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Lab#07

Neilson's Heuristic

Activity 1: Heuristic Evaluation Report

Selected Interface: Facebook

Heuristics Used: Nielsen's Ten Heuristics

Example 1: Clicking the Like Button with a Slow Internet Connection

- When a user clicks the **Like** button on a post while experiencing a slow or unstable internet connection, there is **no immediate visual feedback**.
- The user is left wondering whether the action was registered or not.

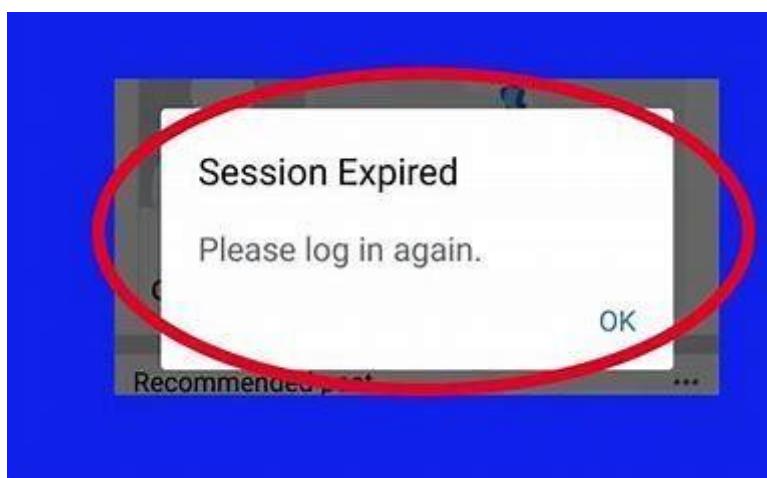
Screenshot:



Example 2: Delayed Login Response

- If a user enters incorrect login credentials, Facebook sometimes takes time to respond.
- No immediate error message appears, leaving the user uncertain.

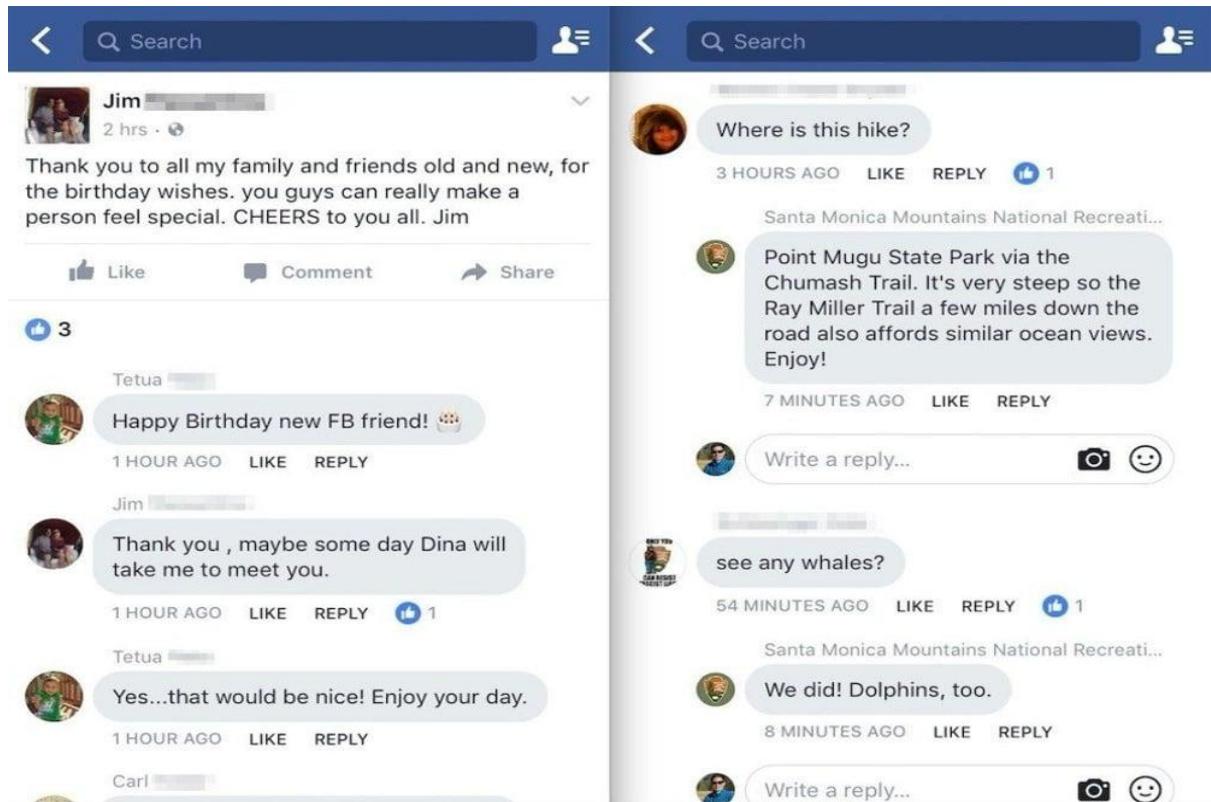
Screenshot:



