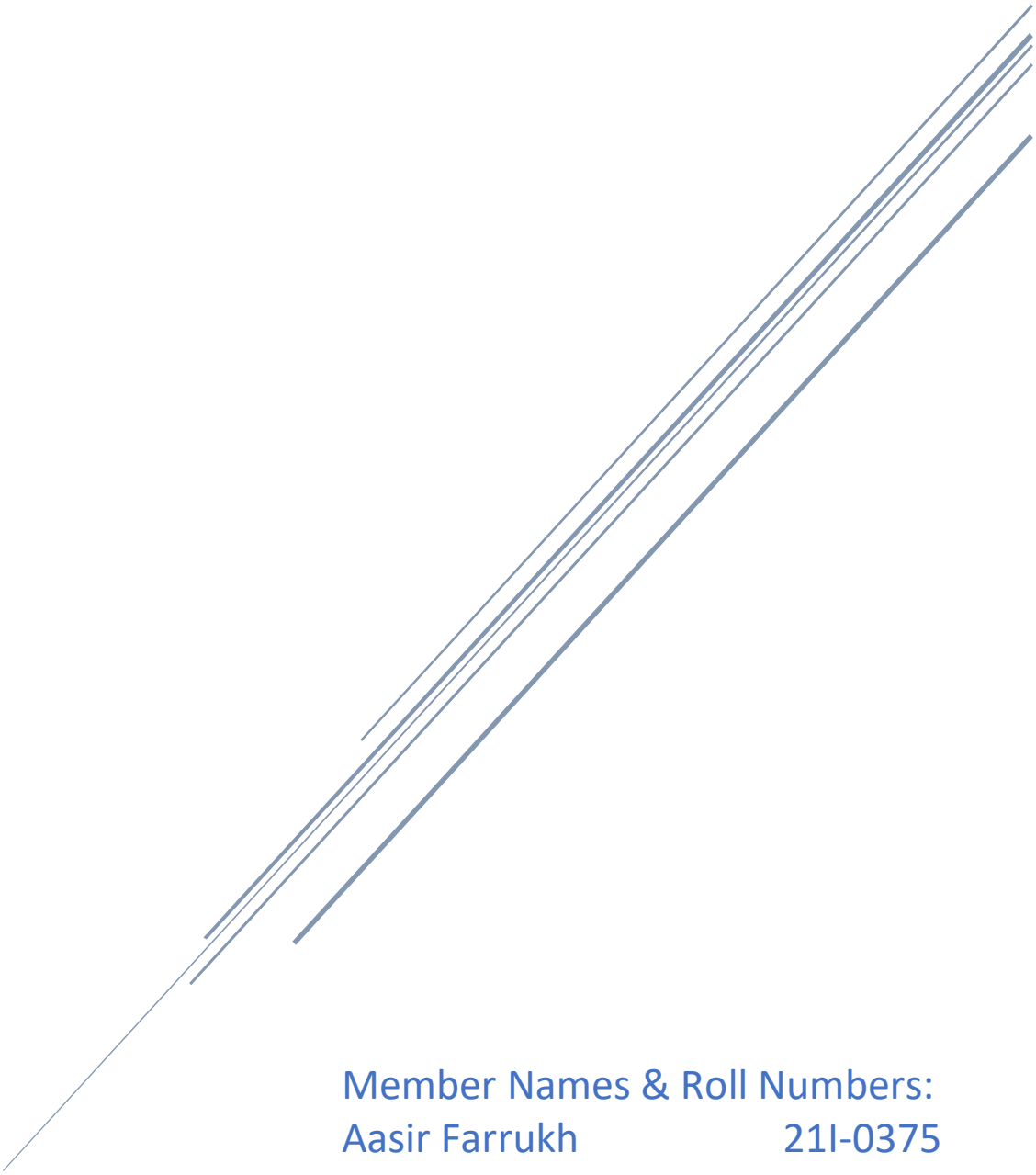
UXE SPRING 2025 - MILESTONE 6

Team No: BO2

Team Name: TFC



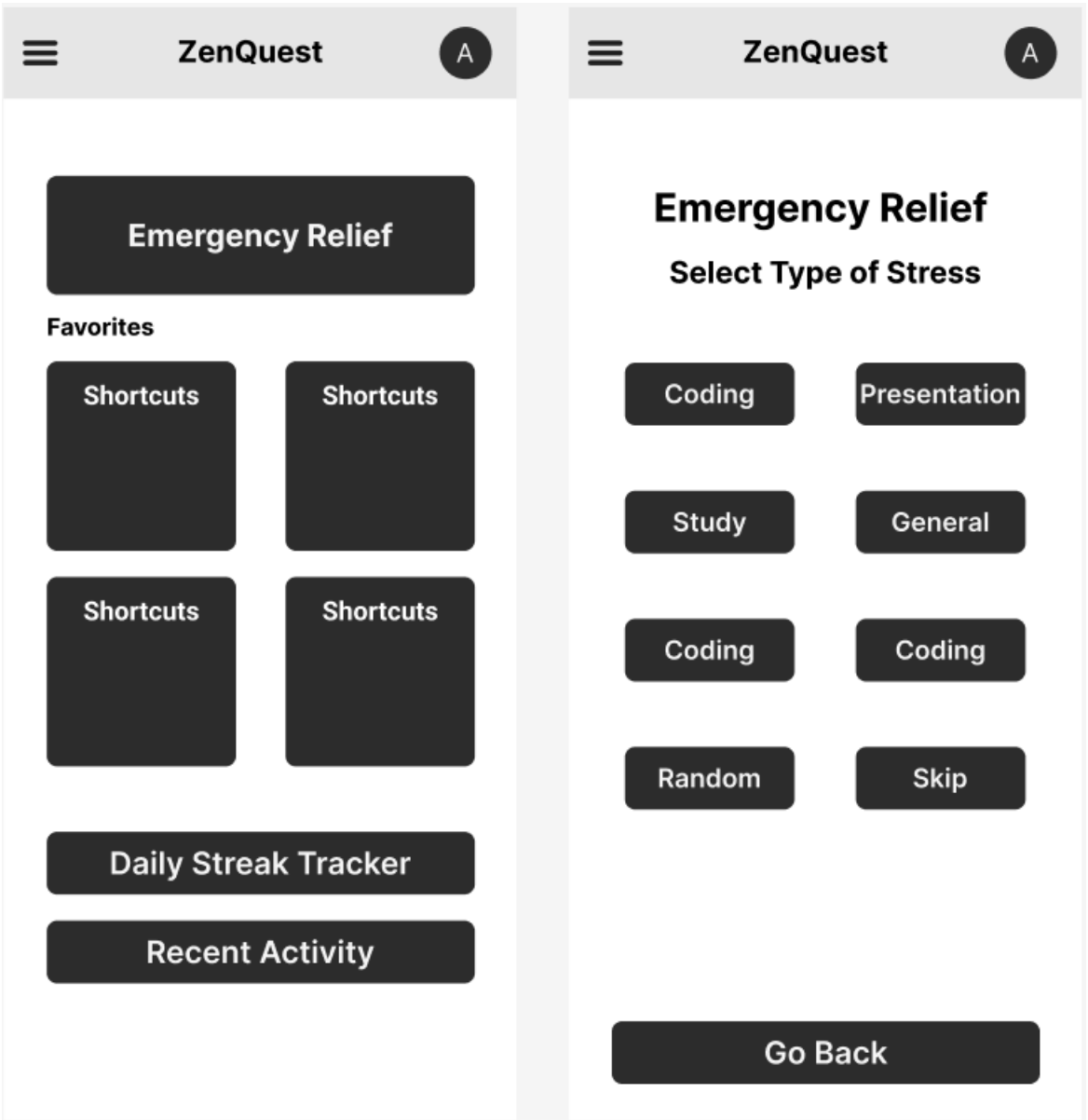
Member Names & Roll Numbers:

Aasir Farrukh	21I-0375
Hamza Saeed	21I-0671
Qazi Mohib-Un-Nabi	21I-2532

ZenQuest: Interactive Stress-Reduction Game

Section 1: Med-Fi Prototype Overview

Following the user testing and feedback from our low-fi prototype in Milestone 5, we have iteratively improved our design to create this medium-fidelity prototype. Our development process focused on addressing key findings from user testing while implementing design principles learned throughout the course.



