

INTRODUCTION

İkşana, a revolutionary online eyewear platform that redefines the eyewear shopping experience. Designed with a focus on user convenience and contemporary style, İkşana invites customers from all walks of life to explore, select, and purchase eyewear that complements their personality.

Once users embark on their İkşana journey, they are greeted with intuitive navigation features, guiding them seamlessly through our diverse range of eyewear categories. Registered users enjoy the luxury of a personalized account, where they can tailor preferences, manage orders, and even receive personalized product recommendations.

Our application is more than just a shopping platform. It is equipped with state-of-the-art features to enhance the shopping experience. The dynamic search functionality swiftly delivers results tailored to user preferences, ensuring they find the perfect pair without a hassle. Our shopping cart summary acts as a reliable sidekick, keeping users informed of their selections. Additional features such as advanced search, progress trackers, and related product suggestions further elevate the user experience.

A standout feature of İkşana is our intelligent chatbot, ready to assist users in real-time, answering queries, offering recommendations, or simply guiding them through the platform.

One of İkşana's pillars is user-centricity. This is evident in design features that eliminate repetitive data entry, ensuring a smooth and efficient shopping journey. Passwords remain the sole exception, maintaining user security and privacy.

Diving deeper into the İkşana ecosystem, we find a robust administrative control center. This hub empowers administrators with comprehensive control over the platform. From processing orders to inventory management, and from vendor coordination to customer interactions, every facet of the business is accessible and modifiable from this command center.

Transitioning from traditional manual business operations, İkşana harnesses the power of digital transformation to offer an unparalleled online eyewear shopping experience.

OBJECTIVE

The primary objective of the ĩkṣaṇa website is to offer a seamless and user-centric online eyewear shopping platform. It aims to amalgamate the vast variety of eyewear options with cutting-edge digital features, ensuring that users can find and purchase their desired eyewear products with ease and confidence. By integrating state-of-the-art functionalities like an intelligent chatbot and personalized user accounts, ĩkṣaṇa strives to revolutionize the eyewear e-commerce landscape, offering a shopping experience that is efficient, enjoyable, and tailored to the modern-day consumer's needs. Additionally, with a robust administrative backend, the platform aims to streamline inventory, order processing, and vendor management, ensuring smooth operations and unparalleled service quality.

Functional Requirements

Functional requirements are crucial in detailing the necessary behaviors of a software system. These are often articulated as “shall” statements, specifying what the system is obliged to accomplish.

1. Login Module – This module is intended for different users: regular shoppers, eyewear vendors, and the system administrator. Only registered users can access specific functionalities of the website.

Input– Username and password

Process – Validates if the entered username and password match the records in the database.

Output– Authenticated users gain access to the website and its services tailored to their role.

2. Chatbot Assistance Module– A feature that provides real-time assistance to users, helping them with queries, product recommendations, and other relevant information.

Input– User query or request

Process – Chatbot processes the query and fetches relevant information.

Output – Returns an immediate response to the user's query.

3. Virtual Try-On Module – Enables users to virtually try on eyewear products, enhancing their shopping experience.

Input – User's camera feed and selected eyewear product.

Process– Overlay the selected eyewear on the user's face using augmented reality.

Output – A live preview showing how the eyewear looks on the user.

4. Administrator Module – Allows the administrator to manage and maintain the system effectively.

Input – Admin login ID and password

Process– Validates the entered credentials against admin records in the database.

Output– Authenticated admin gains access to backend tools, including product management, order processing, and vendor coordination.

5. Search Module – Enables users to effortlessly search for eyewear products based on various criteria like brand, style, or price range.

Input – Search term, keywords, or filters selected by the user.

Process – Fetches products that match the input criteria from the database.

Output – Displays a list of eyewear products matching the user's search.

6. User Module – Central module for shoppers, offering various functionalities tailored to enhance their shopping experience.

Functions:

- Search eyewear based on preferences.
- Place online orders and choose payment methods (credit card, PayPal, etc.).
- Access detailed information about eyewear products.

