3. REQUIREMENT ANALYSIS

3.1 Customer Journey map

1. Entry
Enters showroom, greeted or walks to digital kiosk
2. Exploration
Begins using the catalog: browses by price, type, or brand
3.Comparison
Views multiple models, compares specs, features, price
4. Immersion
Uses 360° view, explores color options, watches videos
5. Decision-making
Narrowed to 1–2 models; checks test drive availability
6. Conversion
Books test drive or sends car details to mobile/email
7. Follow-up Gets contacted by sales rep for test drive confirmation.

3.2 Solution Requirement

Here is a detailed Solution Requirements document for the Automated Car Catalog System for Enhanced Showroom, covering both functional and non-functional aspects. This will guide your development team or solution vendor in understanding what the system must do and how it must perform."

3.3 Data Flow Diagram

Components of a DFD for an automated car catalog system:

1. External Entities:

- Customers: They can search for cars, view details, and potentially make inquiries or bookings.
- Administrators: They manage the car catalog, adding, editing, or deleting car information, managing inventory, and generating reports.
- Suppliers: They might provide data related to vehicle specifications or parts.

2. Processes:

- Search for Car: Allows customers to search the catalog based on various criteria (model, price, features, etc.).
- View Car Details: Displays detailed information about a specific car.
- Add/Edit/Delete Car: Operations performed by administrators to manage the car catalog.
- Generate Reports: Provides sales reports, inventory reports, or other relevant information.
- Manage Inventory: Tracks the availability of cars in the showroom.
- Manage Customer Orders: Processes and tracks customer orders or inquiries.

3. Data Stores:

- Car Database: Stores information about each car.
- Customer Database: Stores customer information (if applicable).
- Order Database: Stores information about customer orders.
- Sales Reports: Stores generated sales data.