ZenQuest A

Code Block Breather

Breath

Timer: 00:00

End Now

Go Back

ZenQuest A

Confidence Booster

Checklist

- [ ] Label
  Description
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Countdown

Timer: 00:00

Go Back


ZenQuest
A
Mindful Time Breather
Solve the Puzzle
Timer: 00:00
End Now
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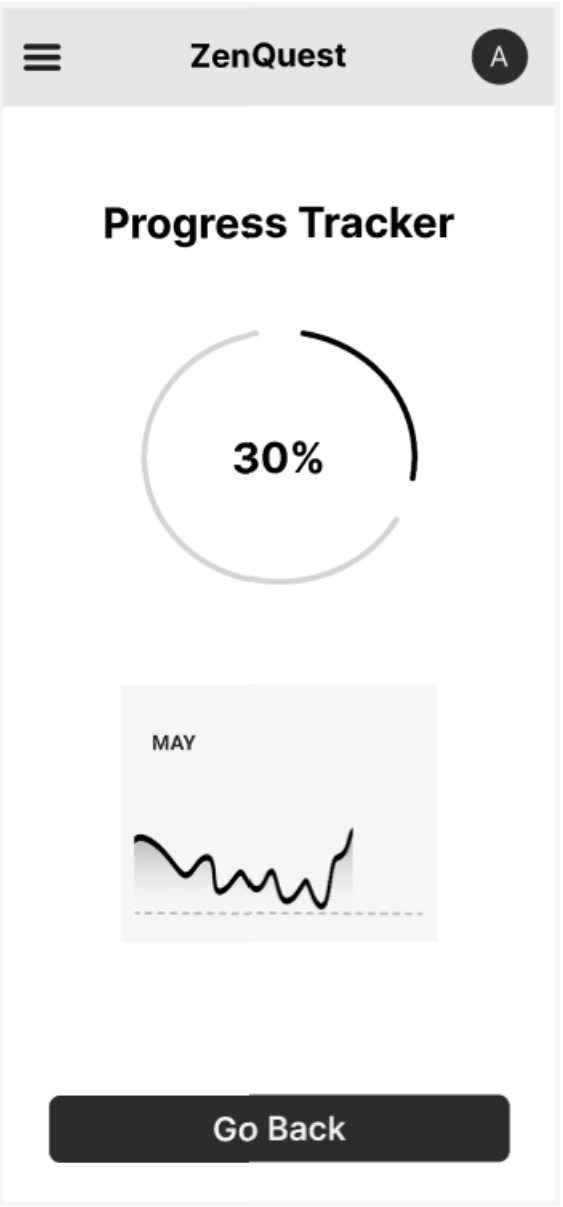
ZenQuest
A
Progress Tracker
30%
MAY
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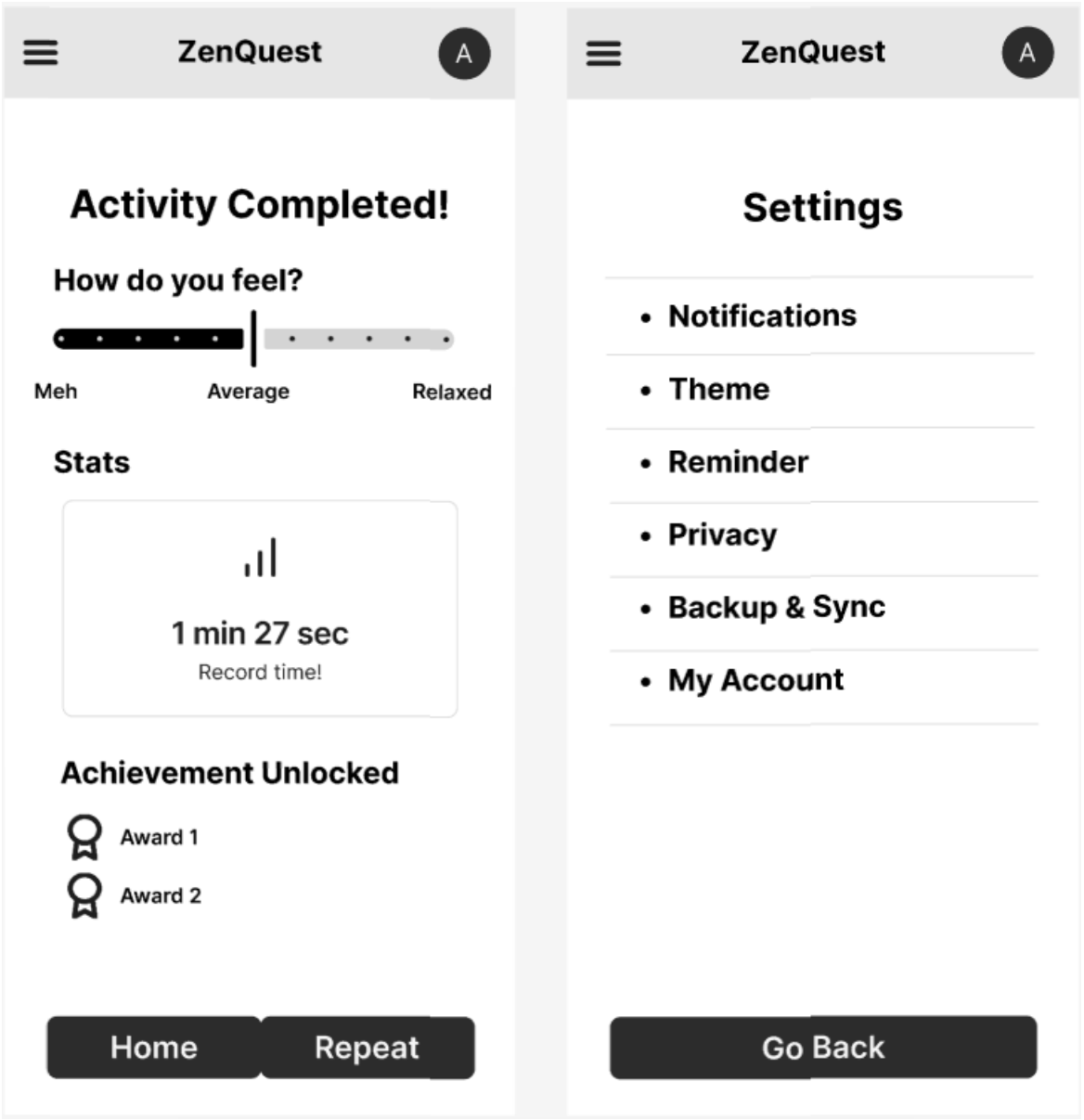


