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<b>Roll Number: 45</b>		<b>Lab Assignment Number: 9</b>
<b>Title of Lab Assignment: Usability Evaluation of the Design, Testing of User Interface from Third Party (Test scripts) Output Test Script.</b>		
<b>DOP: 04-03-2024</b>		<b>DOS: 09-03-2024</b>
<b>CO Mapped: CO6</b>	<b>PO Mapped: PO3, PO5, PO7, PO12, PSO1, PSO2</b>	<b>Signature:</b>

## Practical No. 9

**Aim: Usability Evaluation of the Design. Testing of User Interface from Third Party (Test scripts).**

### **Description:**

#### **What is Test Script?**

A test script is a document that outlines a series of steps and actions to be taken during software testing. It serves as a guide for testers to systematically verify the functionality of a software application or system. Test scripts are typically created based on test cases or test scenarios and are used to execute tests in a structured manner. Here's how test scripts are used:

**Test Execution:** Test scripts are used to execute tests on the software under test. Testers follow the steps outlined in the script to interact with the software and verify its behavior.

**Repeatability:** Test scripts ensure repeatability in testing. By following the same steps each time, the test is executed, testers can ensure consistent results and easily reproduce any issues encountered.

**Documentation:** Test scripts serve as documentation of the testing process. They provide a record of the tests performed, including the steps taken and the expected results, which can be useful for auditing purposes or for future reference.

**Automation:** Test scripts can be automated to expedite the testing process. Automated test scripts allow for the execution of tests without manual intervention, saving time and effort, especially for repetitive tests or regression testing.

**Collaboration:** Test scripts facilitate collaboration among team members involved in testing. They provide a standardized format for documenting tests, making it easier for team members to understand and follow the testing process.

**Debugging:** Test scripts can help identify and debug issues in the software. If a test fails to produce the expected results, testers can review the steps outlined in the script to identify where the problem occurred and troubleshoot accordingly.

**Validation:** Test scripts help validate that the software meets the specified requirements and functions correctly according to user expectations. By systematically testing the software against predefined criteria, test scripts help ensure the quality and reliability of the software.

**1. Goal:**

- a. Understanding User Experience
- b. Delve into the users' mindset, motivations, and behaviors when interacting with the website.
- c. Explore how users perceive the website's layout, content, and functionality.
- d. Analyze how well the website meets users' needs and expectations, particularly in accessing farming equipment rental, land rental, and government schemes.
- e. Identifying Pin Points.
- f. Pinpoint specific areas of frustration, confusion, or inefficiency in the user experience related to the core services offered by the website.
- g. Assess the impact of usability issues on users' ability to accomplish tasks related to farming, land rental, and accessing government schemes.
- h. Prioritize identified pain points based on severity and frequency of occurrence to focus improvement efforts.

**2. Gathering Feedback:**

- a. Solicit feedback from users through various channels, including surveys, interviews, and usability testing sessions, specifically targeting the usability of the services offered.
- b. Encourage users to provide both positive feedback and constructive criticism on their experience with farming equipment rental, land rental, and government scheme services.
- c. Actively listen to users' suggestions for improvement and incorporate actionable feedback into future iterations of the website's services.
- d. Improving User Satisfaction:
- e. Measure user satisfaction with the specific services offered by the website through subjective ratings, feedback forms, and Net Promoter Score (NPS) surveys.
- f. Identify factors that contribute to user satisfaction in each service area, such as ease of use, clarity of information, and responsiveness of support.
- g. Implement changes aimed at enhancing user satisfaction and fostering long-term engagement with the website's services.

**3. Enhancing Task Completion:**

- a. Evaluate the effectiveness of the website's services in facilitating task completion for users across different scenarios and use cases.
- b. Identify barriers or obstacles that hinder users from completing tasks related to farming, land rental, and accessing government schemes efficiently.
- c. Streamline service workflows, remove unnecessary steps, and optimize user interfaces to improve task completion rates and user satisfaction.
- d. Benchmarking Performance:
- e. Compare the performance of the website's services against industry benchmarks and best practices, specifically focusing on the usability of farming equipment rental, land rental, and government scheme services.
- f. Benchmark against competitor websites offering similar services to identify areas of competitive advantage and areas needing improvement.
- g. Establish key performance indicators (KPIs) for service usability and track progress over time to measure the impact of usability improvements.

**Activities:****1. Task Analysis:**

- a. Conduct in-depth task analysis to identify the specific goals and subtasks that users need to accomplish when utilizing the website's services.
- b. Analyze the user journey for each service, from initial exploration to task completion, to understand users' behaviors, needs, and pain points.
- c. Document task flows and user journeys for farming equipment rental, land rental, and accessing government schemes to visualize the sequence of steps involved.
- d. User Testing:
- e. Recruit a diverse group of participants representing the target audience for each service, including farmers, agricultural workers, landowners, and government officials.
- f. Develop realistic scenarios and tasks that simulate common use cases and user workflows for each service area.
- g. Capture user interactions and feedback through observation, screen recording, and post-task interviews tailored to each service.

