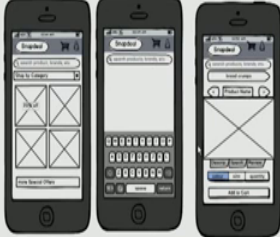
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So, this quick paper prototype will then be taken to the users testing stage; because user testing stage and design stage will go simultaneously. So, this is the first photograph is the low fidelity paper prototypes a picture and this is the same thing how the designers are discussing with the users and testing the validity of the design. In the wireframe each and every buttons in each and every informations has to be there, it might be in a very sketchy format, but all the informations in proper position and proper places has to be there even with the time with the written notes which will appear in the final website.

So, all the pop ups if we see here this is a map based web application has been was on the process of develop design. So, here the pop ups and each and every small icons and all the details are there, but in a very sketchy format as it is a low fidelity design.

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There is a software there are some softwares, which also helps to design a very quick wire frame. So, one of the software is the Balsamiq which I will show you I will give a quick demonstration of the Balsamiq. And I will show you the interface of the Balsamiq and here this is a Balsamiq generated wireframe this is also very rough the information visual information visual communication layer of informations are less, but still you can see the icons logos the shape of the tabs these are all decided.

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So, here visual communication designers actually work with UI designers, but all the

informations of images buttons stamps and everything is there in the wireframe, we go to the next process which is the user testing.

So, user testing the low fidelity design prototype should be showed to the user and the interactions between the user and the design has to be documented, and based on that and based on the feedback user give whether it is a good design or whether do they like the design or some what kind of changes do they pay for that has to be documented through the feedback questionnaire and discussion with the users. And that again designers take the decision of based on that feedback, whether there will be a minor iterations or there can be there has to be a major modification or a completely new design is required for the success of those for the user friendliness of the final website has and that has to be decided by the designers.

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So, the process user testing process is can be through photo and video recording, taking notes and questionnaire survey, feedback forms. So, Likert scale is one example of feedback forms where users create the design of particular different attributes of the divine from 0 to 5 scale, and then eye tracking can also be very useful method of a user testing which we also had a demonstration of eye tracking. Eye tracking is a process of ethnographics, it can be involved in the process of ethnographic survey how people behave in a natural scenario natural set up with in the absence of the final design. And it can also tell you designers how desire users are behaving if the presence of the design.

So, that can also be recorded and documented and particularly users are looking at which particular design elements, where are they looking at that can be tested through eye tracking.

So, this is the previous process the other processes photo recording taking notes questionnaire FGD these are very qualitative in nature, but eye tracking is very quantifiable and objective. So, we can easily identify the UI or whether the UI transition UI design and information architecture is proper or not. So, here we can again see the eye tracking done on a particular page how people read and which areas.

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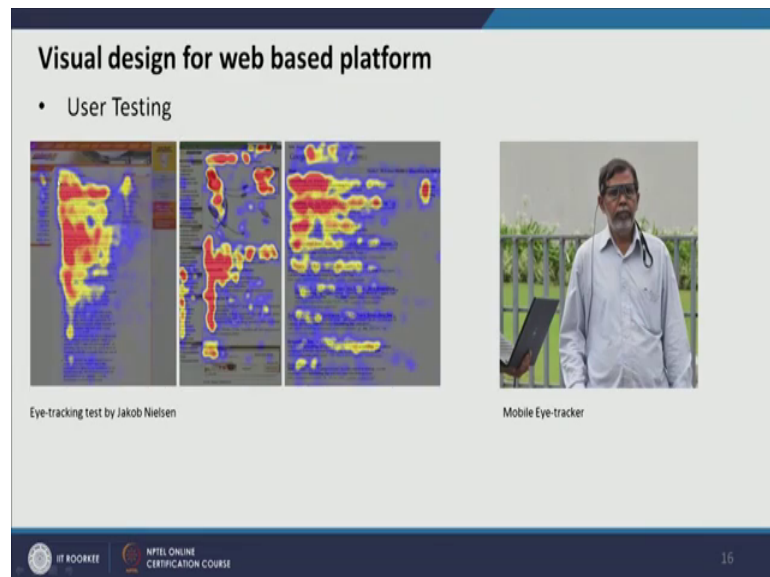
So, if we look at to the testing result, which we get from heat map generated heat map from the eye tracker which is which I showed you previously in the demonstration video. So, this heat map deciphers that the red areas are read properly users of these areas are attending attracting users attention, but some these areas did not at all attract user attention. So, from here we can see this part of the design attended users attraction whereas, this part did not attend any users attraction.

