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ZenQuest User Testing Report

Overview

We tested our ZenQuest low-fidelity prototype with 3 computer science students to evaluate this conceptual stress-relief app. Testing focused on emergency relief, mindfulness mini-games, and progress tracking features. The average SUS score was 78.3, indicating good usability despite being an early prototype. Key issues included inconsistent navigation (all participants affected), unclear breathing exercise feedback (all participants), and poor discoverability of progress tracking (one-third of participants unable to complete). We recommend implementing a persistent navigation bar, adding clear inhale/exhale indicators, and increasing progress tracking visibility before development begins.

Introduction

ZenQuest aims to address high abandonment rates of traditional meditation apps (40% within two weeks) by offering gamified stress management for university students. Our research showed students find conventional mindfulness apps feel like "another assignment" and aren't used during high-stress moments when most needed. This test examined if our approach is more intuitive and engaging, focusing on: navigation intuitiveness, activity engagement, emergency relief usability, and progress tracking clarity.

Methods

Target Population & Participants

We recruited 3 Computer Science students (ages 19-23) who had previously abandoned mindfulness apps and reported high stress levels. All participants were experienced with programming-related stress.

Test Instruments & Analysis

We used: consent forms, a Figma low-fidelity prototype, task scenarios, think-aloud protocol, SUS questionnaire, and post-test interviews. Analysis included direct observation, critical incident logging, Nielsen's heuristics for issue categorization, and standard metrics (task success, completion time, error rates).

Findings and Recommendations

Summary Results

- **Task completion**: Emergency Relief (100%), Mindfulness Game (100%), Progress Tracking (67%)
- **Average times**: Emergency Relief (43.7s), Mindfulness Game (49.0s), Progress Tracking (70.7s)
- **Error rates**: Emergency Relief (0.67/user), Mindfulness Game (1.0/user), Progress Tracking (2.0/user)
- **SUS score**: 78.3 (above the 68 industry average)
- The core concept received positive feedback, with all participants expressing interest in using the finished product.

Key Findings

1. Emergency Relief Feature Was Highly Valued but Not Always Immediately Located

Problem: 2 participants initially expected to find it under menus rather than as a home screen button.

Evidence: Moiez commented, "I'm not sure if this should be on the home screen or under settings." Average find time: 43.7 seconds.

Severity: 2 (Minor) - All users eventually found the feature.

Recommendation: Keep the button prominent but add redundant access through menus to meet user expectations (Nielsen's "Match between system and real world").

2. Navigation Between Home and Activities Was Confusing

Problem: All 3 participants struggled to return to home after completing activities.

Evidence: Users attempted device back buttons rather than in-app navigation. Saim: "I'm not sure how to get back to the main screen from here."

Severity: 3 (Major) - Interrupted flow for all users.

Recommendation: Implement persistent bottom navigation bar across all screens (Nielsen's "Consistency and standards").

3. Breathing Exercise Feedback Lacked Clear Visual Guidance

Problem: All participants were uncertain about breathing instructions.

Evidence: Hassan: "I'm not sure if I should be following this bubble as it expands or shrinks."

Severity: 3 (Major) - Directly impacts core stress-reduction functionality.

Recommendation: Add explicit "Inhale"/"Exhale" text labels and intuitive animations (Nielsen's "Visibility of system status").

4. Progress Tracking Feature Had Low Visibility

Problem: 2 participants struggled to find progress tracking; 1 failed to locate it.

Evidence: Task 3 had longest completion time (70.7s) and highest error rate (2.0/user).

Severity: 3 (Major) - Feature discoverability significantly impaired.

Recommendation: Add dedicated navigation icon and home screen dashboard preview (Nielsen's "Recognition rather than recall").

5. Achievements Unlocking Process Was Not Transparent

Problem: All participants confused about how to earn achievements.

Evidence: Saim: "How do I know what I need to do to get this badge?"

Severity: 2 (Minor) - Affects long-term engagement.

Recommendation: Add clear criteria descriptions and progress indicators for achievements (Nielsen's "Help and documentation").