Input – User ID and password for accessing personalized features.

Process– Validates user credentials for authentication.

Output– Authenticated users can seamlessly utilize all features offered by İksaṇa.

This functional requirement breakdown ensures that the İksaṇa website caters to its users efficiently, offering a superior eyewear shopping experience.

STRUCTURE OF PROJECT

➤ Before Login

- Login
- Register
- Forget Password
- Administrator Login
- About Us
- Contact Us

➤ After Administrator Login

- Edit Website Details
- Add Brands
- Add Category
- Add Items
- Delete Brands
- Delete Category
- Delete Items
- Manage User
 - See Users
 - Users Shopping
 - Add Users
 - Delete Users
- Logout

➤ After User Login

- My Profile
 - Edit Profile
 - Change Password
- Buy Products
 - Categories (Controlled by Admin. Which can be add it dynamically according to their needs)'
- My Cart
- My Shopping's
- Checkout
- Logout

HARDWARE AND SOFTWARE REQUIREMENTS

At Developer Side

During system development, i have to design both static and dynamic website interfaces, create website functions and a database system, edit photos and pictures, so its has a set of software and hardware requirements.

Hardware Used

- ☐ Intel Dual Core Processor
- ☐ 160 GB Hard Disk Drive.
- ☐ 1GB RAM.
- ☐ O.S. – Windows XP SP2

Software Used

- ☐ XAMP SERVER
- ☐ MYSQL Database
- ☐ Any text editor tool -: Visual Studio

At System Users Side

The following is the requirements for the system users including members and administrators.

Hardware Requirements

- ☐ Intel Pentium 4 Processor
- ☐ 20 GB Hard Disk Drive.
- ☐ 256MB RAM.
- ☐ O.S. – Windows XP

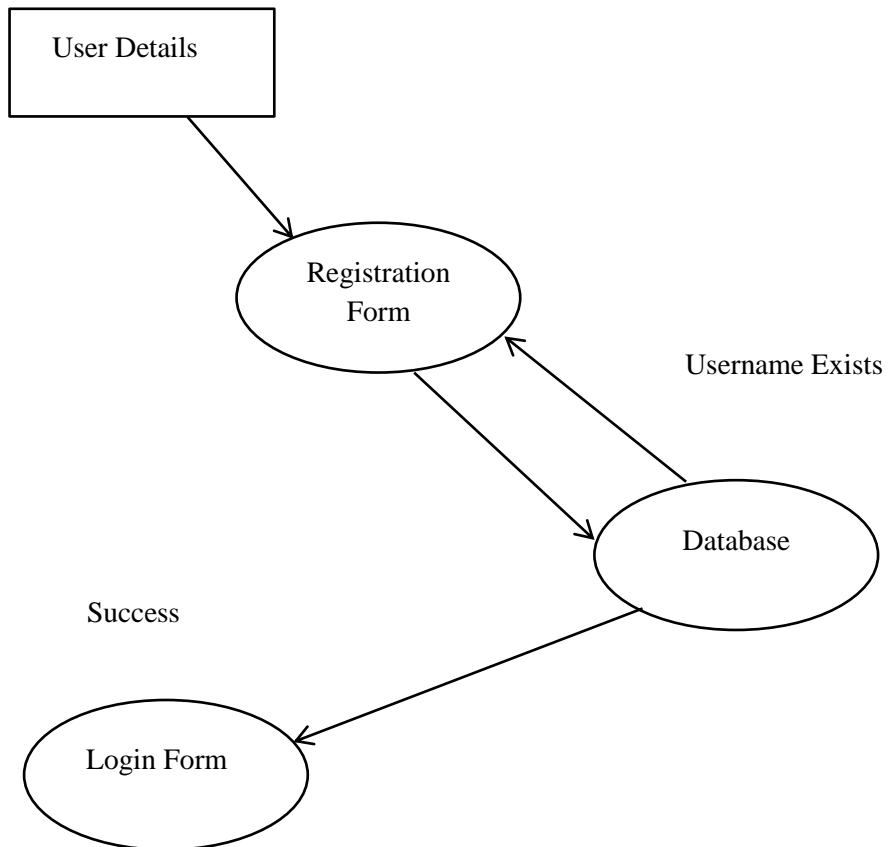
Software Requirements

- ☐ Browser (IE 7.0 or Above, MozillaFirefox, Google Chrome
- ☐ Browser Must be JavaScript Enabled

