



SNS COLLEGE OF TECHNOLOGY

Coimbatore-36.

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COURSE NAME : 19CST302 – 19CSE315-UI/UX Design

III YEAR/ VI SEMESTER

UNIT – IV UX DESIGN PROCESS

Topic: Data gathering methods

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Intoduction

- Definition of UI/UX: User Interface (UI) and User Experience (UX) encompass the overall experience of a user when interacting with a product or service.
- Importance of Data Gathering in UI/UX Design: Data gathering helps designers understand user behaviors, preferences, and needs, leading to more informed and effective design decisions.



Surveys

- **Definition and Purpose:** Surveys gather quantitative and qualitative data from a large number of users to assess their preferences, opinions, and behaviors related to a product or service.
- **Types of Surveys:** Online surveys, email surveys, and in-app surveys offer different channels for gathering user feedback.
- **Advantages and Disadvantages:** Surveys provide valuable insights but may suffer from response bias or limited depth of feedback.



Interviews

- Importance of Direct Interaction: Interviews allow designers to gain deeper insights into user experiences, motivations, and pain points through direct interaction.
- Types of Interviews: Structured, semi-structured, and unstructured interviews offer different levels of guidance and flexibility in gathering information.
- Tips for Conducting Effective Interviews: Establish rapport, ask open-ended questions, actively listen, and probe for further details to maximize the value of interviews.



Observational Studies

- **Definition and Purpose:** Observational studies involve observing users in their natural environment to understand how they interact with products or services in context.
- **Types of Observational Studies:** Remote and in-person observational studies, as well as ethnographic studies and contextual inquiries, offer different approaches to observing user behavior.
- **Ethnographic Studies and Contextual Inquiry:** Immersing in users' environments helps uncover insights that may not be apparent through other methods.



Analytics and User Behavior Tracking



- Importance of Analyzing User Behavior: Analytics tools track user interactions with digital products or services, providing valuable data for understanding user behavior patterns.
- Tools for User Behavior Tracking: Google Analytics, Mixpanel, and other analytics platforms offer features for tracking user journeys, engagement metrics, and conversion rates.
- Heatmaps and Click Tracking: Heatmaps visualize user interactions on webpages, while click tracking identifies areas of interest and user preferences



A/B Testing

- **Definition and Purpose:** A/B testing compares two or more versions of a design to determine which performs better in achieving specific goals or metrics.
- **Implementation of A/B Testing:** Designers create variations of a UI element or feature and randomly assign users to different versions to measure their impact.
- **Examples of A/B Testing in UI/UX Design:** Testing different call-to-action buttons, layouts, or color schemes can reveal insights into user preferences and behaviors.



Usability Testing

- Importance of Usability Testing: Usability testing involves observing users as they interact with a product or prototype to identify usability issues and areas for improvement.
- Methods of Usability Testing: Remote and in-person usability testing, as well as moderated and unmoderated testing, offer different approaches to gathering user feedback.
- Usability Testing Tools and Techniques: Eye-tracking, screen recording, and thinking-aloud protocols help capture user interactions and verbalize thought processes during usability tests.



Data Synthesis and Analysis

- Importance of Data Synthesis: Data synthesis involves analyzing and synthesizing data from various sources to identify patterns, trends, and insights that inform design decisions.
- Techniques for Data Analysis: Affinity diagrams, user journey mapping, and persona creation help organize and visualize data to uncover meaningful insights.
- Generating Insights from Data: By interpreting data in the context of user needs and goals, designers can generate actionable insights to guide UI/UX design iterations.



Card Sorting

- **Definition and Purpose:** Card sorting is a method for organizing and categorizing information based on user input, helping designers understand how users mentally organize content.
- **Types of Card Sorting:** Open card sorting allows users to create their own categories, while closed card sorting provides predefined categories.
- **Advantages and Disadvantages:** Card sorting can reveal insights into user mental models but may be time-consuming to analyze and interpret.



THANKYOU