**2. Heuristic Evaluation:**

- a. Engage usability experts or UX professionals to conduct a heuristic evaluation of the website's services.
- b. Evaluate the usability of farming equipment rental, land rental, and government scheme services against established usability principles and best practices.
- c. Generate a list of usability issues and recommendations for improvement based on the evaluation findings for each service area.

**3. Surveys and Interviews:**

- a. Design and administer surveys specific to each service area to gather quantitative data on user satisfaction, ease of use, and perceived usability.
- b. Conduct one-on-one interviews with users who have utilized each service to gain deeper insights into their experiences, preferences, and pain points.
- c. Use open-ended questions to encourage participants to provide detailed feedback and suggestions for improvement related to farming equipment rental, land rental, and government scheme services.

**4. Quantitative Analysis:**

- a. Utilize analytics tools to collect quantitative data on user behavior and service usage patterns for farming equipment rental, land rental, and government schemes.
- b. Analyze metrics such as task completion rates, time to complete tasks, and user engagement with each service to identify areas for improvement.
- c. Use A/B testing to compare different design variations and service features and measure the impact on user satisfaction and task completion rates.

**5. Competitor Analysis:**

- a. Evaluate the usability of competitor websites offering similar services in the agricultural sector to benchmark against industry standards.
- b. Compare key usability metrics, such as service availability, ease of use, and customer satisfaction, for farming equipment rental, land rental, and government scheme services.

- c. Identify strengths and weaknesses of competitor services to inform usability improvements for each service area offered by "Scorify."

**Procedure for Test Script:****1. Introduction:**

- a. Provide a detailed overview of the usability evaluation process specific to each service area offered by the website.
- b. Explain the purpose, objectives, and scope of the test script in guiding participants through the usability testing sessions for farming equipment rental, land rental, and accessing government schemes.
- c. Set expectations for participants regarding their role, tasks, and responsibilities during the testing sessions for each service area.

**2. Task Instructions:**

- a. Clearly define the tasks that participants will be asked to perform for each service area, providing step-by-step instructions and specific goals to achieve.
- b. Tailor task instructions to reflect common user scenarios and workflows related to farming equipment rental, land rental, and government scheme services.
- c. Clarify any terminology or concepts that may be unfamiliar to participants to ensure a common understanding of the tasks.

**3. Scenario Setup:**

- a. Present participants with realistic scenarios and use cases for each service area, providing context and background information to set the scene.
- b. Customize scenarios to align with the goals and needs of users engaging with farming equipment rental, land rental, and government schemes.
- c. Ensure scenarios are relevant and engaging to participants, capturing a range of user experiences and challenges for each service area.

**4. Navigation Guidance:**

- a. Offer guidance on how to navigate the website and locate relevant information or features specific to each service area.

- b. Provide tips and suggestions for efficient navigation tailored to farming equipment rental, land rental, and accessing government schemes.
- c. Encourage participants to think aloud and verbalize their thought process as they navigate through each service area of the website.

**5. Data Collection:**

- a. Outline the methods and tools used for data collection during the testing sessions for farming equipment rental, land rental, and government schemes.
- b. Specify how observations, user feedback, and performance metrics will be captured and recorded for each service area.
- c. Ensure participants understand the importance of providing honest and constructive feedback to improve the usability of each service.

**6. Debriefing:**

- a. Conclude each testing session with a debriefing to gather additional feedback and insights from participants specific to farming equipment rental, land rental, and government schemes.
- b. Encourage participants to reflect on their experiences with each service area and share any thoughts or suggestions for improvement.
- c. Thank participants for their time and contribution to the usability evaluation process for each service offered by "Scorify."

**7. Documentation:**

- a. Document the findings, observations, and recommendations from the usability testing sessions specific to farming equipment rental, land rental, and government schemes.
- b. Summarize key findings, usability issues, and actionable recommendations for improvement for each service area.
- c. Provide supporting evidence, such as quotes from participants, screenshots, and performance metrics, to substantiate findings for each service offered by the website.

**Test Script:****1. User Authentication:****Scenario:**

A new user wants to register and log in to the cricket scoring website.

**Task:**

1. Navigate to the registration page.
2. Fill out the registration form with valid details.
3. Submit the form and create a new account.
4. Log in using the newly created credentials.

**Evaluation Criteria:**

1. Successful registration without errors.
2. Proper validation of user input fields.
3. Successful login with the newly created credentials.
4. User redirected to the correct page after login.

**2. Match Creation:****Scenario:**

A scorer needs to create a new match entry on the website.

**Task:**

1. Log in to the website as a scorer.
2. Navigate to the match creation section.
3. Fill out the match details form with accurate information.
4. Submit the form to create the match entry.

**Evaluation Criteria:**

1. Successful navigation to the match creation section.
2. Proper validation of match details input fields.
3. Match entry created and listed correctly on the dashboard.
4. Confirmation message or notification indicating successful creation.



**3. Match Scoring:****Scenario:**

A scorer needs to record ball-by-ball updates for an ongoing cricket match.

**Task:**

1. Log in to the website as a scorer.
2. Select the ongoing match from the dashboard.
3. Access the match scoring interface.
4. Record ball-by-ball updates accurately as per match events.
5. Save the scoring data.