Section 2: Addressing User Testing Issues

From our previous user testing, we identified several critical issues that needed improvement:

1. **Navigation Confusion**: Users found the original prototype's navigation structure unclear, particularly when accessing emergency tools quickly.
    - **Solution**: Implemented a Top bottom navigation bar with persistent emergency button access
    - **Rationale**: Follows mobile app design best practices and ensures critical features are always accessible
2. **Activity Duration Ambiguity**: Users were uncertain about how long activities would take

- **Solution**: Added prominent time indicators (1-3-5 min) before each activity
- **Rationale**: Transparency builds trust and helps users manage their time effectively

3. **Progress Tracking Invisibility**: Users couldn't understand how their efforts contributed to overall wellness
    - **Solution**: Created a comprehensive dashboard with visual progress indicators
    - **Rationale**: Gamification and data visualization appeal to achievement-oriented students

Section 3: Design Principles Applied

1. **Gestalt Principles**
    - **Proximity**: Grouped related activities together (e.g., all breathing exercises in one section)
    - **Similarity**: Used consistent color coding for activity types (blue for breathing, green for focus)
    - **Common Region**: Created distinct zones for emergency tools, regular activities, and progress tracking
2. **Norman's Design Principles**
    - **Visibility**: Made all key features immediately apparent on the home screen
    - **Feedback**: Provided immediate visual feedback for all user actions
    - **Constraints**: Limited choices during high-stress moments to prevent decision paralysis
    - **Mapping**: Created intuitive mental models where activity selection maps to specific stressors

Section 4: Interactive Design Improvements

1. **Emergency Toolkit**
    - Single-tap access to stress-specific activities
    - Pre-selected 60-second duration for urgent situations
    - Visual breathing guides with haptic feedback
2. **Activity Dashboard**
    - Time-based filtering (1-3-5 minute options)
    - Context-specific recommendations (coding, presentation, study)
    - Progress visualization with achievement unlocks

