

User Interface Design
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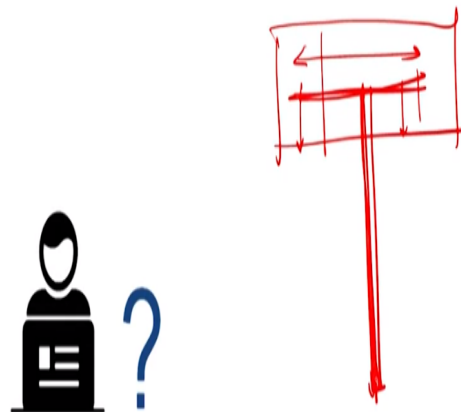
Lecture - 02
User Interface Designer

Hello students, welcome to the online course, NPTEL course, User Interface Design. So today in the second lecture we will discuss who are the designers and what are the roles of designers in the domain of user interface design. So if we look at the user interface designer, this term and this term is used in a different way and there are many other terminologies which might mean the similar profile.

So when we look at the user interface design profiles and what are their jobs and how do they blend with the other different disciplines and how do they act, what are their roles and what do they deliver as a designer.

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User Interface Designers



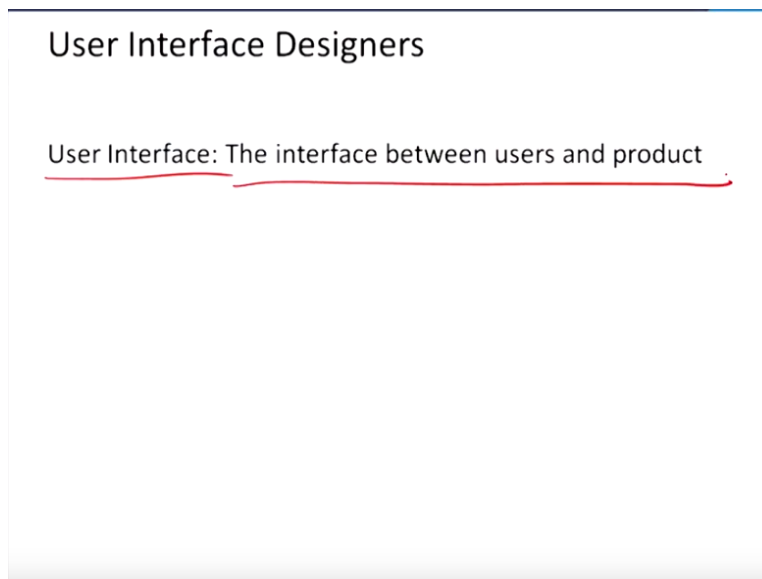
So this designers, the user interface designers and the other designers other terminologies which apply for the similar profile is mostly T-shaped, they have a T-shaped thought process and the expertise is T-shaped. So when this terminology T-shaped is applied, so that means they have a horizontal breadth of knowledge as well as a vertical depth of knowledge. So this signifies their expertise. So they can blend with different profiles horizontally.

So they should have a range of expertise which might not have required a very deep in-depth knowledge on that but they should be able to communicate with the different other profiles for example the web developers, the management people, the client, they should have the knowledge to communicate with them and then there can be also they require knowledge on various different domain.

So that might be psychology to understand user's need and also web design if they need to communicate because they have to communicate with the web designers. As well as they need to communicate with the management people to understand the market requirement. So this horizontal breadth of knowledge is required. As well as they should have vertical depth of knowledge on their own domain which is their own design profile.

So this T-shaped knowledge is very T-shaped knowledge is very much required for the designers for the user interface design platform.

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Now we have multiple different terminologies which might lead to a similar kind of profile. So when we try to understand what is the role of user interface designers, so we need to understand what is user interface. So the terminology depicts the interface between the user and a product.

And this product can be a tangible product or intangible service. So it can be a system design and or a tangible product, tangible product like refrigerator, computer.

And it can also be a software service like for example web application software or it can be a system; so how a total system can run. So web application might not be any particular product but a holistic system even that can be designed by the designers and this interface can also communicate, can also depict the user how the user is behaving within the interface of the system and the user. So it is a broad term if we extrapolate that.

But generally when we use the term user interface design it typically means that user and computer interface. But it can even be a user and system interface and user and product interface.

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User Interface Designers

Human Computer Interface Design: The interface between Human and computer (digital media).

So then there is another term called human computer interface design or human computer interface and the designer for that will be human computer interface designer. So this is the interface between human and computer. So this is pinpointing that the interface has to be between user or the human and the computer. It is not a interface between human and product or human and system.

So it is pinpointing that this human computer interface designers profile will be only the job profile for the human and computer interface. So this will be a digital media. This is specifically for the digital media.