**Evaluation Criteria:**

1. Successful access to the match scoring interface.
2. Proper display and arrangement of scoring fields.
3. Accurate recording of ball-by-ball updates.
4. Saving the scoring data without errors.

**4. Live Score Display:****Scenario:**

A viewer wants to check live scores and match details on the website.

**Task:**

1. Access the website as a viewer.
2. Navigate to the live scores section or homepage.
3. Select an ongoing match to view detailed match information.
4. Verify the accuracy of live scores, run rates, and match status.

**Evaluation Criteria:**

1. Proper navigation to the live scores section.
2. Correct display of live scores and match details.
3. Real-time updates of scores without manual refresh.
4. Accuracy of match information compared to real-world events.

By conducting comprehensive usability evaluations specific to each service offered by "Scorify," the website can identify and address usability issues, prioritize improvements, and enhance the overall user experience for its target audience.

Project Name: Scorify	
Test Case Template	
Test Case ID: Scorify Web	Test Designed By: Pushkar Sane
Module Name: Scoring	Test Designed Date: 08-03-2024
Test Title: Verify website functionality	Test Executed By: Pushkar Sane
Description: Test the Website	Test Execution Date: 08-03-2024
Pre-Conditions: User must be able to perform activities	
Dependencies: N.A	

**Test Cases:**

Test Case No.	Test case Description	Test Case	Expected Output	Actual Output	Remark
1.	Register for user	Name: Pushkar Email id: pushkar@gmail.com Create password: pushkar@ Re-enter password: pushkar@	User has been registered successfully.	User has been registered successfully.	Pass

2.	Register for user	Name: Pushkar Email id: Pushkar.gmail.com Create password: pushkar@ Re-enter password: pushkar@	Please enter valid email id	Please enter valid email id	Pass
3.	Register for user	Name: Pushkar Email id: pushkar@gmail.com Create password: pushkar@ Re-enter password: pushkar	Passwords don't match	Passwords don't match	Pass
4	Login for user	Username: Pushkar Password: pushkar	Please enter the correct password!	Please enter the correct password!	Pass
5.	Login for user	Username: pushkar Password: pushkar@	Please enter the correct username!	Please enter the correct username!	Pass
6.	Login for user	Username: Pushkar Password: pushkar@	Redirects users to the dashboard.	Redirects users to the dashboard.	Pass
7.	Create Match	Click on the button	User should get redirect to team creation page	User get redirect to team creation page	Pass

8.	Team Creation	Team-A Name: India Team-B Name: Australia Venue: Hyderabad	User should get redirect to add player page	User get redirect to add player page	Pass
9.	Team Creation	Team-A Name: India Team-B Name:	Team name cannot be blank	Team name cannot be blank	Pass
10.	Team Creation	Team-A Name: India Team-B Name: India Venue: Hyderabad	Names of the teams cannot be the same.	Names of the teams cannot be the same.	Pass
11	Start Match	Click on the button	Users should get redirected to the Scoring page and display entered details.	Users get redirected to the Scoring page and display entered details.	Pass
12.	Scoring	Click on wide	Should add 1 run in the batting team and +1 in extras.	Adds 1 run in batting team and adds 1 ball	Fail
13.	Scoring	Click on no-ball	Should add 1 run in the batting team and +1 in extras.	Add 1 run in the batting team and +1 in extras.	Pass
14.	Scoring	Click on 1-run	Add 1 run in striker runs and 1 run in bowler's run.	Add 1 run in striker runs and 1 run in bowler's run.	Pass

15.	Scoring	Click on 4-runs	Add 4 runs in striker runs, 4 runs in bowler's runs and +1 in batsman's 4's column.	Add 4 runs in striker runs, 4 runs in bowler's runs	Fail
16.	Scoring	Click on 0	Add 1 ball to the batsman and bowler.	Add 1 ball to the batsman and bowler.	Pass
17.	Scoring	Click on Wicket	End the inning of batsman, add 1 wicket in batting team as well as bowler.	End the inning of the batsman, add 1 wicket to the batting team.	Fail
18.	Scoring	Selects new batsman	Display on scorecard.	Displays batsman on scorecard	Pass
19.	Scoring	Selects new bowler	Display on scorecard.	Display bowler on scorecard.	Pass
20.	Match	Selects same batsman on strike and non-strike	Both batsmen cannot be same	Redirects to scoring page	Fail

21.	Scoring	Click on Bowled	Add 1 wicket to the batting team and display prompt.	Prompt displayed but no wicket was added to the batting team	Fail
22.	Scoring	Click on Stumped	Add wicket, add bowl played in batsman profile.	No wicket was added. No bowl was added.	Fail
23.	Scoring	Click on 0	Add 1 ball to the batsman and bowler.	Add 1 ball to the batsman and bowler.	Pass
24.	Home	Click on sign-out	Users should get signed-out of their account.	User should log-out of their account and redirect to home page	Pass

**Conclusion:** We have successfully implemented Usability Evaluation of the Design Testing of User Interface from Third Party (test scripts).