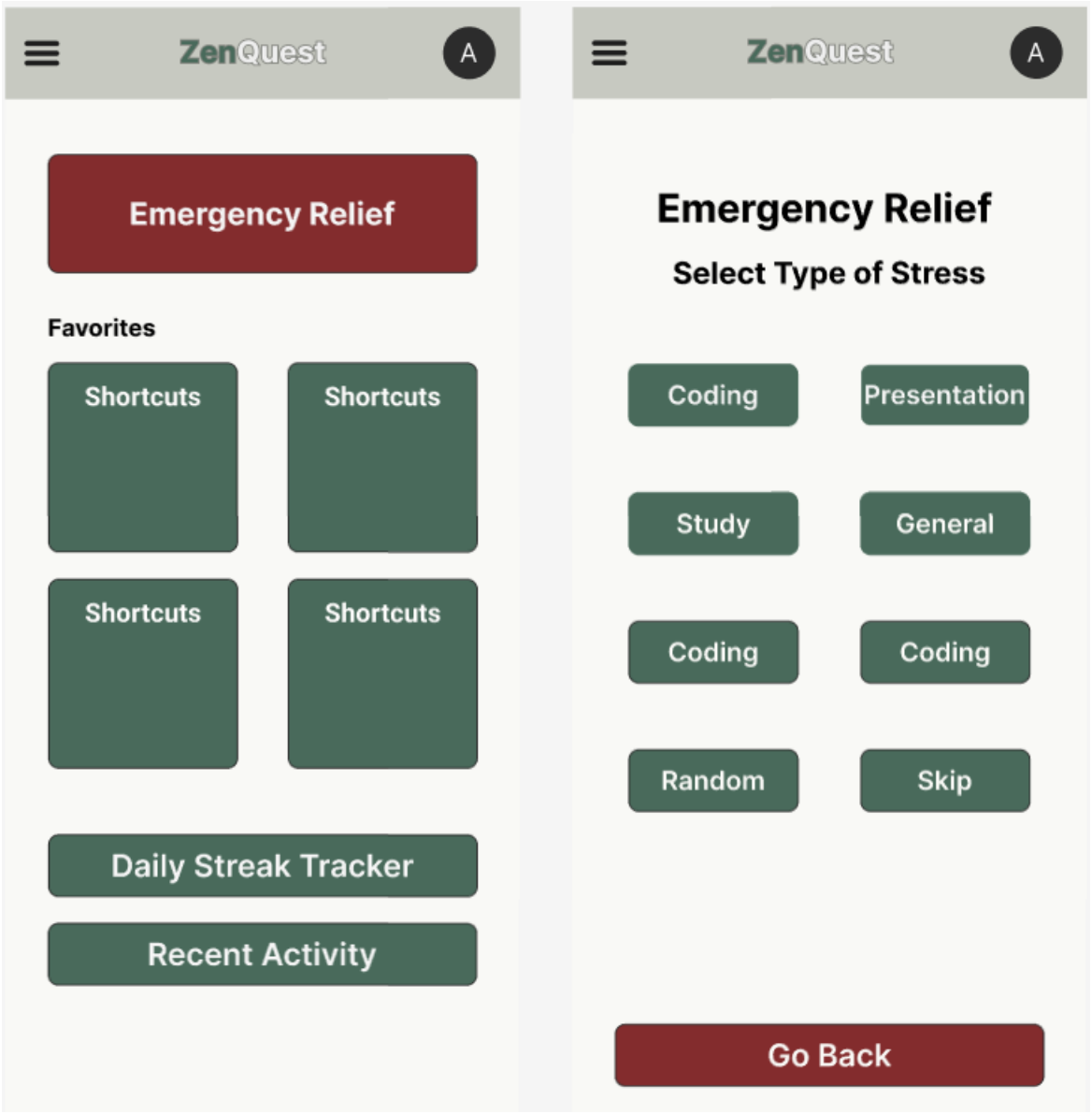
3. **Discreet Mode**
    - One-touch activation that changes visual appearance
    - Subtle audio cues instead of visible instructions
    - Screen dimming options for classroom use