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User Interface Designers

User Interaction Design: The interaction by the users with the interface (digital or tangible)

And then there are terminologies for different terminologies like user interaction design. So this interaction is between the user and the interface and user interaction design again it mostly depicts the interaction between user and the computer or the digital media but you can extrapolate the concept of this interface and it can even be a intangible system or a product. But generally it means that user interaction between human and computer but also it can be the human and the system or the product.

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User Interface Designers

User Experience Design: Codifies the experience of users while interacting with a product or service or system (behavioural soft design)

And another terminology for this is user experience design but there is a difference between user experience and user interface design. So user interface designer will design the interface between the user and the computer or the product but user experience designer profile are different. They will just depict the experience, what is the experience of the user when they are using this interface.

So it will be more of a research of how people behave when they are they have given that product or the system or the computer to interact with. So this user experience designers will create design experience or they will depict what is the experience, whether the experience is good or experience is bad. So this is more of a research profile. So user experience designer's job generally comes first so that they do the survey of the user's experience with the existing product.

Based on that the user interface designers will take over the design and then they will design the interface between the user and the digital or tangible media. And then the other profiles like visual communication designers they will create the interface, the high fidelity interface with the colors and the graphic content and then the developers will develop that.

So the user experience designers are mostly confined with the first part which is a very important part which is the conducting the user survey. Then also this user experience designer they come

in between in the iterative model. We will discuss the models of the methodology later in our discussion. So they also conduct the survey while the product is designed, the low fidelity product is designed in between stages and then they again go back to the user and try to find out whether the user's experience for the designed project or the product is up to the mark or not.

So they again they give the feedback to the user interaction designers on the basis of the experience they can achieve while interacting with the user. And then again it goes to the interaction designers and then they change the design accordingly.

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User Interface Designers

User Experience Design

Visual Communication Design

User Interface Design

So if we look at the connection between the user experience designers, user interface designers, and visual communication designers. So they together combine and create the design component of the system. So we have not discussed visual communication designers in detail. So visual communication designers mostly design the graphical content of the interface. So first the interface interaction designers or the user interface designers design the layout of the web page or the web application, the information architecture.

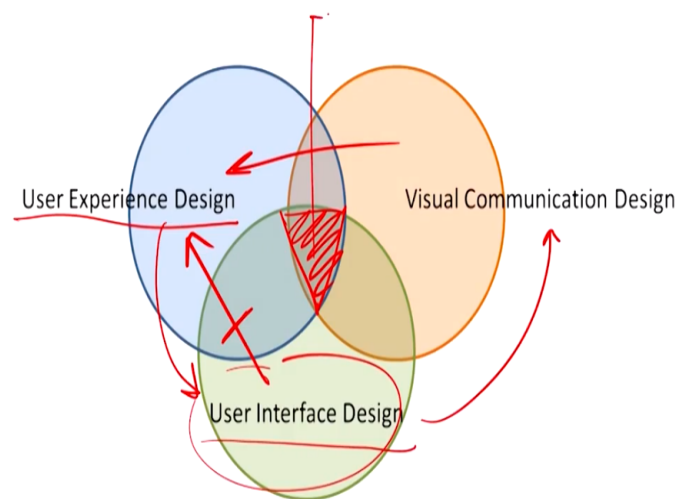
We will discuss what information architecture is. So mostly it is the structure of the website and the web application or the digital media. And then visual communication designers come into picture and then they create the detailing with the color, texture and how the UI transition will happen and on the high fidelity or the next level of designs with the colors and proper

typography, the shape and size of the tabs and the buttons and all this color palette and other detailing is done by the visual communication designers in case of web application.

Visual communication design profiles can also be in animation and graphic design. This visual communication designers are also will be expert of creating graphics, graphical narrative novels and the animation or other domain where there is high value of visual creativity. So they will be expert in creating the visually communicating with the user and the elements with the elements of design.

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User Interface Designers



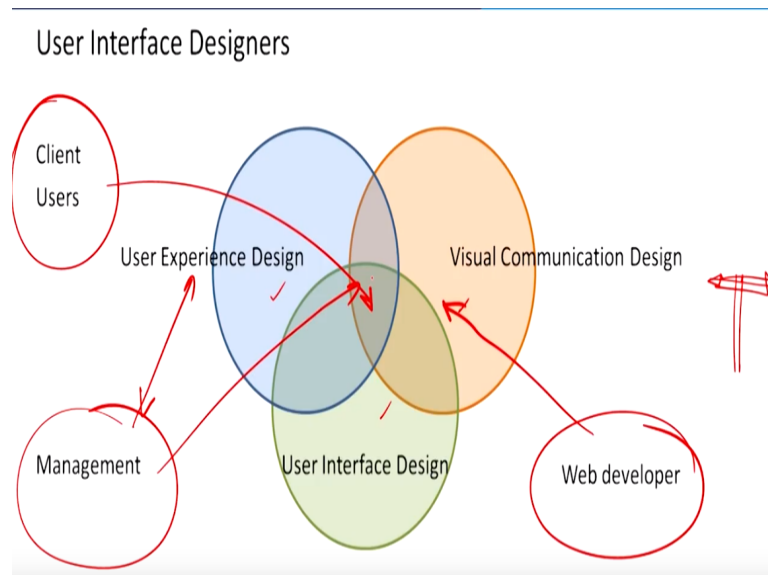
So this is how they are connected. So first user experience designers will do the survey of the users and how their required experience has to be. And then they will feed the data to the user interface designers and user interface designers will create the structure of the web application or the website and then it will go to the visual communication designers. They will add the high fidelity design with the colors, textures, and the detailing.