Example 3: Long-Loading Comment Submission

- Sometimes when posting a comment, there is **no loading animation**, causing the user to click multiple times.
- This leads to **duplicate comments** being posted.

Screenshot:



Example 4: No Clear Error Message for Failed Post Upload

- If a post upload fails due to a network issue, Facebook does not always display a **clear retry option**.
- Users are left confused about whether they should try again.

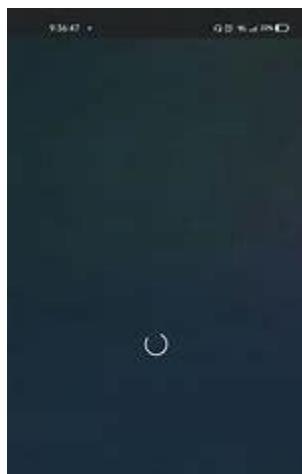
Screenshot:



Example 5: Stuck on Loading Screen

- Occasionally, when switching between tabs or reloading, Facebook gets stuck on a **blank or infinite loading screen** without any message.
- Users are left uncertain if the app is working.

Screenshot:



Why These Violate the Heuristic:

- No immediate indication that an action is in progress.
- Users are left in uncertainty, reducing trust in the system.

4. Suggested Improvements

To improve system visibility, Facebook should:

- Display a **temporary loading indicator** (e.g., a gray placeholder Like animation) until the server confirms the action.
- Show a **message** like “Processing Like...” when the action is delayed.
- Implement a **retry mechanism** in case of connection issues.
- Ensure immediate error feedback for login failures.
- Add real-time status indicators for comment submission and post uploads.

Activity 2: UI Component Redesign

Component Chosen: Old Chat Window

Problems in Original Chat Design:

- No dark/light mode support
- No clear separation between user and others' messages
- No emoji or voice message option

Nielsen's Heuristics Applied:

- Consistency and Standards: Improved iconography, follows messaging app conventions.
- Aesthetic and Minimalist Design: Removed clutter, used minimal design with subtle colors.
- Flexibility and Efficiency of Use: Added emoji support, dark mode toggle.

Redesigned HTML Chat UI (Prototype):

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Modern Chat UI</title>

<style>

body {

margin: 0;

font-family: Arial, sans-serif;

background-color: #f0f2f5;

