KIET Group of Institutions, Delhi-NCR, Ghaziabad (UP)

BACHELOR OF TECHNOLOGY

COMPUTER SCIENCE AND ENGINEERING

FOODY HOME

Major Project Synopsis

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ABSTRACT

Foody Home is a cutting-edge online food delivery application designed to transform the way individuals experience and access food. This platform seamlessly connects users with their favorite local restaurants and eateries, offering a diverse array of culinary options at their fingertips.

The app's user-friendly interface provides a convenient and efficient way for users to browse through a myriad of cuisines, place orders, and have delicious meals delivered directly to their doorstep. Foody Home prioritizes user satisfaction by ensuring a seamless ordering process, timely deliveries, and a variety of payment options for a hassle-free experience.

Through its innovative features, such as personalized recommendations, user reviews, and real-time order tracking, Foody Home aims to cater to the individual preferences and needs of its diverse user base. Additionally, the app fosters a collaborative environment by supporting local businesses and restaurants, thereby contributing to the growth of the community.

Moreover, Foody Home is committed to maintaining high standards of food safety, quality, and customer service. The platform implements stringent measures to guarantee that the food delivered is not only delicious but also prepared and handled under hygienic conditions.

In summary, Foody Home is not just an app; it's a culinary companion, offering convenience, variety, and quality. It serves as a bridge between food enthusiasts and their favorite local flavors, promising a delightful and satisfying gastronomic journey for all its users.

INTRODUCTION

In the fast-paced digital era, the way we experience and savor food has undergone a significant transformation, largely due to the advent of online food delivery applications. Foody Home emerges as a pioneer in this domain, redefining the very essence of food delivery services.

Foody Home isn't merely an app; it's a culinary gateway that bridges the gap between people's cravings and the delectable offerings of local eateries and restaurants. This platform brings together convenience, variety, and quality under one digital roof, catering to the gastronomic desires of a diverse and discerning clientele.

With a user-centric design and intuitive interface, Foody Home empowers users to explore a plethora of cuisines, select from a wide array of eateries, and seamlessly place orders for their favorite meals. Whether it's a comforting dish from a neighborhood diner or a culinary adventure from a trending restaurant, Foody Home promises to fulfill these desires with just a few taps on a smartphone.

The essence of Foody Home lies not only in its ability to simplify the food ordering process but also in its commitment to supporting local businesses. By facilitating a platform for small and medium-sized restaurants, the app plays a pivotal role in their growth and sustainability, contributing to the local culinary landscape.

Furthermore, prioritizing customer satisfaction and safety, Foody Home ensures that every meal delivered meets stringent quality and hygiene standards. From the kitchen to the doorstep, the app guarantees a seamless and secure experience for all its users.

Foody Home stands as an epitome of innovation, flavor, and efficiency in the online food delivery industry. This introduction merely scratches the surface of the incredible journey that awaits those who embrace the app—a journey filled with culinary delights and the joy of hassle-free dining experiences.

RATIONALE

The development of Foody Home stemmed from a recognition of the evolving lifestyle patterns and the increasing reliance on digital solutions for everyday needs. This online food delivery app was conceived with several core rationales driving its creation and existence:

Convenience Redefined: Modern life is characterized by time constraints and a quest for convenience. Foody Home was designed to address this need by offering a convenient platform where users can access a wide range of culinary options with a few taps on their smartphones. The app aims to redefine convenience in food delivery by providing a seamless, user-friendly interface that simplifies the ordering process.

Empowering Local Businesses: Beyond convenience, Foody Home operates on the principle of supporting local businesses. By providing a platform for smaller and medium-sized restaurants, the app contributes to their visibility and growth. It fosters a community-centric approach by helping these eateries reach a broader customer base, thereby bolstering the local culinary landscape.

Variety and Customization: Foody Home acknowledges the diverse preferences of its users. The rationale behind its design is to offer a vast array of cuisines, dining options, and personalized recommendations. The app's aim is to cater to individual tastes, whether it's comfort food from a nearby favorite or an exploration of new flavors from trending establishments.