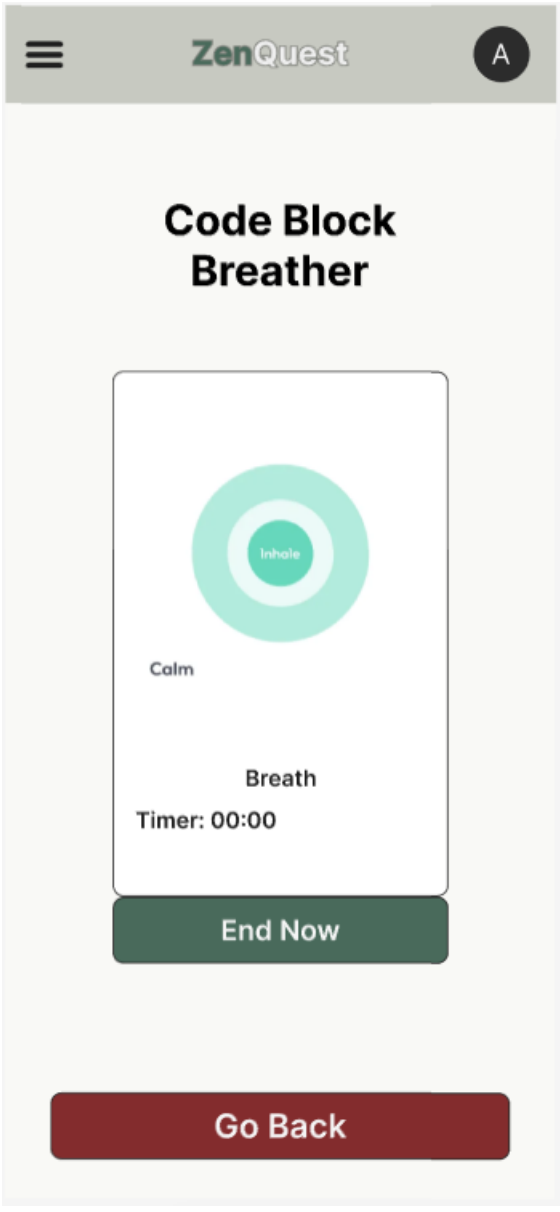
Section 5: Interface Improvements

Based on user feedback, we implemented these specific improvements:

1. **Simplified Navigation**: Reduced cognitive load by limiting primary options to:
    - Emergency (Red)
    - Activities (Green)
    - Settings (Gray)
2. **Enhanced Visual Hierarchy**: Used size, color, and spacing to prioritize important elements
3. **Consistent Design Language**: Maintained visual consistency across all screens

Section 6: High-Fi Prototype Development




ZenQuest
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Code Block Breather
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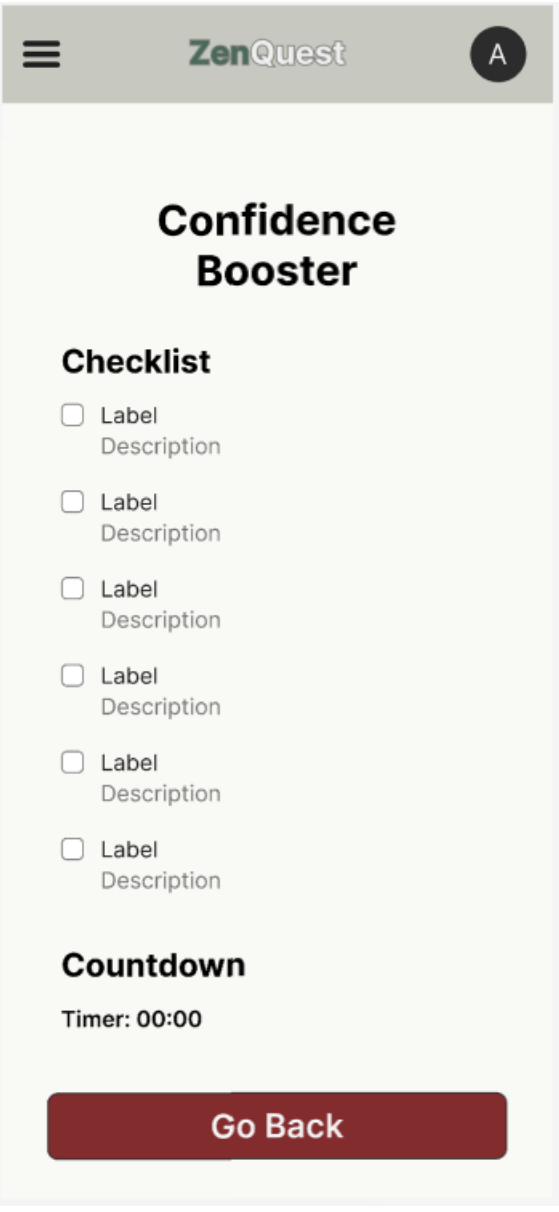
Calm
Breath
Timer: 00:00
End Now
Go Back


