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Project Report on
“User Experience Designing Coursework”

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Coursework Assessment

Module Name: User Experience Designing

Task 1

What is the primary goal of usability in UI/UX

The main aim of usability in UI/UX is to ensuring users can achieve their objectives easily and effectively. [1, 2] This involve identifying any problems in the design that might stop users from having a good experience. [3, 5] Ultimately, it's about creating products that are not just functional but also pleasant for people to use.

Name two key factors in building a user-friendly interface

Two important factors for a user-friendly interface is clarity and consistency. [6, 10] A clear layout helps users understand the interface quickly, and consistency in design elements makes the system predictable and easier to learn, which reduce confusion. [6, 7]

How does performing a usability study contribute in a design revamp

A usability study is very helpful for a design revamp because it show what parts of the current design is not working well for users. [14, 15] This informations help designers make changes that are based on actual user needs and behaviors, leading to a more effective and satisfying new design. [11, 12] It ensures resources are invested into changes that truly matter.

Challenges in conducting a usability study

One big challenge is finding the right participants who truly represent the target users for the product; if the sample is not right, the findings may be skewed. [16, 20] Another difficulty can be to ensure the test environment reflect how people will actually use the product in their daily lives, as artificial settings may not capture true behavior. [16, 17] Budget and time constraints also often pose significant hurdles.

Task 2

How can data help in UI/UX

Data provides valuable insights into how users interacts with a product, for example, what features they use most or where they encounter problems. [21, 25] This helps designers to understand user needs better, identify specific pain points, and make design decisions based on evidence rather than just assumptions, which ultimately lead to better products. [23, 24]

What is the difference between qualitative data and quantitative data

Qualitative data gives us insights into the 'why' behind user actions, like their feelings, opinions, or motivations, and it is usually in non-numerical form. [26, 29] Quantitative data, on other hand, is about numbers and statistics, such as how many users clicked a specific button or how long they might have stayed on a particular page; it tells you 'how much' or 'how often'. [27, 28]

How does A/B testing improve a design

A/B testing help improve a design by allowing designers to compare two different versions of an interface element (like a button or a layout) to see which one performs better with users in terms of achieving a specific goal. [31, 33] This process takes out much of the guesswork and lets design decisions be made based on actual user behavior and preferences, ensuring changes are genuinely beneficial. [32, 34]

List down a few common data collection methods and explain each in brief

- **Surveys:** These collect information from a large number of users through a set of structured questions. Surveys are good for gathering both quantitative data (e.g., ratings, frequencies) and some qualitative data (e.g., open-ended responses about experiences). [36, 37]
- **User Interviews:** These are one-on-one discussions with users to obtain in-depth qualitative insights about their attitudes, beliefs, motivations, and experiences regarding a product. They allow for follow-up questions and a deeper understanding of user perspectives. [38, 39]
- **Usability Testing:** This involves observing users as they try to complete predefined tasks with a product or prototype. Its primary goal is to identify usability problems, collect qualitative feedback, and measure task success rates. [37, 38]

Task 3

This task is group work and has been omitted as per instructions.

Task 4

How does accessibility impact in user experience

Accessibility makes sure that people with different abilities (including visual, auditory, motor, or cognitive impairments) can use a product effectively, and this usually improve the overall user experience for all users, not just those with disabilities. [41, 44] For instance, clear navigation and readable text that help users with disabilities also make the site easier for everyone else to use and understand. [42, 45]

Impact of pervasive computing in UI/UX

Pervasive computing, where technology is embedded in many everyday objects and environments, mean that UI/UX design must create interfaces that are more adaptable, context-aware, and often less obtrusive. [46, 49] The interaction needs to be natural and often blend seamlessly into the user's environment, moving beyond traditional screen-based interfaces. [47, 50] This presents new challenges for designers to ensure usability across a multitude of interconnected devices.

What is UCD in UI/UX

UCD, or User-Centered Design, is a design approach where the needs, wants, and limitations of the end user are the central focus at every stage of the design and development process. [51, 53] It involves users actively throughout development, through research and testing, to ensure the final product is highly usable, accessible, and meets their actual requirements. [52, 56]

How does UI/UX improve a business

Good UI/UX can significantly improve a business by increase customer satisfaction and fostering loyalty. [57, 60] When users have a positive and effortless experience with a website or app, they are more likely to continue using that product or service, recommend it to others, and convert into paying customers, which can lead to higher sales and a stronger, more reputable brand image. [58, 59] It can also reduce development costs by identifying issues early.