Safety and Quality Assurance: Ensuring food safety and maintaining high-quality standards are pivotal aspects of Foody Home's rationale. The app rigorously vets its partner restaurants and maintains stringent guidelines to guarantee that all food deliveries are prepared and handled in hygienic conditions, ensuring a safe dining experience for the users.

Innovation in User Experience: The app doesn't merely focus on food delivery; it aims to create an engaging and seamless experience for its users. From user-friendly interfaces to real-time order tracking, Foody Home strives to innovate continually, ensuring a hassle-free, enjoyable journey for its users.

In conclusion, the rationale behind Foody Home revolves around addressing the evolving needs of consumers for convenient, diverse, and safe dining experiences. It's a platform that not only simplifies the process of food delivery but also actively contributes to the growth of local culinary businesses while prioritizing quality and user satisfaction.

Existing system

In the present scenario people have to physically visit the hotels or restaurants for eating food, and have to make payment through cash mode most of the times due to unawareness of advanced technologies at certain places.

In this method time as well as physical work is required, among which time is something that no one has in ample amount. The traditional food ordering procedure is not efficient enough for hotels and restaurant, as they have to deal with crowd, in their restaurant.

The old methods can be classified into categories which are paper grounded and verbal grounded. For paper based work, the waiter comes and pens down foods that customers order and pass the food list containing paper to the chefs or cooks in the kitchen for further process.

Also from the owner's point of view maintaining data record and the accounts in physical file is cumbersome and tedious work to do. And also it is full of risk as anyone can access it and modify the data.

Proposed System

This system is a bunch of benefits from various point of views. As this online application enables the end users to register to the system online, select the food items of their choice from the menu list, and order food online.

Also the payment can be made through online mode or at the time of home delivery depending upon the customer's choice and convenience. The selection made by the customers will be available to the hotel reception or to the person handling work assignment.

Now this same person will assign the orders to the specialist chef to be completed within a fixed duration of time.

As soon as the chef prepares the food, the later person forwards the parcels to the delivery persons assigned with the location and customer identity of the customer along with the bill status.

With this application the work load of the waiter in the hotels are reduced or in some situations the work is abolished.

One of the various benefits of this is system is that if there is rush or a huge crowd present in the restaurant then in that case sometimes unavailability of tables cut downs the restaurants customer.

Also there will be chances that the waiters are unavailable as they are busy in handling others, so the customer can directly order the food to the chef online by using this application, by checking the seat availability in the restaurant.