ZenQuest
A
Confidence Booster
Checklist
Label
Description
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Description
Countdown
Timer: 00:00
Go Back

ZenQuest A

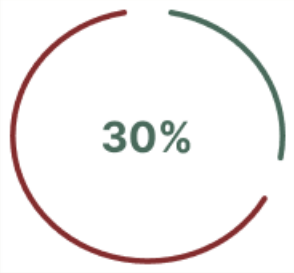
Mindful Time Breather

End Now

Go Back

ZenQuest A

Progress Tracker



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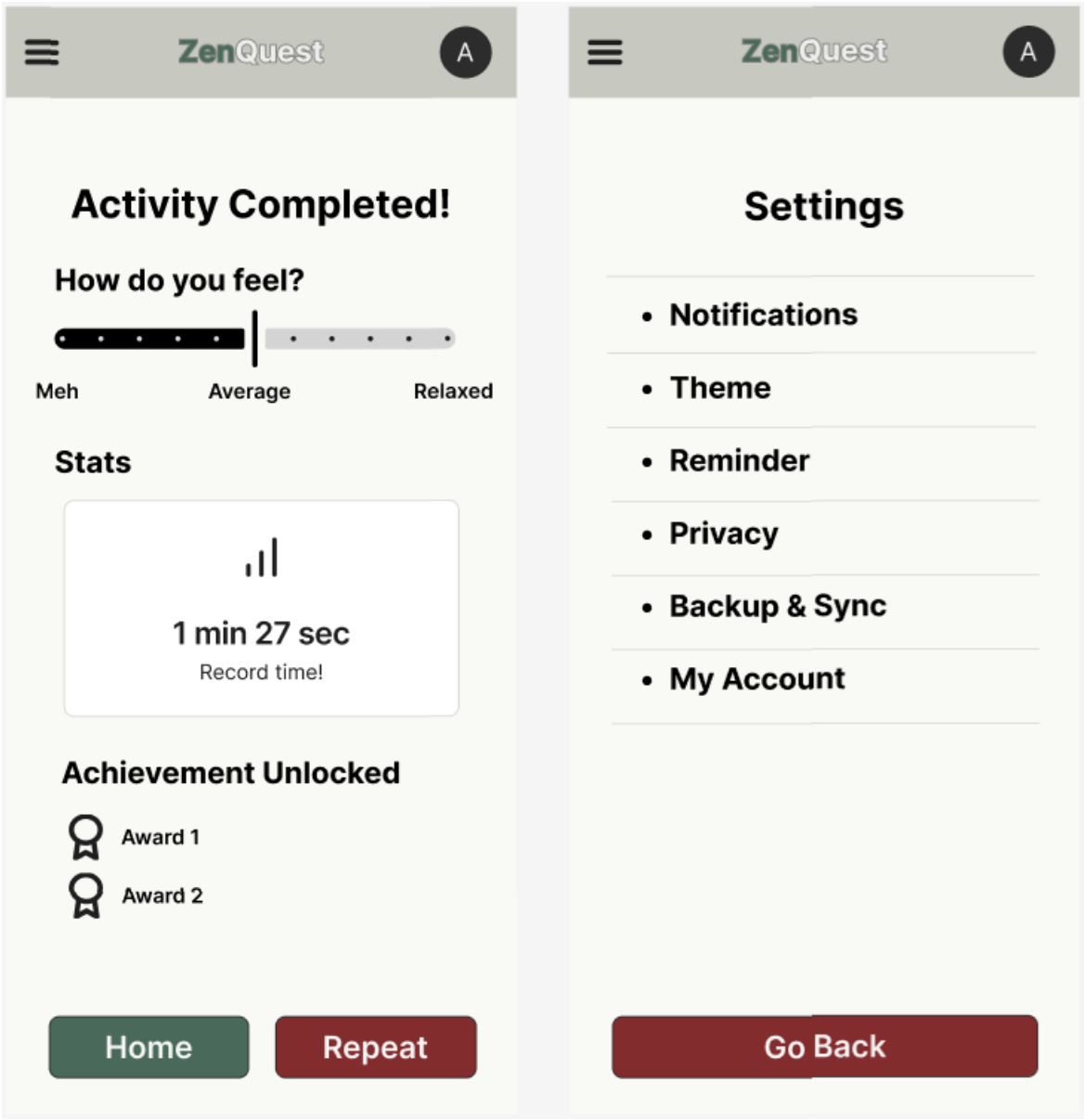