}

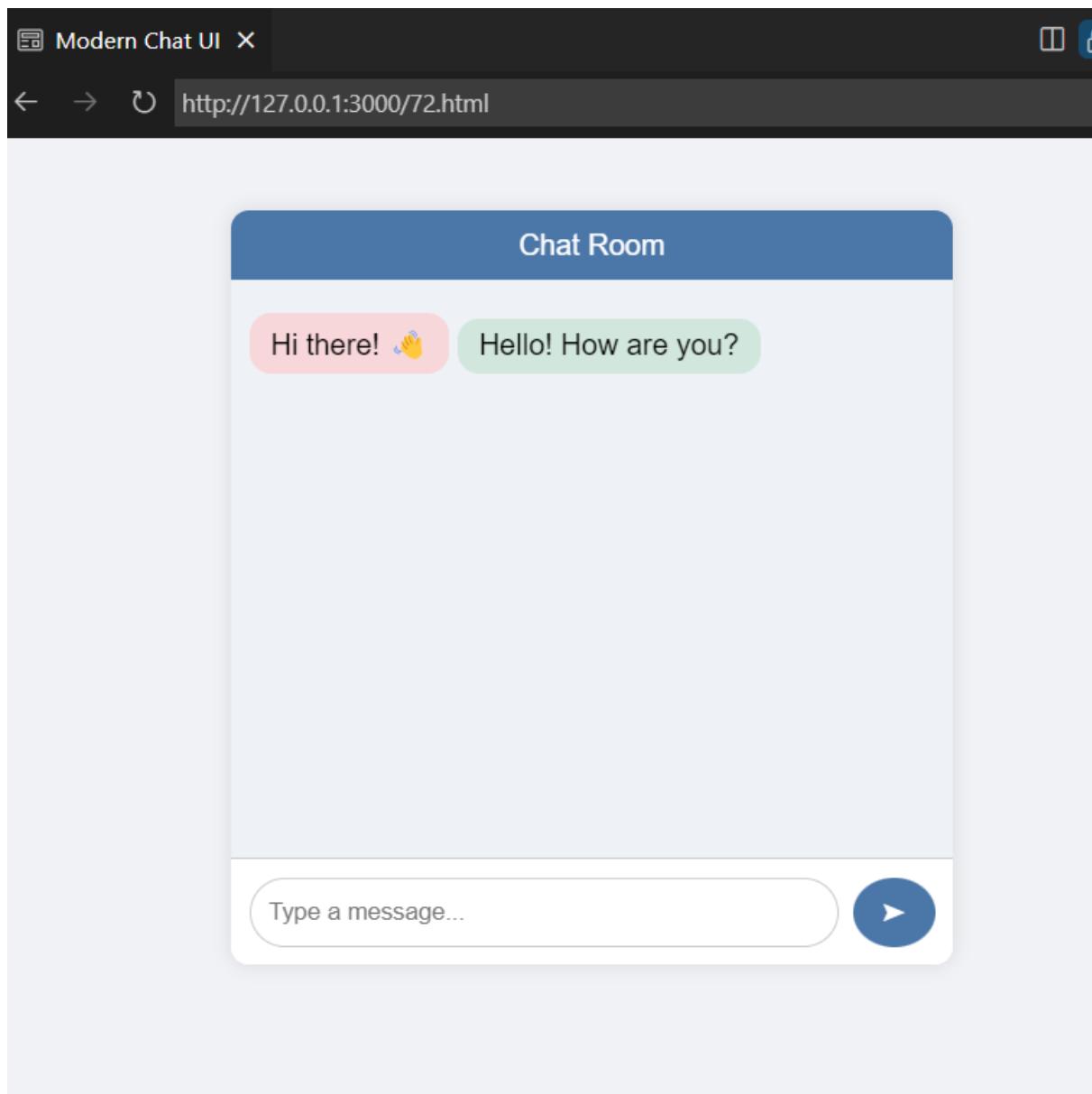
.chat-container {
```

```
max-width: 400px;  
margin: 40px auto;  
background: #fff;  
border-radius: 10px;  
overflow: hidden;  
box-shadow: 0 0 10px rgba(0,0,0,0.1);  
}  
  
.chat-header {  
background: #4a76a8;  
color: white;  
padding: 10px;  
text-align: center;  
}  
  
.chat-body {  
height: 300px;  
overflow-y: auto;  
padding: 10px;  
background: #eef1f5;  
}  
  
.message {  
margin: 8px 0;  
}  
  
.from-user {  
text-align: right;  
background: #d1e7dd;  
padding: 6px 12px;
```

```
border-radius: 12px;  
display: inline-block;  
}  
.from-others {  
text-align: left;  
background: #f8d7da;  
padding: 6px 12px;  
border-radius: 12px;  
display: inline-block;  
}  
.chat-input {  
display: flex;  
border-top: 1px solid #ccc;  
padding: 10px;  
background: #fff;  
}  
.chat-input input {  
flex: 1;  
padding: 10px;  
border: 1px solid #ccc;  
border-radius: 20px;  
}  
.chat-input button {  
background: #4a76a8;  
color: white;  
border: none;
```

```
padding: 10px 16px;  
margin-left: 8px;  
border-radius: 50%;  
cursor: pointer;  
}  
</style>  
</head>  
<body>  
  
<div class="chat-container">  
  <div class="chat-header">Chat Room</div>  
  <div class="chat-body">  
    <div class="message from-others">Hi there! 🙌</div>  
    <div class="message from-user">Hello! How are you?</div>  
  </div>  
  <div class="chat-input">  
    <input type="text" placeholder="Type a message..." />  
    <button>▶</button>  
  </div>  
</div>  
  
</body>  
</html>
```

Interface:



Activity 3: Group Discussion Summary

Q1: Most Important Heuristic?

- “*Recognition Rather Than Recall*” because it reduces user memory load and improves usability drastically.

Q2: Real-World Violation Example:

- *Old government forms (PDFs)* often violate error prevention and consistency leading to confusion and delays in task completion.

Q3: Heuristics in AR/VR:

- “Visibility of System Status” is critical in AR/VR to prevent user confusion.
- “User Control and Freedom” ensures users can easily exit or undo interactions in immersive environments.

THE END