So, from these feedbacks from this analysis we can again change the design, we can modify the position of the text, we can change the layout of the web page, you can change the buttons breadcrumbs and all this way why design elements if required. So, this is a photograph of a user (Refer Time: 28:29) mobile eye tracker. So, mostly web based designs should be tested with a stationary eye tracker attached with the desktop,

but if we are trying to understand the interaction between a mobile web application on a mobile platform or in a tab based platform or if we are trying to understand mostly in a virtual reality or devices or some signage with signage design advertisement, which is we are visible in the public space then we have to go with the mobile eye tracker.

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Here is a photograph of a mobile eye tracker; you can also search about how the desktop is eye tracker works. So, next moving on to the high fidelity design, where visual communication designers part is more, here in the high fidelity design which contains coloured version of the screens where before, but before going to the high fidelity design we should definitely do one round of user testing. Because high fertility designs cost more time that also costs more money and more money for the client.

And so, one round of user testing will prove the validity of the design based on that proved no fidelity design, we can then move on to the high density design of the final product. So, high fidelity design can be delivered in terms of finding first users mental model.

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So, high fidelity design actually contains the colour palette, detailed coloured rendering and UI transitions. So, that colour palette can should be derived from the users mental model of the final product. Mental model is how that also we discussed earlier what people think, what people what the target audience or the users think about the final design and what kind of colour schemes they are expecting in the final design, that has to be done in the ethnographic survey and the questionnaire. So, survey when we do the user research. So, we should ask people what kind of colour palette you are expecting what kind of colour scheme you are you will attach with this kind of website. That will be one source of source for the colour scheme another will be the brand identity of the company.

So, if the company already has a particular colour scheme, valid an established colour scheme the then we should follow the brand identity of the company, that particular colour scheme of the company company's logo or company's branding has to be taken into consideration and also if the company's brand identity is well established this will also affect the users mental model. So, if the (Refer Time: 31:41) companies well as established between the users the company's colour and everything will be also there in the users mind and user will also expect that kind of colour scheme. And that will reflect in the midterm model of the users as well. So, coming to an example this example this is the small work, which has been done for in for SNA for Snapdeal ecommerce web website.

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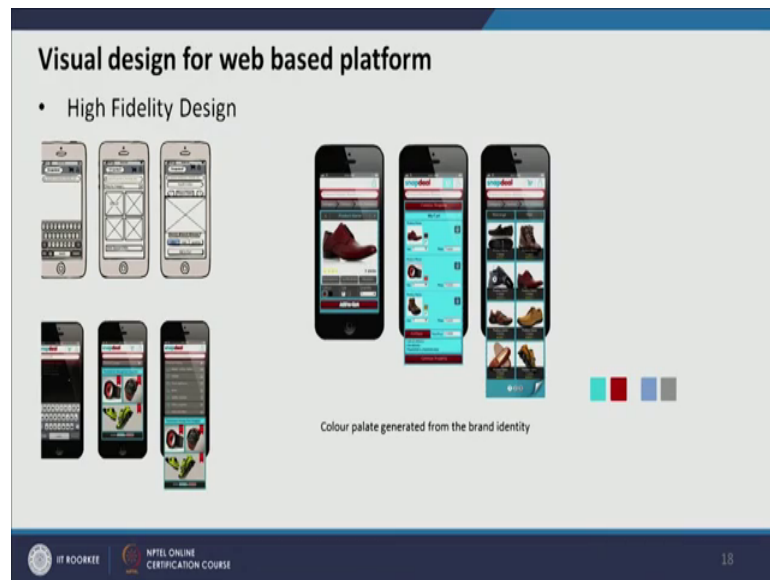
This is not for Snapdeal this is just an exercise which has been done for demonstration. So, first we can see in this corner which is the Balsamiq wireframe which is the low fidelity design prototype, showing the wireframe and information based on the information architecture.

So, this is the low fidelity prototype; from here we I identify what is the users mental model what kind of colour scheme they are expecting what kind of design style they are expecting as well as what is the bands identity, what kind of colour scheme the brand also already has and what is the platform of, what you are what kind of, what is the design platform, what kind of paradigm has to be applied.

So, these things are there and based on that this is the high fidelity prototype over there in the corner in the bottom corner. So, high fidelity prototype exactly shows how the web page web website or web application will look like. So, it contains all the colour, details of the details of textures, shadow and each and every, but buttons and how the pop ups will look like even the rock shadows and everything will be there in the high fidelity design.

So, if we see the cases of this design as we all know slapdeal has a colour this is the logo of the Snapdeal we can see. So, there from the logo of the Snapdeal the colour schemes are derived, which is the cyan or the bluish cyan colour and the red colour is design derived from the logo because its already well established brand and people through the

user study and their users mental model analysis through the feedback. People also identify Snapdeal as with these two colour schemes.