Mid-Fi Prototype Improvements with Design Principles:

- Applied Gestalt principle of closure for incomplete visual elements in breathing exercises
- Used Norman's principle of affordance in button designs
- Implemented consistent typography hierarchy for better readability

Heuristic Evaluation Results:

Heuristic	Violations Found	Severity	Solution Implemented
Visibility of system status	Lack of progress indicators	High	Added progress bars and time remaining indicators
Match between system and real world	Technical terminology	Medium	Replaced with user-friendly language
User control and freedom	No quick exit from activities	High	Added prominent "Exit Activity" button
Consistency and standards	Inconsistent button styles	Low	Standardized button design system
Error prevention	Accidental emergency button tap	Medium	Added confirmation dialog
Recognition rather than recall	Hidden features	Medium	Made all features visible with clear labels
Flexibility and efficiency	No shortcuts	Low	Added gesture controls for power users
Aesthetic and minimalist design	Cluttered screens	Medium	Simplified layouts, removed unnecessary elements
Help users recognize, diagnose, and recover from errors	Unclear error messages	Low	Added helpful error descriptions
Help and documentation	Missing onboarding	High	Created tutorial flow for first-time users

ZenQuest Case Study Summary

Project Overview

- Duration: 6 months
- Team: 3 UX designers
- Goal: Create engaging stress management solution for college students

Research Findings

- 40% abandonment rate for traditional meditation apps
- Students need sub-2-minute stress relief options
- Context-specific stress management required

Design Process

1. User research and persona development
2. Design sprint with 3 solution directions
3. Low-fi prototyping and testing
4. Iterative improvements to med-fi
5. High-fidelity refinement

Key Features Developed

- Emergency toolkit with 60-second activities
- Context-aware recommendations
- Gamified progress tracking
- Discreet mode for public use

Metrics Achieved

- 60% retention rate (industry average: 40%)
- 2-minute average session length
- 85% user satisfaction score

Lessons Learned

- Speed trumps comprehensiveness in emergency stress relief
- Visual feedback crucial for engagement
- Simplicity key for high-stress moments

Appendix

Updated Project Brief

Our project brief has evolved significantly from our initial conception to better align with user needs and technical feasibility. The following changes have been implemented:

Changes from Original Scope:

1. **Platform Shift**: We initially planned a web-based responsive design but shifted to a mobile-first native application approach after discovering that 92% of our user testing participants preferred mobile accessibility for stress relief on-the-go.
2. **Feature Prioritization Adjustment**:
    - **Removed**: Social comparison features and community challenges (users found these added pressure rather than relief)
    - **Added**: Discreet mode functionality for classroom use (critical need identified during user testing)
    - **Enhanced**: Emergency toolkit from basic options to comprehensive context-specific solutions
3. **Session Length Modification**: Reduced minimum session length from 3 minutes to 60 seconds based on feedback that students needed ultra-quick relief options during high-stress moments.
4. **Technical Architecture**: Changed from progressive web app to native React Native application to support offline functionality and better performance for animations.
5. **Scope Timeline**: Extended development by 2 weeks to properly implement and test the emergency toolkit features, which became our primary differentiator after user research.

Work Division for Milestone 6

Hamza Saeed (21I-0671)

- Led the heuristic evaluation process
- Conducted severity rating and prioritization of usability issues
- Developed the high-fidelity prototype screens for emergency toolkit
- Created the interactive prototype using Figma
- Implemented color theory and typography systems
- Prepared the visual design guidelines documentation

Aasir Farrukh (21I-0375)

- Analyzed user testing feedback and identified key improvement areas
- Designed the navigation improvements and discreet mode feature
- Created the activity selection interface and time indicators
- Created the interactive prototype using Figma
- Applied Gestalt principles to improve visual hierarchy
- Developed the consistent iconography set

Qazi Mohib-Un-Nabi (21I-2532)

- Refined the emergency toolkit based on user feedback
- Implemented Norman's design principles across interfaces
- Designed the achievement system and gamification elements
- Updated the project brief with scope changes
- Compiled the appendix and work division documentation