DATA FLOW DIAGRAM

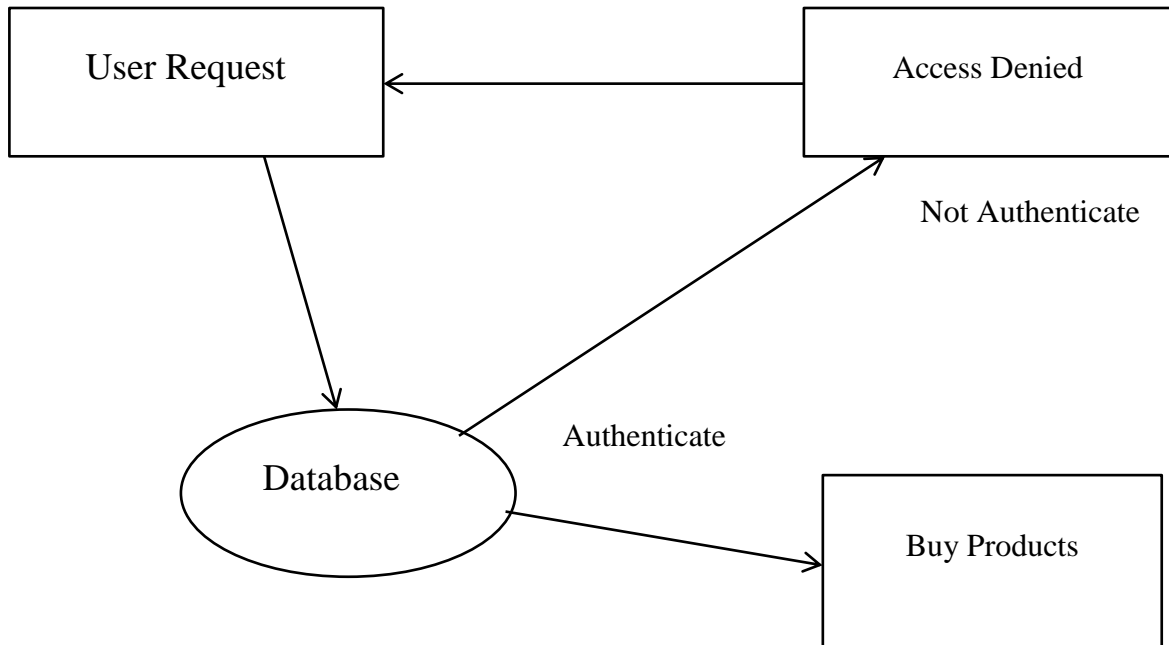
(0 level DFD)