This system allow the staff to serve customer within less time as compared to the manual system.
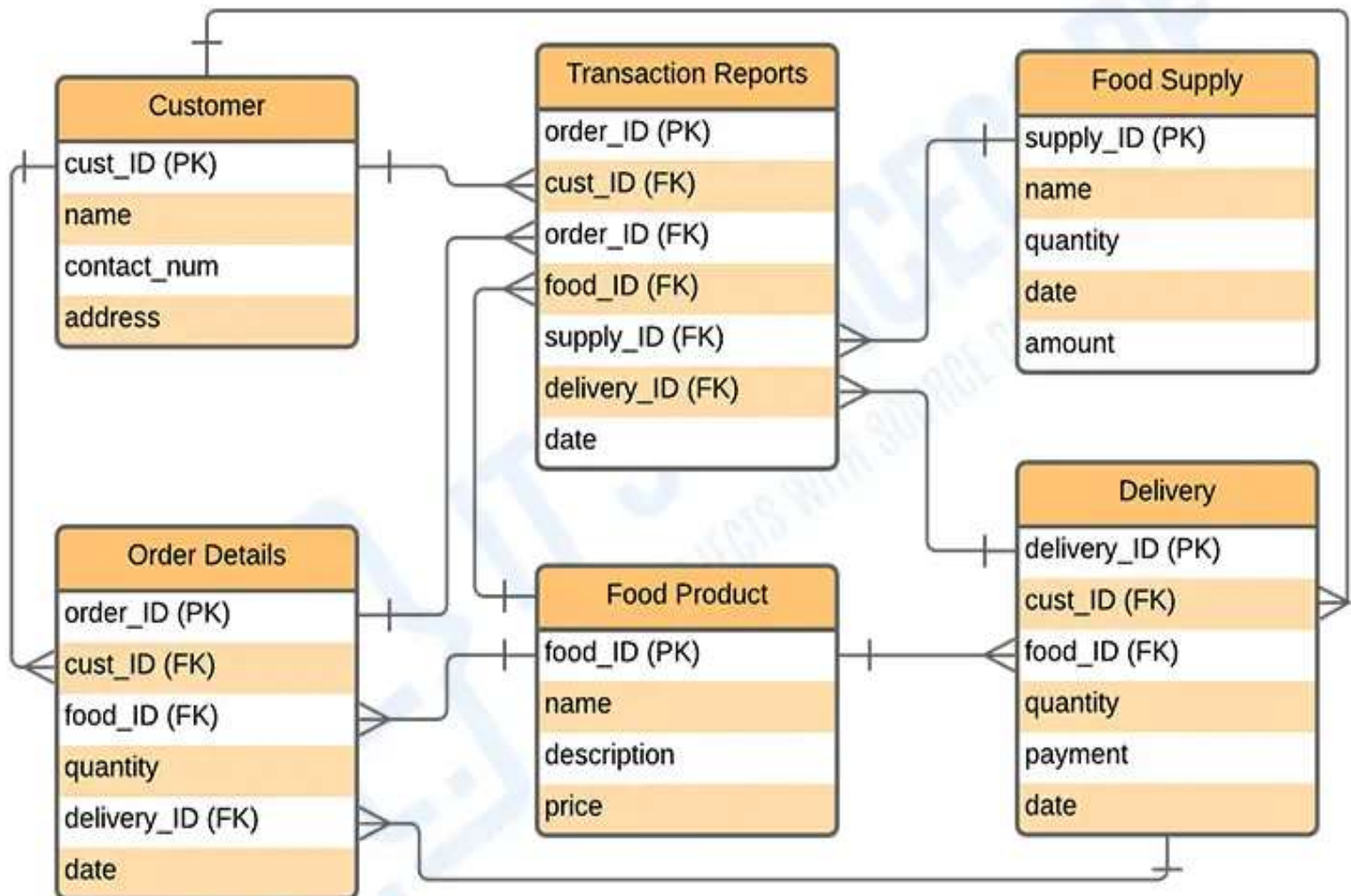
ER-Diagram of Online Food Ordering System

ERD of Online Food Ordering System
The above shown is an entity relationship diagram, depicting the working of food ordering system. ER diagram reflects the relationships that various entities involved in the system share among themselves, along with the entities.

Following are the description of entities involved in food ordering system:

ONLINE FOOD ORDERING SYSTEM

Customer

cust_ID (PK)

name

contact_num

address

Transaction Reports

order_ID (PK)

cust_ID (FK)

order_ID (FK)

food_ID (FK)

supply_ID (FK)

delivery_ID (FK)

date

Food Supply

supply_ID (PK)

name

quantity

date

amount

Order Details

order_ID (PK)

cust_ID (FK)

food_ID (FK)

quantity

delivery_ID (FK)

date

Food Product

food_ID (PK)

name

description

price

Delivery

delivery_ID (PK)

cust_ID (FK)

food_ID (FK)

quantity

payment

date

ENTITY RELATIONSHIP DIAGRAM

Functions of entities

Customer

This represents the set of customers, which are the clients who will be using this application. The customers are for whom the system is being designed.

Its attribute set includes:

■   **Name:** This is the name of the customer, searching or purchasing the products. When signing up to the website the name of customer is stored, this is done for the future referencing and maintaining the user's data record (history). It is the composite attribute which contains two more attributes that is First_Name and Last_Name. That contains user's first name and last name.