So, these two colour schemes are retained in the design, and along with that to add in the background there is two neutral colour added with the this colour scheme, because the in some spaces we need the neutral colour which we act as a background. So, this highlights which is very vibrant colours which snap Snapdeal has which can act as a focal point which will draw users eye attention and also we need some background colour. So, that is why a more neutral colour that is great and dull version of blue is added to this.

So, here we can see the also because this is designed on a iPhone platform. So, iOS the design style is also adopted because iOS this design style is also a brand design style which is there in the users mental models. So, when we asked when we asked people that what kind of design style you expect in an iOS platform who is a user of iPhone or iPad, they do not expect some the design style which is there in the android platform they expect something which blends with the iOS platform.

So, iOS platforms a style which is a skeuomorphism, which has to be applied in the design style as well skeuomorphism as we all already discussed in the previous lecture that skeumorphism is a style evolved from iOS design paradigm, which is which has a particular intricate texture intricate shadow pattern and bevelled edges and gradient colour palette in the designer design style which is very different from Google's material design or flat design style.
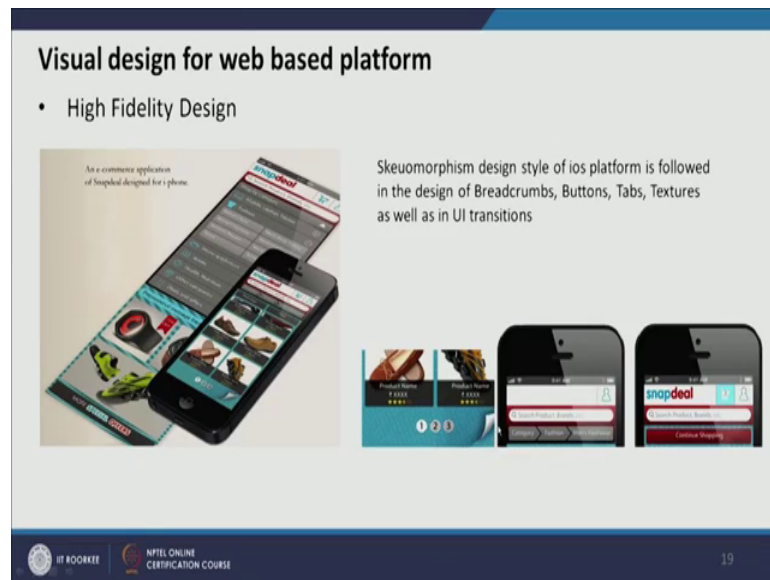
So, this is this has been adopted in the buttons, breadcrumbs, tabs and overall textures and UI transition of the design. So, we can see your proper drop shadow of added here which actually will look which mimics the actual page. So, this is not there in the material design style of evolved from Google. So, even the drop shadow and everything looks like there is a contour there is a texture into the form. So, that is also applied in the visual design style. So, now, we I will give you a small demonstration of the Balsamiq software which can be used for wire frame design.
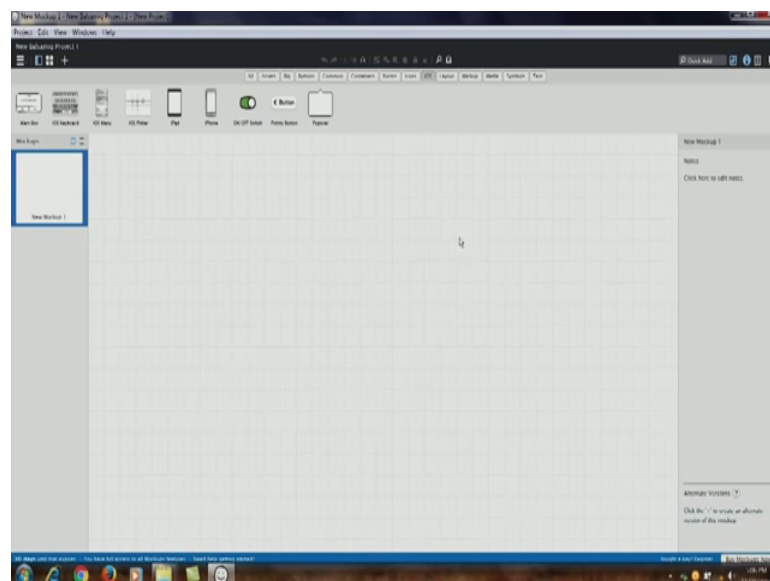
So, we can see this is the logo of the Balsamiq mock ups software which we are launching. So, if you see this is the interface of the Balsamiq software and here on the top we have the different icon different tabs, in one of these tab if we go to the iOS tab where already some iPads format is already there.