And they together will create the product which is the combined creation by all these designers. And after visual communication designers or from this stage it can again go back to the user experience designer when the structure of the website can be validated by the user experience designers. Whether the structure can achieve the required experience which is targeted for. Then after, so this is in the mid stage of the design.

And in the high stage of the design when the visual communication elements are also added from there also it can come to the user experience designers. So with the color and tabs and all the detailing whether that design which is more towards the final product can also achieve the you know required user experience or not.

So this is a nonlinear process iterative model of design where user experience designers, user interface designer, and visual communication designer they work together and it goes back and forth and then finally the product comes with their joint venture. So this is we are discussing within the design team.

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So there are design team also connect with the other teams. So here in this stage their in-depth knowledge of the T-shaped knowledge, this part is talking about and they also have a vertical domain of knowledge which is the breadth the horizontal sorry the horizontal domain of knowledge which is the width of the or the breadth of the knowledge which enables them to connect with the other teams which is the web developer team.

Because whenever the design is envisioned by the designers, all three designers and that has to be developed by the web developer. So whatever they are envisioning so that should be feasible to develop. And then so that web developer comes into picture. But the project starts with the

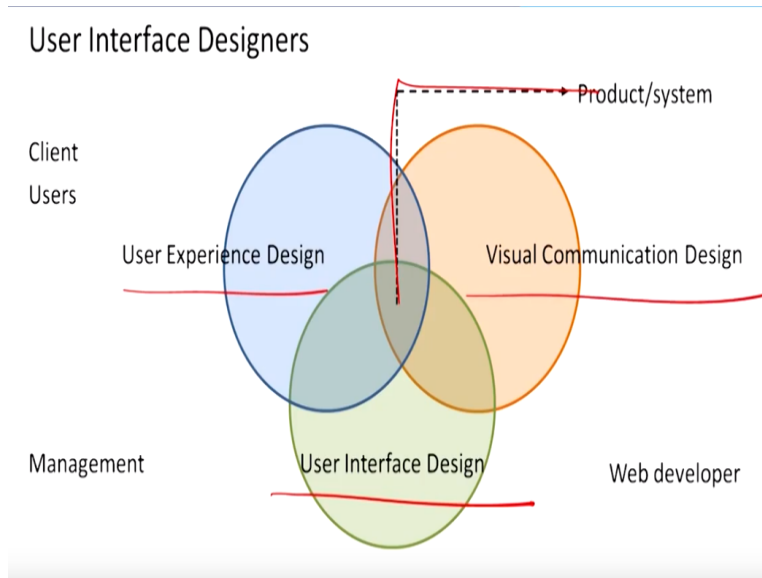
management people when they find the requirement of the product and the return on investment. So whether this product if the product launches the market.

So whether it will be viable for the company to invest that money and launch the product and whether there are enough number of potential customer for this product or not. So that comes from the management people. And they also intervene within the process and then they see whether and then there is a close communication between the user experience designer people and the management. So they sometimes do the similar task.

For example understanding the user requirement, management people also do that and the user experience designers also do that. So they will be in sync with the idea that the product should cater to this kind of people with the person and scenario of the segment of the people and what they are achieving for, they are looking for, their need and desire of the particular user. So their client and user also comes into picture.

And in several times the client and user will be called to see the product in different stages so that the product caters to the need of the user or client. So most of the cases client might be the real user or client might not be the user. For example if there is a big company which is launching a product within their product range, then the client will be different and the real user will be different. So the client will envision the product and the real user will be the target audience.

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So this all the team comes together and then the final product or the system or the intangible system or the tangible product or the digital product comes into the market. So this is the system of the generic system of how designers work within the design team and what are the divisions between the design team and what are the different terminologies used for the design profiles and how these designers then with the other teams within the company or outside the company with the users meeting and the client.

So this is the brief discussion on that and from the next class onwards we will go deep into the design methodology and the research methodology for the design and then we will also go on with the examples and the detailing of how design will be done by the designers and we will focus on the user interface design mostly and also we will talk about the experience design and communication design because these three design profile or the designers work together to create the system. Thank you.