■   **Cus_id:** This is the identity number assigned by the admin to the users so as to identify them uniquely in future. This identity number is helpful in fetching data of individual user from a big set. This is mainly to manage the huge database system where the entire data is being stored. It is a permanent identity number given by the admin to the customer to maintain customer history.

■   **Cus_order_id:** This is the identity number given to determine and manage the sequence of servicing. Since multiple customer will place orders, so as to schedule whom to give the delivery first is determined by the help of this number, so as to maintain consistency in the system working procedure. It will be unique for each order a day. But the same id can be repeated on a new day, as it is mainly for the restaurant's reference and to prevent any type of conflict.

Address

This field is for the physical address of the customer where the restaurant authority is required to deliver the parcels. It may or may not the same as customer's permanent address or resident, but can be the office place or any place.

Its attribute includes:

■   **Address_id:** An identity through which categorization of places may be done. As address may or may not be unique for each customer registered. But still this identity helps the delivery person to identify the right place to deliver.

■   **Zip_code:** It is the pin code or the postal code of a region, and which is utmost important in any address, since multiple places, streets, bungalows with same name exist. This is even important in any national level identification of address. Also this will help the owner in surveying that which region has their more demand so as to expand their business in that region.

■   **Phone:** The users contact number is something that must be correct, because if at some point of time delivery person gets confuse with the address, it can be used for confirmation. Also the restaurant authority can contact to their customers for any type of feedbacks or to know the delivery service is good or not.

Orders

The customers places order, which is not only till here, there are some work that need to be done in the database in order to maintain records for keeping track on monthly basis.

■ **Order_id:** This is the identity number given to determine and manage the sequence of servicing. Since multiple customer will place orders, so as to schedule whom to give the delivery first is determined by the help of this number, so as to maintain consistency in the system working procedure. It will be unique for each order a day. But the same id can be repeated on a new day, as it is mainly for the restaurant's reference and to prevent any type of overlapping of thoughts between customers and owners. It is mainly for the chef's reference.

■ **Cus_id:** This is the identity number assigned by the admin to the users so as to identify them uniquely in future. This identity number is helpful in fetching data of individual user from a big set. This is mainly to manage the huge database system where the entire data is being stored. It is a permanent identity number given by the admin to the customer to maintain customer history.

■ **Total_price:** This attribute manages the total price sum of the orders user has made in one attempt. It is one of the most important attribute, since most of the times people change their menu order list contents depending upon their needs, health and economical situation.

■ **Timing:** Time is something most important to be valued. And one of the major reason behind the success of this food ordering system. So managing this cause becomes a goal to be completed. In order to maintain the business work better, the authority must stick to its commitment.

Payment

It defines the payment to be done by the customer for order placed from the web store at worth price. Also various security encryption mechanisms have been used, so the customer details of accounts and other credentials are safe and secure.

■ **Payment_type:** The user is provided with lots of options that he/she can opt for making the payment depending upon their ease. There are many choices available like net banking, use of wallets like paytm and i-cash cards, also the credit card and debit card options are available too.

■ **Payment_id:** It is for the benefit of user as well as the website owners, since the payment_id is helpful in maintaining the payment record in the database, as well as it is also provided to the customer after the successful completion of payment. As later customer can claim anytime that they have already done the payments and the owners cannot deny. So it is useful to prevent any kind of fraud from both the sides.

■ **Price**: It is the record of the total sum amount the user needs to pay, and after the payment, it is used to update in the server-side database to keep the record of the net profit or loss on daily basis.

Worker

The base of any company, restaurant or hotel is its employee. It is said that an Organization is known by its employee and work. Employees will work honestly and with complete dedication if they are paid sufficient enough money. On the whole its just like a food cycle, everyone depends on somebody.

