**PriceGuard Project Milestone 2**

**“**Project Brief & Needs Finding Plan”



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| **Design Brief** |

**Target Audience**

The target audience for **PriceGuard** are:

* Low budget households.
* Middle-aged people responsible for grocery shopping and management.
* Students who have limited finance and are living independently.
* Sustainable & Ethical Shoppers interested in responsible consumption who want to avoid waste and make informed purchases.

**Problem description**

With grocery prices rising by **8.5% annually** (source: market data), many individuals struggle to maintain budgets. Rising grocery prices due to inflation are making it difficult for people to stay within budget while maintaining a nutritious diet. Many people struggle to track price trends, compare costs across stores, and make informed purchasing decisions. Without reliable and easy to use tools, people often overspend, face financial strain, or compromise on essential groceries.

**PriceGuard** aims to solve this issue by using technology to provide real-time grocery price tracking, budget-friendly recommendations, and smart spending insights. It promotes responsible consumption **(UN SDG 12)** and helps mitigate the impact of inflation which makes it contribute to food security and affordability **(UN SDG 2)**.

**Competitive Landscape**

## APP – inflataCart

* Provides price trends for each grocery items.
* **Limitations**: Doesn't provide stores’ comparison therefore no help in better decision making of expenditure.

## Website – grocery tracker

* Helps users to compare prices of different stores for a specific grocery item for valuable decision making.
* **Limitations**: Lack inflation tracking, price trend analysis, or predictive insights.

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| Feature | Inflatacart | Grocery Tracker | PriceGuard  (Our Solution) |
| Real-time price tracking | ✅ | ❌ | ✅ |
| Store comparison | ❌ | ✅ | ✅ |
| Price trend analysis | ✅ | ❌ | ✅ |
| Budgeting assistance | ❌ | ❌ | ✅ |
| Personalized shopping recommendations | ❌ | ❌ | ✅ |

**System goals**

PriceGuard provides users with *credible* information which enables them to track accurate prices of grocery items efficiently and quickly. It promotes **responsible consumption (UN SDG 12)** and helps mitigate the impact of inflation which makes it contribute to **food security and affordability (UN SDG 2)**.

Features

* *Real-Time Price Tracking* – tracks prices at the spot of purchase and compare prices among different stores.
* *Inflation Trend Analysis* – provides the entire trend including the history to have a better understanding of how the inflation has impacted the prices.
* *Personalized Shopping Recommendations* – recognize user’s shopping patterns and provide budget-friendly tips for better financial decision making.
* *Predictive Price Insights* – the app also provides users with information regarding the potential increase on grocery items in the near future.
* *Instantaneous Alerts* – if there is a change in the price of an item, the user is instantly notified to avoid any overspending on an item.

PriceGuard is better than plenty of already available solutions because it is an all-in-one application that will be especially built for middle-aged people who find it difficult to understand trends, PriceGuard will assist them to make better decisions. It provides tracking, comparison, prediction and alerts all in one platform for ease of the users. It also provides personalized shopping assistance.

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| **Needs Finding Study Plan** |

**HIGH-LEVEL goals**

Our goal for this study is to understand how users can track grocery prices, manage their budgets, and make financial decisions for effective purchase in order to reduce the impact of inflation.

Questions:

* *How do grocery shoppers currently track prices and manage budget for groceries?*
* *What problems do grocery shoppers face when tracking price changes?*
* *What features would help grocery shoppers make smarter and cost-effective grocery choices?*
* *Why do grocery shoppers track prices the way they do?*

**recruiting criteria and strategy**

## Recruitment criteria

Participants will be selected from the target audience mentioned prior. These include:

* People who are on a tight budget and frequently monitor grocery expenses and are always looking for ways to save grocery expenses.
* Parents, guardians, or household help who handle and manage grocery purchases.
* Students living independently for example, ones living in hostels or shared apartments.
* People who like to stay responsible of the expense they spend and the quality of food they can achieve with reasonable prices.

