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M5-II: User Test Report

# User Test Plan

## Test Description

PriceGuard is a mobile app designed to help budget-conscious shoppers manage rising grocery prices (8.5% annually) through real-time price tracking, store comparisons, inflation trend analysis, personalized recommendations, predictive price insights, and instantaneous alerts. This user testing plan evaluates PriceGuard’s usability and identifies issues to ensure it meets the needs of middle-aged and budget-conscious shoppers.

## Test Goals

The goal of this user test is to answer:

* Can budget-conscious and middle-aged users effectively use PriceGuard to track grocery prices, compare stores, and stay within budget?
* What problems do users encounter when using PriceGuard’s features (e.g., real-time tracking, alerts, recommendations)?

## Recruiting and Diversity Criteria

The principal audience is budget-conscious shoppers who buy groceries regularly and are unfamiliar with PriceGuard. Recruiting criteria:

* Purchased groceries (online or in-store) in the past 3 months.
* Has not used PriceGuard before.

To gain insights into diverse user experiences, we will recruit participants varying along two dimensions:

* **Shopping Frequency**:
  + Weekly shoppers (e.g., families, frequent planners).
  + Bi-weekly or monthly shoppers (e.g., students, occasional planners).
* **Tech Familiarity**:
  + Comfortable with mobile apps (e.g., frequent app users).
  + Less tech-savvy (e.g., prefer simple interfaces, limited app experience).

**Target**: 4 participants, ensuring 1 from each shopping frequency category and a mix of tech familiarity levels.

## Test Preparation

* **Setup**: Create a test email account (e.g., priceguardtest@gmail.com, password: pgtest2025) for tasks involving alerts or account creation.
* **Prototype**: Ensure the PriceGuard prototype is loaded with simulated data for May 2025, including prices for common groceries (e.g., milk, bread, eggs) at stores like SaveMart, Dwatson, and local markets.
* **Pretest Checklist**:
  + Clear app cache and reset prototype to default state.
  + Verify all task dates are in the future (e.g., May 5–12, 2025).
  + Confirm price thresholds (e.g., Rs3000 budget) reflect realistic grocery costs; adjust if prototype data varies.
  + Update all documents (test plan, script, consent form) with “PriceGuard” as the app name.
  + Test alert functionality to ensure notifications display correctly.

## Pretest Interview

The pretest interview characterizes participants’ grocery shopping habits, budgeting practices, and tech experience. Sample questions:

1. How often do you shop for groceries, and do you primarily shop online or in-store?
2. Tell me about your last grocery shopping trip:
   * What do you usually use to plan your shopping (e.g., lists, apps, flyers)?
   * What is your primary concern (e.g., price, quality, time)?
   * What is your typical grocery budget?
3. What information is most important when planning your grocery shopping?
4. How comfortable are you using mobile apps for shopping or budgeting?

## Task Instructions and Success Criteria

Tasks test PriceGuard’s core features with scenarios reflecting personas’ needs (e.g., Ahmed’s structured budgeting, Eshaal’s cost savings, Saima’s time efficiency). Success criteria marked with may vary based on prototype data and should be verified before each session.

### **Task 1**

You’re planning a weekly grocery shop for your family with a budget of Rs4000. Use PriceGuard to find the cheapest store in your area (e.g., SaveMart, Dwatson, or local market) for a list including milk (1 gallon), bread (1 loaf), and eggs (1 dozen) for May 5–7, 2025. Email the store name and total price to priceguardtest@gmail.com.

* **Success Criteria**: Store with the lowest total price (e.g., SaveMart, 800 ) identified and emailed. On April 27, 2025, prototype data shows ~3 stores with prices under Rs1000; adjust budget to Rs5000 if fewer options are available.

### **Task 2**

You need to buy 5 pounds of chicken breast for a family gathering on May 10, 2025. Use PriceGuard to compare prices across at least three stores and identify the cheapest option. What is the total price for 5 pounds at the cheapest store?

* **Success Criteria**: Cheapest price (e.g., Rs1500 at Metro) identified. Prototype data on April 27, 2025, shows prices ranging Rs1200–Rs1800; verify range before testing.

### **Task 3**

You want to understand how inflation has affected milk prices. Use PriceGuard to view the price trend for 1 gallon of milk over the past 6 months. What was the average price in November 2024 compared to May 2025?

* **Success Criteria**: Trend accessed and average prices reported (e.g., Rs 500 in November 2024 vs. Rs 550 in May 2025). Prototype data provides simulated trends; confirm accuracy before testing.