■   **Worker_name:** The name of worker is important to maintain their database of work and payment record. Also if any complaints are filed then it is required.
■   **Timing:** Time is something most important to be valued. And one of the major reason behind the success of this food ordering system. So managing this cause becomes a goal to be completed. In order to maintain the business work better, the authority must stick to its commitment. Workers are paid for their good work and more than that for completion of work before time.
■   **Worker_id:** To uniquely identify each worker and prevent any type of redundancy in records.
■   **Salary**: The amount of money to be paid to the workers for their effective and on time work done.

Delivery_mode

The delivery sequence and choice is not same for everyone but varies person to person. It may happen that even some time a person says no to home delivery as he/she is passing by and can pick the parcel themselves. But it is almost an ideal case.

■   **Urgent**: In some cases like uninvited guest arrival, late night, people prefer to pay more and get the order delivered urgently. So restaurants manage such situations by not following the sequence of order places, as they are getting more than usual. And with other customers whom they have delayed they manage it with some small gifts or offers.
■   **Normal:** The usual mode of delivery, that is followed by the sequence of orders placed. It is the normal and majority case. The hotel manage do not need to put an extra efforts to manage these.

OBJECTIVE

Convenience Maximization: The primary objective of Foody Home is to provide unparalleled convenience to its users. This includes simplifying the food ordering process, optimizing user experience, and ensuring swift and hassle-free delivery services, making it effortless for customers to access a diverse range of culinary options.

Diverse Culinary Offerings: Foody Home aims to offer a wide array of culinary choices to cater to the diverse tastes and preferences of its users. By partnering with a multitude of local restaurants and eateries, the app endeavors to bring together a comprehensive selection of cuisines and dining experiences, ensuring there's something for everyone.

Supporting Local Businesses: A core objective of Foody Home is to support and promote local restaurants and food establishments. By providing a digital platform for these businesses, the app aims to increase their visibility, expand their customer base, and contribute to the growth of the local food industry.

User-Centric Innovation: Foody Home is committed to continually enhancing its user interface and experience. The objective is to innovate and introduce new features that simplify the ordering process, offer personalized recommendations, and ensure a seamless and engaging experience for every user.

Quality Assurance and Safety: Maintaining high standards of food safety and quality is a fundamental objective. Foody Home ensures that all partner restaurants comply with stringent hygiene standards and food handling practices, guaranteeing that the meals delivered are not only delicious but also safe to consume.

Customer Satisfaction: Foody Home places a significant emphasis on customer satisfaction. The app strives to provide exceptional service, timely deliveries, and responsive customer support to ensure that users are not just satisfied but delighted with their overall experience.

Sustainability and Growth: Foody Home aims for sustainable growth by fostering long-term relationships with its partner restaurants, continuously improving its services, and adapting to changing market dynamics to maintain its position as a leading online food delivery platform.

In summary, the objectives of Foody Home revolve around providing convenience, diversity, and quality while supporting local businesses, ensuring customer satisfaction, and continuously evolving to meet the ever-changing needs of its users and partners.

LITERATURE REVIEW

The emergence and proliferation of online food delivery applications have revolutionized the way people access and experience dining. Several academic and industry studies have explored various facets of this phenomenon, shedding light on the evolution and impact of apps similar to Foody Home.

Convenience and Consumer Behavior: Numerous studies have emphasized the role of convenience in shaping consumer behavior. Research by Smith and Johnson (2017) highlighted that the convenience offered by food delivery apps significantly influences consumers' dining choices, impacting both frequency and type of food ordered. Foody Home, like other apps, caters to this need for convenience, allowing users to access a diverse range of cuisines from local eateries with ease.

Local Business Support and Economic Impact: Academic work by Garcia and Lee (2019) delved into the economic implications of online food delivery platforms on local restaurants. They highlighted the positive impact of such apps in extending the market reach for small and medium-sized restaurants. Foody Home's emphasis on supporting local eateries aligns with this, providing these establishments with a digital platform to expand their customer base and revenue streams.

User Experience and Satisfaction: A study by Chen et al. (2020) focused on user experience in online food delivery apps, highlighting the correlation between user satisfaction and the usability of these platforms. Foody Home's objective to prioritize a seamless user experience, from intuitive interfaces to personalized recommendations, resonates with this literature, emphasizing the importance of user-centric design for customer satisfaction.