## Recruitment strategy

We plan to conduct interviews upon several platforms to ensure diversity and maximum audience coverage. Here is a list of those strategies:

* Online Surveys & Social Media Outreach – use the digital platform to survey and collect objective information for as much diversity as possible.
* University Outreach – engage with hostelites that manage their own groceries.
* Household Engagement – communicate with parents/guardians or those who manage groceries for the house and figure their pain points.
* Low-Budget Households Outreach – speak to suffering households that are most victim of inflation for a better understanding.
* In-Person Interviews & Focus Groups – in-person interviews to collect subjective and in-depth information.

**Interview protocol**

## Overarching question

How do users currently track grocery prices and manage their grocery budgets, what challenges do they face in responding to inflation and how do they react when there is an unpredicted increase in price of an item?

## Introduction

Hi, our team's name is Sketchonauts, and we’re here to understand better how you track grocery prices and manage your grocery budget, especially in the context of rising prices and inflation. This interview will take about 10-15 minutes, during which we’ll go through some questions. Throughout this session, we’d like you to treat us as if you’re describing the situation to someone who isn’t familiar with grocery budgeting tools or price-tracking methods. We’re here to learn from your experiences.

A couple of things before we start: To the extent possible, we will take your comments to be confidential. My research team and I will aggregate all the comments from several interviews we’re conducting so that your responses are not easily traced back to you. If we quote you in our final report, we will do so without identifying your name or specific role. If there’s anything you really don’t want on the record, even if it’s anonymized, please let us know.

Also, this interview is entirely voluntary on your part – if for any reason you want to stop, please let us know. We can end the interview at that point with no repercussions. We can also discard anything you’ve shared up to that point.

Do you have any questions for us? If not, let’s get started.

**Once the interview starts…**  
 By the way, do you mind if we take an audio recording of this interview? This is just so that we are able to make sure we haven’t missed anything. No one else besides our research team will have access to this recording. Thank you.

## WARM-UP QUESTIONS

1. How often do you go grocery shopping?
2. Do you usually follow a budget when shopping for groceries? If so, how do you set it?

**Recent grocery shopping experience**

Tell me about your last grocery shopping trip. What stood out to you the most?

**Follow-up questions (if not included in their response):**

* Where did you shop, and why did you choose that store?
* Do you usually check prices before you shop? How do you go about it?
* Did you have a list or a set budget in mind before you went?
* Did you check for deals or discounts before or during your shopping trip?
* Were there any unexpected price changes that affected what you bought?
* How did you feel about the overall cost of your groceries after checkout?
* Would you say this was a typical shopping experience? Why or why not?

**Unusual shopping experience**

Now, we’d like you to think about a recent grocery shopping experience that was different from your usual routine. For example, maybe you had to shop on a tighter budget than usual, faced unexpected price increases, or had to visit multiple stores to find the best prices.

**Follow-up questions:**

* What made this shopping trip unusual?
* Did you change the way you planned or shopped because of it?
* Did you use any tools or methods to adjust to this situation?

**Current grocery budgeting and price tracking methods**

1. What’s your usual way of keeping track of your grocery expenses?
   * 1. Do you use any apps, spreadsheets, or paper lists?
2. How do you decide where to shop for groceries?
3. Have you noticed price fluctuations over time? If so, how have they affected your grocery shopping?
4. Do you think having a tool that tracks grocery price trends and suggests budget-friendly options would be helpful?
   * 1. If yes, what specific features would you find useful?
     2. If no, why not?[

**Other questions**

1. Can you think of any specific challenges you face when trying to stay within your grocery budget?
2. Have you ever had to change what you buy due to price increases?
3. Is there anything else about your grocery shopping or budgeting habits that you think would be relevant for us to understand?

## CONCLUSION

Thank you – those are all the questions we have for you. If anything else occurs to you after this interview, please don’t hesitate to reach out. We may follow up with you later to clarify some points or ask a few additional questions. If you’d like, we can also share a summary of our research findings once the study is completed.

Do you have any questions for me? Thanks again for your time!