### **Task 4**

You’re on a tight budget and want to make informed decisions about buying canned tomatoes. Use PriceGuard to find and view the price trend for an 800 g can of tomatoes over the past 6 months (November 2024 to May 2025). What was the average price in November 2024 compared to May 2025?

* **Success Criteria**: Price trend accessed and average prices reported (e.g., Rs 180 in November 2024 vs. Rs 200 in May 2025). Prototype data provides simulated trends; confirm accuracy before testing.

### **Task 5**

You need affordable ingredients for a healthy meal (e.g., vegetables, rice, chicken). Use PriceGuard’s recommendations to find a budget-friendly shopping list under Rs2000 for May 6, 2025, at a local store. Save the list in the app.

* **Success Criteria**: Recommended list (e.g., carrots, rice, chicken breast, Rs22.30) saved in app. Prototype data shows ~5 lists under Rs2000; adjust to Rs2500 if needed.

## Post-Test Questionnaire

Administer the standard System Usability Scale (SUS) questionnaire on paper to measure PriceGuard’s usability. Print forms before each session.

**Link To Questionnaire:**

<https://docs.google.com/forms/d/1U-7ptdJZ_pD711K15K_8JGIFxmHUB5DU5OhIr9owTMc/edit>

## Debriefing Guidelines

Focus on usability issues encountered during tasks, then explore broader feedback if time allows:

1. **Usability Issues**: Review struggles: “What difficulties did you have with PriceGuard? I noticed you struggled with [feature, e.g., setting alerts]; can you tell me what happened? You paused here; tell me more.”
2. **Preferences**: “What did you like/dislike about PriceGuard? Which features are most/least important?”
3. **Improvements**: “If you had 3 wishes to improve PriceGuard, what would they be? Why?”
4. **Description**: “How would you describe PriceGuard to a friend?”
5. **Use Cases**: “When would you use PriceGuard, and why?”

## Sequence of Activities

* **Welcome and Consent** (5 minutes): Explain purpose, obtain informed consent.
* **Pretest Interview** (5–7 minutes): Gather background on shopping habits and tech experience.
* **Tasks** (25–30 minutes): Complete 5 tasks with facilitator guidance as needed.
* **Post-Test Questionnaire** (5 minutes): Complète SUS questionnaire.
* **Debriefing** (10–15 minutes): Discuss usability issues and gather qualitative feedback.

# Consent Form

I agree to participate in the study of ***PriceGuard***, a shopping assistant app designed to help users track prices, compare store deals, analyze price trends, assist in budgeting, and provide personalized shopping recommendations. This study is being conducted as part of the course: *User Experience Engineering - Spring 2025*.

I consent to the recording of this test session. The recording will be used strictly for research, analysis, testing and improving the design of PriceGuard.

I understand that participation in this usability study is voluntary, and that I may withdraw from the study at any time. I also agree to immediately raise any concerns or areas of discomfort during the session with the study administrator.

I sign below to indicate that I have read and understood the information on this form and that any questions I had about the session have been answered.

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thank you! We appreciate your participation and assure you of the confidentiality of your privacy.

# Logging Sheet

### **Link to test Recordings:**

<https://drive.google.com/drive/folders/1J2565Qk7CrieP4nrzF63DXkylga-Libw?usp=drive_link>

### **Logging excel sheet link:**

[Logging Sheet](https://docs.google.com/spreadsheets/d/1OvZdadd42M1IHdbFdHghdoOZ2yvKlPEwKuiGG80zTcs/edit?gid=0#gid=0)

# User Test Script

## Pretest Checklist

* Keep the Logging Sheet and this Test Script ready and accessible while testing.
* Print Consent Form.
* Print tasks [one per page] for user accessibility during the test.
* Start screen recording.

## Posttest Checklist

* Stop recording, save audio and video to backup drive
* File informed consent form
* File logging sheet

## Introduction to Demo

**Moderator (with a big smile!):** Hi! Thanks so much for coming in today. We’re constantly trying to improve our product, and getting your honest feedback is really important to us.

Today, we're testing an app called **PriceGuard**. I’m here to learn from you — I’ll ask questions, but **you are not being tested**. There are **no right or wrong answers!**

I’ll start by asking a few background questions. Then, I’ll ask you to perform some tasks using PriceGuard. As you work, **please think aloud** which means, please say what you’re trying to do, what you expect to happen, and what you notice. If you feel confused or stuck, please share that too. Honest feedback is the most helpful!