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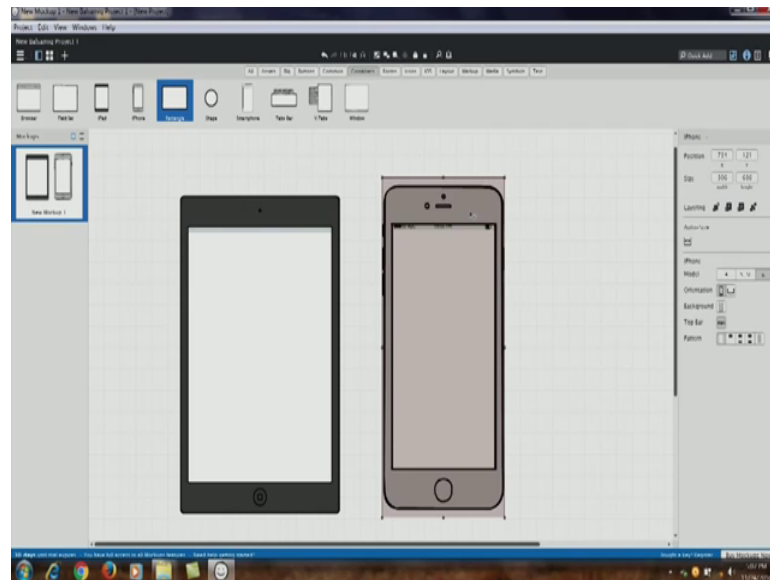
So, we just click and drag. So, there is a already we have and iPad which is created in the Balsamiq in some other versions of balsamic, we also have some different versions of iPhone. So, iPad is there we can clear select iPhone if we want to be a design on iPhone and. So, the basic is ready if we are designing on the iPad platform and if we are not designing on the iPhone we are designing on different tabs and different formats we can create just a rectangular shape some different rectangles, we can create a different rectangles.
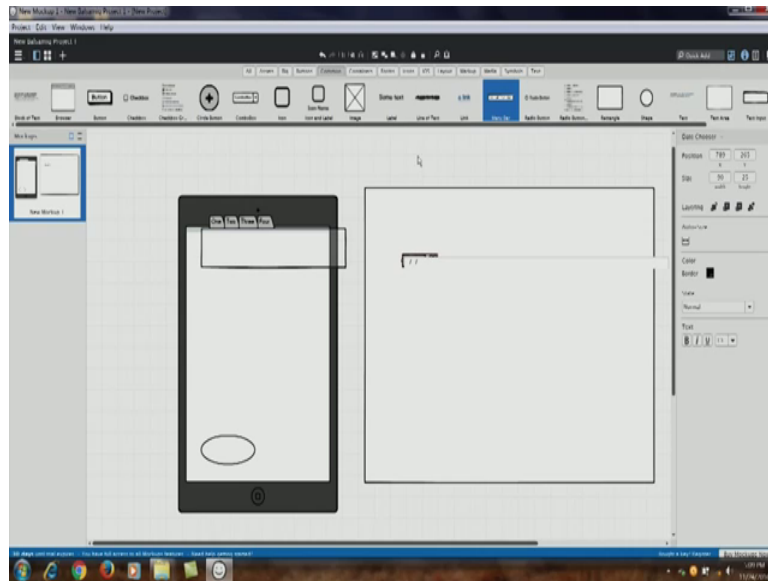
So, I am deleting this we just create a rectangle and we can start designing and it also shows what is the rectangles height and widths in terms of pixel in. So, that also if we see there are different shapes which we can add just click and drop this is a button, we can elongate the button we can change the buttons shape, we can also had different tabs for toolbars which we can add and quickly create some mock ups.

So, this is there. So, you can right click and add the different tool box you can change the position from this tab, we can even change the size, we can change the opacity of this. So, you can see the opacity of this thing is changing if you want to create a toolbar in below toolbar will be just a pop up. So, we can do that and we can here we can see different kind of buttons are also there. So, we can see on off buttons, click buttons, different other buttons day and calendar charts everything has is there you can (Refer Time: 40:02) Balsamiq and all these things menu bars and everything is where in the Balsamiq.

So, this software is a very quick prototyping software for wire framing. So, this is also free software, you can download Balsamiq from their website and start using this for quick paper quick mockup prototype. So, after making this you can come to the visual design and on the Balsamiq software from the Balsamiq software generated low fidelity prototype, we can start adding colour and ask the users. Even from this Balsamiq software you can take a printout and ask people ask the target audience the users, what is the problem with your design, and identify and rectify the design and start moving on to

the high fidelity design.