For Registration



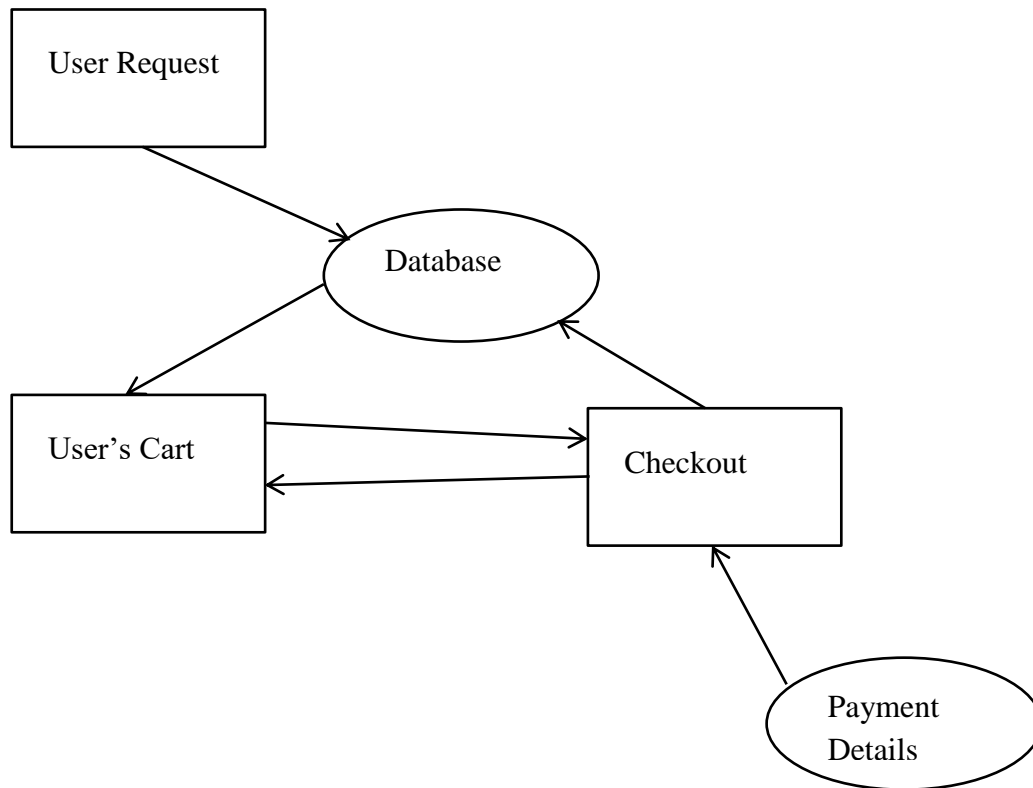
(1st Level DFD)

