**Business Requirements Document (BRD)**

**Project Name:** Menu.X  
**Version:** 1.0  
**Date:** July 3, 2025  
**Author:**   
**Status:** Finalized for Development

**1. Executive Summary**

**Objective:**  
Develop and launch **Menu.X**, a digital ordering and dining experience platform designed for modern cafes and casual dining restaurants in urban centers of Bangladesh. The platform aims to streamline restaurant operations, enhance customer experience, and provide AI-driven insights to restaurant owners.

**Business Need:**  
The restaurant industry in Bangladesh is evolving, with a growing demand for digital solutions that improve efficiency and customer satisfaction. Menu.X addresses this need by offering an intuitive platform that simplifies menu management, ordering, and analytics.

**2. Project Scope**

**In-Scope:**

* **Free Plan Features:**
  + Secure sign-up/login (Email/Password, Google)
  + Basic dashboard with menu views and item count
  + Menu management with CRUD functionality and drag-and-drop reordering for up to 25 items.
  + Diner menu view with "Powered by Menu.X" footer.
* **Pro Plan Features:**
  + All Free Plan features.
  + Removal of 25-item limit on menu
  + Removal of "Powered by Menu.X" footer.
  + Smart Ordering System (Diner: place orders and request bill; Owner: live orders dashboard)
  + AI Menu Architect (OCR-based instant menu upload and smart description writer)
  + AI Business Forecaster (predictive insights on sales trends and popular items)
  + AI Smart Sommelier (personalized menu recommendations via chatbot)
  + Advanced Analytics Dashboard (visual charts for revenue trends, popular items, and peak service hours)

**Out-of-Scope:**

* Automated payment gateway integration (planned for post-launch)

**3. Project Objectives**

* **Onboard at least 50 active restaurants** (Free or Pro) in Rangpur and Chittagong by the end of Month 3.
* Achieve a **10–15% conversion rate** from Free to Pro plan by Month 6.
* Develop and implement **automated payment gateway integration** post-launch.

**4. Business Requirements**

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| --- | --- | --- | --- |
| **ID** | **Requirement** | **Priority** | **Notes** |
| BR1 | Implement secure sign-up/login functionality | High | Essential for user authentication and data security |
| BR2 | Develop menu management system with CRUD functionality and drag-and-drop | High | Core feature for restaurant owners to manage their digital menu |
| BR3 | Create diner menu view with "Powered by Menu.X" footer | Medium | Enhances brand visibility; can be removed in Pro plan |
| BR4 | Remove 25-item limit and "Powered by Menu.X" footer in Pro plan | High | Provides additional flexibility and branding control for Pro users |
| BR5 | Develop Smart Ordering System with live orders dashboard | High | Streamlines ordering process and improves operational efficiency |
| BR6 | Integrate AI Menu Architect for OCR-based instant menu upload and description writing | High | Speeds up menu creation and enhances item descriptions |
| BR7 | Implement AI Business Forecaster for predictive sales insights | Medium | Assists restaurant owners in inventory and staffing planning |
| BR8 | Develop AI Smart Sommelier for personalized menu recommendations | Medium | Enhances customer experience through personalized suggestions |
| BR9 | Create Advanced Analytics Dashboard with visual charts | High | Provides valuable insights into restaurant performance |

**5. Key Stakeholders**

* **Founder:** [Your Name] – Lead Developer, Project Manager, Head of Strategy
* **AI Assistant:** Strategic Advisor, Documentarian
* **Beta Tester Restaurants:** Initial partners providing feedback and testing.
* **Early Adopter Diners:** End-users whose experience will determine the product's success.

**6. Project Constraints**

* **Team Size & Budget:** Solo venture with limited financial resources; reliance on free tiers of services like Firebase and AI APIs.
* **AI API Reliance:** Dependent on third-party AI APIs (e.g., Google's Gemini); changes to their free tiers or capabilities could impact feature set and cost structure.
* **OCR Accuracy:** Success of "Instant Menu Upload" feature depends on AI's ability to accurately parse varied, real-world menu designs.

**7. Timeline & Milestones**

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| --- | --- | --- |
| **Phase** | **Target Date** | **Deliverable** |
| Prototype Completion | July 31, 2025 | High-fidelity, clickable prototype in Figma |
| Beta Testing | Mid-October 2025 | Feature-complete beta version |
| Public Launch | Early November 2025 | Official public launch |

**8. Success Metrics**

* **Primary Metric (Launch to Month 3):** Number of onboarded restaurants. Goal: 50 active restaurants in initial target markets.
* **Secondary Metric (Month 3 to 6):** Pro plan conversion rate. Goal: 10–15% conversion from Free to Pro plan.
* **Tertiary Metric (Long-term):** Average transaction volume per diner. Important for evaluating financial viability of potential transaction-based fee model.

**9. Cost-Benefit Analysis**

**Costs:**

* **Development:** Time investment by the founder; no external development costs.
* **Tools & Services:** Utilization of free tiers of Firebase and AI APIs; potential costs if usage exceeds free tier limits.

**Benefits:**

* **Revenue:** Potential income from Pro plan subscriptions (~৳1,500/month per restaurant).
* **Market Positioning:** Establishment as a leading digital ordering platform in Bangladesh's restaurant industry.
* **Customer Satisfaction:** Enhanced dining experience leading to increased customer loyalty and repeat business.

**10. Risks & Mitigation**

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| --- | --- |
| **Risk** | **Mitigation Strategy** |
| **Single-person development** | Prioritize features; use agile development practices; seek feedback early and often |
| **AI API limitations** | Monitor API usage; have contingency plans for potential costs or feature changes |
| **OCR accuracy issues** | Implement fallback options; allow manual corrections; continuously improve AI model |

**11. Glossary**

* **OCR:** Optical Character Recognition
* **AI:** Artificial Intelligence
* **MFS:** Mobile Financial Services
* **bKash/Nagad:** Popular MFS providers in Bangladesh