Project Specification for TaraKazan (GDPR Compliant)

Project Description

TaraKazan is a system for local businesses that enables them to collect customer reviews and build

a customer database. Customers interact with a chatbot embedded in a full-screen landing page for

the respective business. The chatbot collects the customer's phone number, checks if the customer

already exists, sends an OTP for verification, and provides a discount voucher after the review is

completed.

Project Goal

To create a flexible and interactive platform that allows local businesses to gather reviews and

expand their customer base through offers and discount vouchers.

System Architecture and Technology

Backend: Node.is, Express

Frontend: EJS, JavaScript for chatbot interactions

Database: MongoDB

Additional Services: SMS provider (e.g., Twilio) for OTP and discount SMS

Features and Requirements

The project includes detailed database models, backend API routes, frontend chatbot integration,

and an admin dashboard for business owners. The chatbot will engage users, verify new customers

via OTP, and reward completed reviews with an SMS voucher. Business owners will be able to

manage customer data, send SMS campaigns, and upgrade their SMS package.

1. Database Models

1.1 Shop (Business): Manages all information related to the business, including name, address,

SMS quota, and current package.

- 1.2 Customer: Stores customer information, including phone number, shop ID, and review status.
- 1.3 Package: Defines different SMS packages for monthly use.

2. Backend Logic and API Routes

- 2.1 Chatbot Interactions:
- POST /:shop_id/add-customer: Collects customer phone number via chatbot. Checks if the customer exists. If new, sends OTP for verification.
- POST /:shop_id/verify-customer: Verifies OTP and directs customer to review page.
- 2.2 Shop Management:
- GET /:shop_id/get-shop: Returns shop details.
- GET /:shop_id/get-dashboard: Provides customer info and SMS stats.
- 2.3 SMS Quota and Upgrade:

SMS limit check and option to upgrade package when SMS count is nearing its limit.

3. Frontend Development

- 3.1 Full-Screen Chatbot:
- Each shop has a unique URL for a full-screen chatbot.
- Chatbot engages the customer with welcome message, collects phone number, verifies with OTP, and allows review submission.
- 3.2 Business Owner Dashboard:
- Customer overview with filtering, SMS quota display, SMS campaign sending, and package upgrade modal with pricing options.

4. Developer Requirements

Technologies: Node.js, Express, MongoDB, EJS, JavaScript.

Testing and Debugging: Unit tests for OTP, customer management, package upgrade, and SMS limit.

Documentation: Detailed API and user guide for operation and maintenance.

Support and Training: Basic user training and optional support for the first three months.

5. GDPR Compliance

Data protection and compliance with GDPR are fundamental in handling customer data. Key considerations:

- Only necessary personal data (e.g., phone number, name) is collected for the purpose of customer verification and feedback.
- Data is stored securely in MongoDB and is accessible only by authorized personnel.
- Anonymization and deletion options are provided for customers upon request to ensure GDPR compliance.
- Clear privacy terms are displayed to customers before data collection, and explicit consent is obtained.
- Customers have the right to request data access, modification, or deletion.
- All data processing, including the use of third-party SMS services, follows GDPR regulations to protect personal information.

6. Additional Considerations

- SMS provider costs (e.g., Twilio) should be budgeted based on volume.
- Monthly maintenance: The system should be easily maintainable for future growth.
- Security and Data Privacy: Ensuring compliance in handling customer data, with options for data anonymization and deletion.

7. Delivery and Acceptance

7.1 Full delivery of the TaraKazan solution, including backend API, frontend dashboard, chatbot

integration, and documentation.

- 7.2 Acceptance Testing: Comprehensive tests for OTP, customer process, dashboard functionality, and package management.
- 7.3 Training and Handover: User training for dashboard management, chatbot, and package upgrades.
- 7.4 Post-Acceptance Support: Optional three-month support for smooth operation and minor adjustments.