6. Activity Duration Options Were Limited

Problem: All participants wanted more granular time options.

Evidence: Moiez: "Sometimes even one minute feels too long when I'm debugging."

Severity: 1 (Cosmetic) - Current options functional but could be optimized.

Recommendation: Add 30-second emergency option and custom time settings (Nielsen's "Flexibility and efficiency of use").

Limitations

Our small sample (n=3) of only Computer Science students limits generalizability. The low-fidelity prototype couldn't accurately represent animations crucial for breathing exercises. Testing occurred in a controlled environment rather than during actual stress situations. These limitations suggest caution in interpreting results, but consistent findings across all participants indicate genuine usability issues worth addressing.

Conclusion

Testing revealed strong support for the ZenQuest concept but identified critical navigation and feedback issues. The Emergency Relief feature was particularly well-received, confirming the value of quick-access stress management for students. Before development, we recommend: (1) implementing consistent navigation across all screens, (2) adding clear breathing exercise instructions, and (3) increasing progress tracking visibility. Next steps include addressing these issues and testing with a broader participant pool from diverse disciplines.

References

- Nielsen, J. (1994). Heuristic evaluation. In J. Nielsen & R.L. Mack (Eds.), Usability Inspection Methods.
- Sauro, J. (2011). A practical guide to the System Usability Scale: Background, benchmarks & best practices.

Appendices

Consent Form for Moiez

PARTICIPANT CONSENT FORM

Study Title:
User Testing for ZenQuest: A Gamified Stress Management Application

Principal Investigator:
ZenQuest Team

Purpose:
To evaluate the usability of ZenQuest, a conceptual stress-relief application.

Procedures:
• Complete a background questionnaire
• Perform 3 tasks using a low-fidelity prototype
• "Think aloud" during tasks
• Complete a post-test questionnaire
• Participate in a brief interview

Risks & Benefits:
No anticipated risks. Benefits include exposure to new stress management tools.

Confidentiality:
All information kept confidential. Results reported anonymously.

Voluntary Participation:
You may withdraw at any time without penalty.

Participant Name: Moiez
Participant Signature: _____
Date: 22/4/25

Researcher Name: Hamza
Researcher Signature: _____
Date: 22/4/25

Consent Form for Hassan

PARTICIPANT CONSENT FORM

Study Title:
User Testing for ZenQuest: A Gamified Stress Management Application

Principal Investigator:
ZenQuest Team

Purpose:
To evaluate the usability of ZenQuest, a conceptual stress-relief application.

Procedures:
• Complete a background questionnaire

• Perform 3 tasks using a low-fidelity prototype
• "Think aloud" during tasks
• Complete a post-test questionnaire
• Participate in a brief interview

Risks & Benefits:
No anticipated risks. Benefits include exposure to new stress management tools.

Confidentiality:
All information kept confidential. Results reported anonymously.

Voluntary Participation:
You may withdraw at any time without penalty.

Participant Name: Hassan
Participant Signature: _____
Date: 21/4/25
Researcher Name: Aasir Farukh
Researcher Signature: _____
Date:21/4/25

Consent Form for Saim

PARTICIPANT CONSENT FORM

Study Title:
User Testing for ZenQuest: A Gamified Stress Management Application

Principal Investigator:
ZenQuest Team

Purpose:
To evaluate the usability of ZenQuest, a conceptual stress-relief application.

Procedures:
• Complete a background questionnaire
• Perform 3 tasks using a low-fidelity prototype
• "Think aloud" during tasks
• Complete a post-test questionnaire
• Participate in a brief interview

Risks & Benefits:
No anticipated risks. Benefits include exposure to new stress management tools.

Confidentiality:
All information kept confidential. Results reported anonymously.

Voluntary Participation:
You may withdraw at any time without penalty.

