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Roll Number: 45		Lab Assignment Number: 4			
Title of Lab Assignment: Design creation of scenario. Write a scenario that involves all three of the tasks identified for the chosen project.					
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Practical No. 4

Aim: Design creation of scenario. Write a scenario that involves all three of the tasks identified for the chosen project.

- a. Explain a scenario
- b. Sketch a scenario
- c. Draw a mental model

Theory:

A UI Scenario, also known as user interface scenario, is a description or narrative that outlines the interactions and actions that a user may perform within a user interface (UI) of a software application or system. It provides a step-by-step account of how a user interacts with the UI, including the screens, input fields, buttons and other elements involved in the process.

A UI Scenario helps designers, developers and stakeholders understand and visualize the user's journey through the application's interface. It serves as a means to explore and validate the user experience, identify potential usability issues, and ensure that the interface meets the needs and expectations of the users.

A typical UI scenario includes details such as the user's actions, the system's responses and any relevant input or output data involved in the interaction. It may also include information about the context or purpose of the user's actions, such as the user's goals, motivations or specific tasks they are trying to accomplish.

Overall, a UI scenario provides a structured way to describe and analyze the user interface interaction allowing designers and developers to iteratively improve the UI design and ensure a seamless and intuitive user experience.

UI scenarios offer several advantages in the design and development process of software applications:

1. <u>User Centric Focus:</u> UI scenarios put the user at the center of the design process. By outlining the user's actions, goals and interactions with the interface, UI scenarios help

designers understand the user's perspective and design interfaces that meet their needs effectively.

- 2. <u>Visualizing User Journeys:</u> UI scenarios provide a visual representation of the user's journey through the application. They help stakeholders, designers and developers to visualize the sequence of screens, interactions and transitions, enabling a better understanding of the overall user flow.
- Identifying User Interface Issues: By creating UI scenarios, designers can identify
 potential usability issues or challenges in the user interface early in the design process.
 It allows for proactive problem solving and refinement of the interface to enhance
 usability and user experience.
- 4. <u>Iterative Design and Validation:</u> UI scenarios facilitate an iterative design process. Designers can create, review and iterate on UI scenarios to validate and refine the interface design. It helps ensure that the interface aligns with user expectations, goals and tasks.
- Collaboration and Communication: UI scenarios serve as a communication tool for designers, developers and stakeholders. They provide a common language and understanding of the user interface, facilitating collaboration and effective communication between team members.
- 6. <u>Design Consistency:</u> UI scenarios help maintain design consistency across the application. By visualizing the user flow and interface elements, designers can ensure a cohesive and seamless user experience throughout different screens and interactions.
- 7. <u>Early User Feedback:</u> UI scenarios can be shared with users or stakeholders for feedback at an early stage. This allows for gathering usable insights and incorporating user feedback into the design before significance development efforts have been made.
- 8. <u>Documentation:</u> UI scenarios can serve as documentation for the design rationale and decision making process. They provide a record of the user interface design and the intended user experience, making it easier to revisit and understand the design choices in the future.

Overall, UI scenarios help designers create user-centered, intuitive and effective interfaces. They enhance collaboration, facilitate interactive design and improve the overall user experience and usability of software applications.

A **Mental Model** refers to an individual's internal representation or understanding of how something works or how a particular system, concept or process functions. It is a cognitive framework that helps people interpret and interact with the world around them, guiding their perception, reasoning, decision-making and problem-solving.

Mental models are based on an individual's knowledge, beliefs, experiences and assumptions. They are constructed through a combination of learning, observation and personal interpretation. Mental models allow individuals to make sense of complex information and situations by simplifying and organizing them into coherent structures.

Here are a few points about mental models:

- 1. Simplifications and Abstraction: Mental models simplify reality by abstracting and focusing on the essential aspects of a system or concept. They filter out irrelevant details and highlight the most relevant elements for understanding and decision making.
- Influence on Perception and Interpretation: Mental models shape how individuals perceive and interpret information. They serve as a lens through which people view the world, influencing their understanding of judgements about the environment and the actions they take.
- 3. Predictive and Inferential Power: Mental models enable individuals to predict and anticipate how things will behave or unfold based on their understanding of underlying principles and casual relationships. They help individuals make inferences and draw conclusions based on their mental representations.
- 4. Bias and Limitations: Mental models are subjective and can be influenced by biases, misconceptions or incomplete information. They may lead to cognitive biases, such as confirmation bias or anchoring bias, which can impact decision-making and problem-solving.
- 5. Evolving and Adaptive: Mental models are not fixed but can evolve and adapt over time through new experiences, learning and exposure to new information. They are constantly refined and updated as individuals acquire new knowledge or challenge their existing beliefs.

Mental models play a crucial role in various domains, including psychology, cognitive science, user experience design and decision making. Understanding the mental models of users is particularly important in user-centered design as it helps designers create interfaces and

interactions that align with users' existing mental models, making them more intuitive and user-friendly.

Scenarios for Users while working with the 'Scorify' website:

Scenario 1: Homepage

- Upon entering the website, users are greeted with a visually appealing homepage.
- The user can also see the latest news regarding the game.
- Clear navigation menus direct users to different sections of the website, such as "Login", "Registration,", "About" and "Contact Us".

Scenario 2: Scorer Dashboard

- Upon logging in, the scorer is directed to a dashboard where they can see ongoing matches and matches they have scored previously.
- They can select a match to update or start scoring a new match.
- The dashboard also provides access to settings, help documentation, and account management options.

Scenario 3: Match Details Page

- Each match has a dedicated page where users can find comprehensive details such as teams, venue, date, toss result, playing XI, and match status.
- This page also displays ball-by-ball commentary, milestones, and notable events during the match.

Scenario 4: Match Scoring Interface

- The scorer enters the match details such as teams, venue, date, and type of match (e.g., Test, ODI, T20).
- During the match, the scorer updates scores, wickets, overs, and other relevant information in real-time.
- They can easily switch between innings, overs, and bowlers to update the score accurately.

Scenario 5: Scorecard View:

• Users can view the detailed scorecard of completed matches, including batting and bowling statistics for each player.

• The scorecard includes runs scored, balls faced, strike rate, wickets taken, economy rate, and other relevant metrics.

Component	Description	UI Scenario
User Roles	Scorer: Responsible for updating scores, wickets, overs, and other match details in real-time.	2. Scorer Dashboard 3. Match Details Page 4. Match Scoring Interface 5. Scorecard View
Match Information	Includes details such as teams, venue, date, type of match, toss result, playing XI, and match status.	3. Match Details Page4. Match Scoring Interface5. Scorecard View
Detailed Match Analysis	Provides ball-by-ball commentary, milestones, notable events, batting and bowling statistics for each player.	Match Details Page Scorecard View

Conclusion: We have successfully implemented & Created a Scenario & StoryBoard Template for Users and problems that need to be addressed.