

# **PriceBite**

## **Business Description**

### **Why (Problem / Motivation)**

Students often struggle to make smart purchasing decisions throughout the semester because prices change frequently and budgets are tight. Many rely on guesswork or random sales instead of understanding price history or knowing when an item will likely drop. Traditional budgeting tools track spending but do not help students decide when to buy essential items or how to stretch their finances. There is also no system that ties academic needs to real pricing trends, leaving students unprepared and overspending.

PriceBite's mission is to help students make informed, confident purchasing decisions by combining price tracking, budgeting, and predictive insights. PriceBite focuses on timing and affordability, showing students how to purchase smarter, anticipate price drops, and stay within budget. It empowers users to:

- Monitor real price changes over time
- Track essential and optional items needed for school
- Set price thresholds that match their budget
- Receive alerts when it is the right time to buy

### **Who (Users / Stakeholders)**

Primary Users:

- Students preparing for a semester and planning academic purchases
- Students with limited budgets who need to maximize savings
- Students in programs that require expensive equipment or tech

Secondary Users:

- Retailers or partners interested in student buying patterns
- Educational platforms that can recommend necessary equipment

User Needs & Pain Points:

- Unpredictable prices across retailers
- Difficulty identifying genuine deals versus inflated discounts
- No system that connects academic program needs to price behavior
- Lack of clear budgeting guidance for essential school-related purchases

Stakeholder Goals:

- Users want price transparency and reliable alerts
- Recommendations must feel personal, accurate, and useful

## **What (System Functionality)**

PriceBite is a price forecasting and budgeting intelligence system built for students. Its core functionalities include:

### Shopping List Creation

Students add required and optional items for their academic program.

### Price Tracking & History Analysis

- Tracks prices across multiple retailers
- Shows historical lows and highs over time

### Threshold Alerts

- Students set preferred price points
- System sends alerts when items match or drop below expectations

### Predictive Insights

- Forecasts potential price movement
- Helps students decide whether to buy now or wait

### Alternative Recommendations

- Suggests similar products when an item is over budget
- Compares specifications, quality, and affordability

### Student Profile Integration

- Considers program of study and semester needs
- Recommends items commonly required for specific courses

## **Where (Platforms / Context)**

### Platforms:

- Web App: For full dashboards, price charts, and forecasting
- Mobile App: For quick alerts and portable price monitoring
- Browser Extension: For in-context alerts while shopping online

### Contexts of Use:

- At the start of a semester when planning purchases
- During ongoing checks for price drops
- When comparing alternatives within budget limits

## **How (Operations / Flow / UX)**

### Step 1: Student Profile Setup

- User selects academic program and sets a semester budget.
- User adds essential and optional items to their list.

### Step 2: Price Monitoring

- System tracks prices across retailers in real time.
- Historical data provides context for pricing decisions.

### Step 3: Forecasts and Alerts

- PriceBite analyzes trends and predicts likely movements.
- User receives alerts when the price drops or reaches their threshold.

### Step 4: Recommendations and Review

- If an item stays out of range, the system suggests alternatives.
- Students compare items using clear pricing and specification insights.

### Design Principles:

- Simple, visual UI that highlights price movement clearly
- Transparent pricing logic to build trust
- Lightweight experience that enhances budgeting, not complicates it

### Impact / Vision

PriceBite helps students save money and make smarter purchasing decisions by removing uncertainty around pricing. It empowers students to plan better, budget more accurately, and feel confident that they are getting the best possible value. PriceBite transforms price awareness into a strategic advantage rather than a source of stress.

The system supports long term financial habits by showing students how prices behave over time and teaching them to recognize patterns. It also enables future integrations with educational platforms and retailer ecosystems for a complete academic budgeting experience.

### Long-Term Vision:

PriceBite evolves into a predictive financial planning companion for students. Over time, the system learns each student's budget behavior and purchasing patterns. It becomes increasingly accurate at forecasting deals, recommending items based on academic needs, and guiding students toward sustainable financial habits throughout their education.