Participant Name: Saim
Participant Signature: _____
Date: 21/4/25

Researcher Name: Mohib Un Nabi
Researcher Signature: _____
Date: 21/4/25

Logging Sheet

Participant	Task	Time Start	Time End	Duration (s)	Errors	Completion	Notes
Moiez	Task 1: Emergency Relief	10:05:23	10:06:11	48	1	Yes	Searched Settings menu first before noticing button
Moiez	Task 2: Mindfulness Game	10:08:33	10:09:11	38	0	Yes	Commented positively on game concept
Moiez	Task 3: Progress Tracking	10:12:45	10:14:27	102	2	Yes	Struggled to locate feature, expressed frustration
Hassan	Task 1: Emergency Relief	14:22:10	14:23:12	62	1	Yes	Looked for feature in "Tools" section first
Hassan	Task 2: Mindfulness Game	14:25:30	14:27:02	92	3	Yes	Confused about breathing pattern, tried incorrect buttons

Participant	Task	Time Start	Time End	Duration (s)	Errors	Completion	Notes
Hassan	Task 3: Progress Tracking	14:30:17	14:31:03	46	1	Yes	Found after exploring several screens
Saim	Task 1: Emergency Relief	16:43:21	16:43:42	21	0	Yes	Found quickly, appreciated prominent placement
Saim	Task 2: Mindfulness Game	16:46:04	16:46:21	17	0	Yes	Navigated easily to feature
Saim	Task 3: Progress Tracking	16:50:32	16:52:06	94	3	No	Unable to locate feature within time limit

Script

Introduction: "Thank you for participating in our ZenQuest user test. Please think aloud as you complete tasks. We're testing the application, not you. All feedback is valuable."

Tasks Instructions: "Complete each task as you normally would, sharing thoughts aloud. If stuck, try for a reasonable time before asking for help."

Post-Task Questions:

1. "How easy/difficult was this task (1-5)?"
2. "What was confusing or unclear?"
3. "How might you expect this to work differently?"

Closing: "Thank you for your participation. Your insights will help improve the ZenQuest concept."

Post-Test Questions

System Usability Scale (SUS) - 10 standard questions rated 1-5:

1. I think I would like to use this system frequently
2. I found the system unnecessarily complex
3. I thought the system was easy to use
4. I think I would need technical support to use this system
5. I found the various functions well integrated
6. I thought there was too much inconsistency
7. Most people would learn this system very quickly

8. I found the system cumbersome to use
9. I felt confident using the system
10. I needed to learn a lot before using the system

Additional Questions:

1. What aspects of ZenQuest did you find most appealing?
2. What aspects did you find confusing or frustrating?
3. How likely would you be to use this app during high-stress academic periods?
4. How could we improve ZenQuest to better meet your needs?
5. Would you prefer this over traditional meditation apps? Why?

Critical Usability Issues

Issue	Severity	Feature Affected	Nielsen's Heuristic
Navigation inconsistency	3 (Major)	Global navigation	Consistency and standards
Unclear breathing feedback	3 (Major)	Breathing exercises	Visibility of system status
Hidden progress tracking	3 (Major)	Progress tracking	Recognition rather than recall
Emergency relief discoverability	2 (Minor)	Emergency relief	Match between system and real world
Achievement transparency	2 (Minor)	Achievements	Help and documentation
Limited duration options	1 (Cosmetic)	Activity settings	Flexibility and efficiency of use

Team Dynamics

Team Roles During Testing:

- **Moderator**: Conducted introduction, gave tasks, and facilitated discussion
- **Note Taker**: Documented participant actions, quotes, and timing
- **Observer**: Monitored for critical incidents and non-verbal behaviors

Testing Schedule:

- Three separate sessions scheduled across a single day
- Each session lasted approximately 45 minutes
- 5-15 minute breaks between sessions for team discussion

Debriefing Process:

- Team met immediately after completing all sessions
- Each team member shared observations and key findings
- Collaborative severity rating of identified issues

- Agreement on priority recommendations

Collaborative Analysis:

- All team members independently reviewed notes before meeting
- Consensus-building approach used to identify key findings
- Unanimous agreement on critical issues to address
- Equal contribution to final recommendations