If you get completely stuck, I’ll help, but I’ll first observe what you would naturally try. I want to emphasize that **you won’t hurt my feelings** by telling me what you think, the goal of this activity is to recognise PriceGuard’s shortcomings and improve on that.

**Do you have any questions before we start?**

## Consent Form

* Present the Consent Form
* Summarize it briefly
* Obtain participant’s signature

## Pre-test Questionnaire

1. Have you ever used a shopping assistant or price comparison app before?
2. Tell me about the last time you went shopping for groceries or household items.
   * What do you usually do to find good deals?
   * What is your primary goal while shopping (e.g., save money, buy specific brands, etc.)?
   * Do you usually set a monthly shopping budget?
3. When shopping, what type of information is most important to you (e.g., price, discounts, brand, quality)?
4. How often do you go shopping for groceries or daily-use products?

## Task Instructions

*(Print each task’s statement only [not heading] on a separate sheet and present one at a time. Read each aloud.)*

### **TASK # 1: Real-Time Price Check**

Imagine you’re standing in a store and looking at Sunsilk Shampoo.  
 → Open PriceGuard and find the current price of that Sunsilk Shampoo.

### **TASK # 2: Compare Store Prices**

Imagine you want to know if another store has a cheaper price for the Sunsilk Shampoo.  
 → Use PriceGuard to compare prices across stores.

### **TASK # 3: View Available Deals and Discounts**

→ Find and view available discounts or promotions on Sunsilk Shampoo.

### **TASK # 4: Analyze Price Trends**

→ Find and view the price trend for a product.

### **TASK # 5: Personalized Recommendations**

→ Check if PriceGuard offers you recommendations or alternative products.

## Debrief

1. **Review Difficulties**
   * You struggled a little with [specific part] — can you explain what happened?
   * You paused here — could you share what you were thinking?
2. **Preferences**
   * What did you think of PriceGuard overall?
   * What did you like or dislike?
   * Which features felt most/least useful to you?
3. **Changes**
   * If you had 3 wishes to make PriceGuard better for you, what would they be? Why?
4. **Understanding**
   * If you had to explain PriceGuard to a friend in a sentence or two, what would you say?
5. **Use Cases**
   * In what situations do you think you would use PriceGuard? Why?

## Conclusion

**Moderator:** This has been incredibly helpful. Today you mentioned [briefly summarize issues, e.g., finding discounts easily, budget management was confusing, etc.]. Your input is really valuable as we work to make PriceGuard better.

Thank you so much for your time and honest feedback!

[If appropriate: Give your participant any thank-you gift or incentive.]

# Post-Test Questionnaire

Link to Questionnaire

<https://docs.google.com/forms/d/1U-7ptdJZ_pD711K15K_8JGIFxmHUB5DU5OhIr9owTMc/edit>

# Appendix

#### **Project Brief**

**PriceGuard** is a mobile app designed to assist budget-conscious shoppers by tracking grocery prices, comparing store deals, analyzing price trends, providing personalized shopping recommendations, and offering price alerts. The app helps users stay within their budget by offering real-time data and insight into grocery price fluctuations.

#### **Changes to the Project Brief**

There have been **no changes** to the original scope or plans of the project. The app's features and testing approach have remained consistent with the initial project brief. No new features were added or existing features removed; the focus has been on refining the usability of the app based on user feedback.

#### **Team Dynamics**

* **Javeriah Abid**: Responsible for the **User Test Script** and **Logging Sheet**.
* **Aliza Ibrahim**: Contributed to the **Consent Form** and **Logging Sheet**.
* **Mehreen Israr**: Worked on the **User Test Plan Overview** and **Logging Sheet**.
* **Fizza Mumtaz**: Developed the **Appendix**, **Post-Test Questionnaire**, and **Logging Sheet**.

#### **Links**

* **Wireframes**: [View lo-fi Prototypes on Figma](https://www.figma.com/design/CdBOo0mBZToy0HDkvtGwjM/PriceGuard-WireFrames?node-id=0-1&p=f&t=pHBamatC50iCGma3-0)
* **Lo-fi Prototype**: [View Wireframes on Figma](https://www.figma.com/design/uGPH489B4qEcjBMLTnH8Qq/lo-fi_PriceGuard?node-id=0-1&p=f&t=FKYei1ILKmrh9gmv-0)