E-commerce Marketplace Project Plan

Step 1: Choose Your Marketplace Type ?

My Marketplace Type:-

Rental E-commerce.:-

Rental E-commerce is an online platform that facilitates the renting of products or services, such as vehicles, equipment, or properties, directly between customers and service providers. It enables users to browse, book, and pay for rentals through a seamless digital interface. The platform typically offers flexible rental terms, a variety of options, and secure payment methods for a convenient and efficient rental experience.

Step 2: Define Your Business Goals:

Q: What problem does Your marketplace aim to solve?

1st Problem: People need reliable, affordable, and convenient car rentals for short-term use but often face issues like high prices, long booking processes, and limited vehicle options.

Solution: Our car rental marketplace aims to solve this by providing an easy-to-use platform where users can quickly find, book, and rent cars at competitive prices with a variety of vehicle options available.

Q: Who is You target audience?

Target Audience:

◆ **Tourists and Travelers:** People who need a car temporarily when visiting a new city or country.

◆ **Locals:** Residents who need a car for special occasions or short-term needs (e.g., a family trip, weekend getaway, etc.).

◆ **Business Professionals:** Those who need reliable cars for business trips.

◆ **Students and Young Adults:** People who need cars but may not own one due to budget constraints.

Q: What products or services will you offer?

Products/Services Offered:

◆ **Car Rentals**: A wide range of cars (economy, luxury, SUVs, etc.) available for daily, weekly, or monthly rental.

◆ **Flexible Booking**: Options to book a car for a few hours, a day, or more.

◆ **Delivery and Pickup**: Option to have the car delivered to a specific location or picked up from the user's location.

◆ **Customer Support**: 24/7 assistance to help with bookings and inquiries.

Q: What will set your marketplace apart?

◆ · **Speed**: Quick and easy online booking system with instant availability checks.

◆ · **Affordability**: Competitive pricing and discount offers, making car rentals accessible for all budgets.

◆ · **Convenience**: A user-friendly platform that allows for easy navigation, fast bookings, and even contactless pickup/drop-off services.

◆ · **Customer Experience**: Personalized services, such as tailored vehicle recommendations based on user preferences and quick response times from customer service.

Step 3: Data Schemas:

Fields:

To visualize the database schema We've described, here's a simplified Entity-Relationship Diagram (ERD) showing how the tables relate to each other. The relationships are represented by lines linking the relevant fields between tables:

1. **User Table** connects to **Booking Table** via user_id.
2. **Cars Table** connects to **Booking Table** via car_id.
3. **Booking Table** connects to **Payment Table** via booking_id.
4. **Users Table** and **Cars Table** connect to **Reviews Table** via user_id and car_id respectively.

I'll describe how to structure it:

User Table:

- user_id (Primary Key)
- first_name
- last_name
- Email (Unique)
- phone_number
- Address
- created_at

Cars Table:

Fields:-

- car_id (Primary Key)
- Make
- Model
- Type
- price_per
- Availability
- Image (Array)

Booking Table:

Fields:-

- booking_id (Primary Key)
- user_id (Foreign Key from Users Table)
- car_id (Foreign Key from Cars Table)
- start_date
- end_date
- total_price
- Status
- created_at

Payment Table:

Fields:-

- payment_id (Primary Key)
- booking_id (Foreign Key from Booking Table)
- payment_method
- Amount
- payment_date
- payment_status

Reviews Table:

Fields:-

- review_id (Primary Key)
- user_id (Foreign Key from Users Table)
- car_id (Foreign Key from Cars Table)
- Rating
- Comment
- created_at

Examples:-

1.User Table (Example)

user_id	first_name	last_name	Email	phone_number	Address	created_at
1	John	Doe	john.doe@email.com	123-456-7890	Karchi	2025-01-10 09:00:00

2. Cars Table (Example)

car_id	Make	Model	Type	price_per	Availability	Image
101	Toyota	Corolla	Sedan	40	true	["toyota_corolla1.jpg", "toyota_corolla2.jpg"]

3. Booking Table (Example)

booking_id	user_id	car_id	start_date	end_date	total_price	Status	created_at
1	1	101	2025-01-15 09:00:00	2025-01-16 09:00:00	80	confirmed	2025-01-10 09:05:00

4. Payment Table (Example)

payment_id	booking_id	payment_method	Amount	payment_date	payment_status
1	1	Credit Card	80	2025-01-10 09:10:00	completed

5. Reviews Table (Example)

review_id	user_id	car_id	Rating	Comment	created_at
1	1	101	5	"Great car, easy booking process, would rent again!"	2025-01-16 10:00:00