For Login

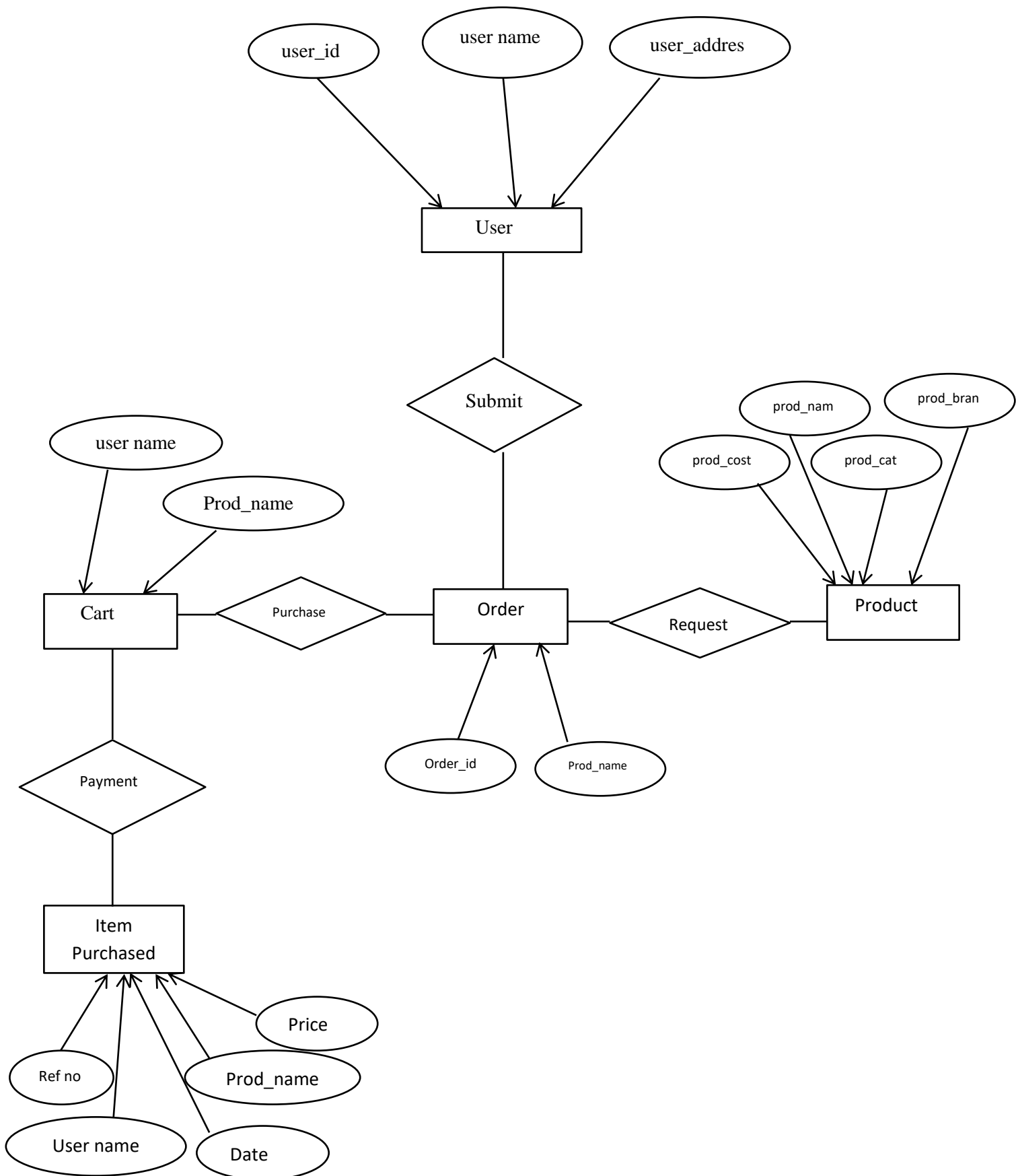


(2nd Level DFD)

For Buying Products



E-R DIAGRAM



Future Scope

The digital realm is ever-evolving, and so is the eyewear industry. Taking into account the current trends and potential technological advancements, the ĩkṣaṇa website has numerous opportunities for enhancement and expansion in the future:

1. Augmented Reality Integration: Beyond just virtual try-ons, augmented reality can be used to offer a more immersive shopping experience. Users could virtually walk through a digital store, picking up frames and trying them on, all from the comfort of their homes.

2. AI-Powered Recommendations: Leveraging machine learning algorithms to analyze users' browsing patterns, past purchases, and preferences to recommend products tailored to individual tastes.

3. Subscription-based Models: Introducing eyewear subscription services where users can opt for periodic deliveries of fresh eyewear styles, ensuring they always have trendy options at their disposal.

4. Collaborations with Eye Health Professionals: Partnering with ophthalmologists and optometrists to offer online consultations or eye tests, making the platform a holistic eye care solution.

5. Expansion to Wearable Tech Eyewear: As technology evolves, smart glasses and AR glasses are becoming more popular. ĩkṣaṇa could venture into selling tech-integrated eyewear.

6. Personalized User Experience: Implementing a dynamic user interface that adjusts based on the user's behavior and preferences, offering a truly personalized shopping journey.

7. Sustainability Initiatives: Launching eco-friendly eyewear lines, or a recycling program where users can send back old frames for discounts on new purchases.

8. Global Expansion: Taking ĩkṣaṇa to international markets, offering a diverse range of styles catering to global tastes and preferences.

9. Enhanced Chatbot Capabilities: Enhancing the chatbot to handle more complex queries, provide style advice, or even notify users about ongoing promotions and sales.

10. Mobile Application Development: As mobile commerce continues to grow, launching a dedicated ĩkṣaṇa app could further boost user engagement and sales.

The possibilities for ĩkṣaṇa are vast. With a keen eye on emerging trends and a commitment to innovation, ĩkṣaṇa can cement its position as a leading name in online eyewear and potentially expand into other domains of eye care and tech-integrated solutions.