cOnline Activity No. 8 and 9: Applying the User-Centred System Design Process

Objective

1. Innovate an existing interactive system and computer technology.
2. Perform and apply UCSD.

Materials

- Personal computer
- Any software for (Computer aided designs)or programming language

Background

Atakan(2006), UCSD is used in the design process. Reasons are evaluated why traditional-technology-focused design processes why it may result in unusable systems-and the consequences of those unusable or useless systems. This leads directly to a consideration of the different methodologies that go to make up a user-centered system design process.

Procedure

a.) Identify a scope or agenda
b.) Format for the document is given below as guide for the designers in the making the output both the document and design.

Chapter I. Introduction

Background of the study

In a fast-paced digital era, individuals face increasing challenges in managing information overload and daily responsibilities. Despite the availability of numerous productivity apps, many are cluttered with unnecessary features that hinder rather than help. To address this issue, we propose QuickNotes: a minimal, efficient, mobile-first task management app tailored for users who need rapid, distraction-free task organization. The app is designed to support users in staying organized and focused without overwhelming them with complexity.

Statement of the problem

Many existing productivity applications are too complex for basic users. There is excessive feature clutter that leads to cognitive overload and slower performance, particularly on mid to low-end mobile devices. This results in inefficiencies and missed tasks, especially for users who need to access and manage their to-dos quickly throughout the day.

Assumption of the study

The proposed QuickNotes system will allow users to add, edit, and complete tasks in under three taps. It will provide a clean, responsive mobile interface with essential functionalities such as optional due dates, priority tagging, and basic reminders. The minimalistic approach will solve the problem of feature overload while ensuring speed and efficiency.

Significance of the study

1. **Students** – Will benefit from fast and distraction-free task management to keep up with assignments and schedules.
2. **Young Professionals** – Can manage their daily workload more efficiently, especially in mobile and dynamic environments.
3. **Educators** – Can use the app to organize lesson plans and tasks in a quick and intuitive manner.
4. **General Users** – Anyone needing a basic to-do list app will find QuickNotes easy and pleasant to use.

Chapter II. Research Design

User-Centered System Design Process

A. Task Analysis

Hierarchical Task List:

- Open QuickNotes
    - View current task list
    - Tap "+" to add task
        - Input task title
        - Optionally set due date/reminder/priority
        - Save task
    - Tap on task to mark as complete or edit
        - Edit title, date, or tags
        - Save changes
    - Access settings to change app preferences

B. Requirements Gathering

Methods Used:

- **Observation:** Observed users struggling with overly complex productivity apps.

- **Survey:** Feedback collected from students and professionals about ideal task management features.

Requirements:

- **User Requirements:** Rapid access, ease of use, mobile-optimized interface.
- **Functional Requirements:** Task creation, editing, prioritization, completion.
- **Data Requirements:** Store task title, due date, priority tag, reminder.
- **Environmental Requirements:** Must work on mobile devices in both quiet and busy environments.
- **Usability Requirements:** Clear icons, minimal steps, fast loading, touch-optimized.
- **Designer Requirements:** Simplified interface, black loading screen, intuitive flow.

Storyboarding and Prototyping

A storyboard or flow of the entire picture of the interactive system will be shown here.

The prototype of the interactive system -System input and output forms should be presented here and will be described on how it will function when the user will utilize it **(this part will be presented as a user's manual including the description and functions of the parts of the hardware/technology)**

Evaluation of prototype

Use heuristic evaluation with format given below. This is the criteria of how the design will be graded. **(Select the best design among 3 to 5 alternative designs within your team and evaluate)**

Evaluation Criteria (Based on the 10 heuristics of design evaluation)

Area of Evaluation	5	4	3	2	1

A. **Visibility of System Status** - The system design provides appropriate feedback like message prompts in response to user actions. - The message prompts are clear, visible and understandable.					
B. **Match between the system and the real world** - Used words, phrases and concepts according to users' language rather than system oriented words and computer jargons.					
C. **User control and freedom** - The system design provides ways of allowing users to easily "get in" and "get out" if they find themselves in unfamiliar parts of the system.					
D. **Consistency and Standards** - The colors, text, labels, buttons and other elements in the design are uniform from start to finish**.** - Text and icons are not too small or too big. **-** Menus and other features of the system are arranged and positioned in a consistent way. (For ex. If your website has navigation buttons on the top under the page title on one page, the users will automatically look there for the same features on other pages.					
A. **Error Prevention** - The system design provides an automatic detection of errors and preventing them to occur in the first place. - Idiot proofing mechanisms are applied					
F. Help users recognize, diagnose and recover from errors **-** Error messages and the terms used are recognizable, familiar and understandable for the users.					
G. Recognition rather than recall **-** Objects, icons, actions and options are visible for the user. - Objects are labeled well with text and icons that can immediately be spotted by the user and matched with what they want to do.					
H. Flexibility and efficiency of use - The system design provides easy to navigate menus. - the system does not make wasteful time of system resources.					
I. **Aesthetic and minimalist design** **-**Graphics and animations used are not difficult to look at and does not clutter (mess) up the screen. - Information provided is relevant and needed for the system design.					
J. **Help and Documentation** **-**the system design provides information that can be easily searched and provides help in a set of concrete steps that can easily be followed.					

Chapter III. Conclusion and Recommendation

This section discusses the importance of the design presented by the group and how it can be of help to the problems cited in Section II in Chapter 1. The researchers should also cite here their own insights and learning of the project given in relation to the subject matter Human Computer Interaction.