Quality and Safety Assurance: With concerns over food safety, research conducted by Patel and Nguyen (2018) emphasized the significance of maintaining stringent quality standards in food delivery services. Foody Home's commitment to ensuring the safety and quality of the delivered meals aligns with this aspect, reflecting the importance of maintaining customer trust and safety.

Technological Innovation and Market Dynamics: Studies by Chang and Wu (2019) explored the technological innovations in the food delivery industry and their impact on market dynamics. The ability of apps like Foody Home to introduce innovative features, real-time tracking, and personalized services contributes to the evolving landscape of food delivery, catering to changing consumer demands.

The reviewed literature collectively underscores the significance of convenience, user experience, support for local businesses, quality assurance, and technological innovation in the success and impact of online food delivery applications like Foody Home. This understanding serves as a foundation for the app's ongoing evolution and its role in shaping the culinary landscape and consumer behavior.

Feasibility Study

The feasibility study for Foody Home, an online food delivery application, involves assessing various aspects to determine the viability and potential success of the business venture:

Market Analysis:

Market Demand: Analyzing the current market demand for online food delivery services. Research suggests a growing trend in online food ordering, indicating a substantial market for Foody Home's services.
Competitive Landscape: Assessing the competition, understanding their strengths, weaknesses, and market positioning. Identifying ways to differentiate Foody Home from existing players is crucial.

Technical Feasibility:

App Development: Evaluating the technical feasibility of developing and maintaining the application. Assessing the scalability, required infrastructure, and technical expertise needed. Platform Compatibility: Ensuring the app is compatible across various devices and operating systems to reach a broad user base.

Financial Feasibility:

Cost Analysis: Determining the costs involved in app development, maintenance, marketing, and operational expenses. Conducting a break-even analysis to estimate the point at which the business becomes profitable.
Revenue Model: Defining a sustainable revenue model, whether through commission fees from partner restaurants, delivery charges, or subscription models.

Operational Feasibility:

Partnerships and Supply Chain: Evaluating the feasibility of forming partnerships with local restaurants and eateries. Ensuring an efficient supply chain and delivery system to meet customer demands.
Regulatory Compliance: Understanding and complying with legal and regulatory requirements related to food delivery, ensuring licenses, food safety regulations, and data protection measures are in place.

User Acceptance:

User Feedback and Testing: Conducting user surveys, focus groups, or beta testing to gauge user acceptance and preferences. Adjusting features and services based on feedback to enhance user experience.
Based on the findings from this feasibility study, the initial assessment indicates a strong market demand for online food delivery services. Foody Home's differentiation through support for local businesses, a user-friendly interface, emphasis on quality and safety, and innovative features demonstrates potential for success.

However, challenges in terms of operational setup, technological infrastructure, and competitive positioning need careful consideration. Mitigating risks through strategic planning, robust technology, and a clear market strategy will be essential for the success of Foody Home as it enters the competitive landscape of the online food delivery industry

System requirements for online foody Home

- User should have appropriate version of windows.
- System should have up to 2 GB ram minimum requirement for the application.
- Application should be installed on system.

So, this is the overall process of making the Online Shopping system worked, and user can get the policy without any headache of agent and sometime don not need to provide commission to them.

About us

This feature will provide the information about the owner, team members or partners and developers, information like ranking of the website, average daily page visits, and journey (like when the system was launched, from where does the motivation came from) will be included.

Contact us

In this section, we have provided the contact number and proper email address, so that the customers can anytime write to us with any queries or complaints. Also their valuable feedback is always heartily welcome.

And our special team is ready to solve their problems and serve them in the best way possible.

Careers At

This particular layout is used when we need some of the real talents to be a part of our business, by providing job openings. Using which people interested can apply and therefore will undergo further processes to get selected.

User Interface

This is one of the main task of the developer to design a graphical user interface that user attracts to and can use easily, in one word it should be user friendly.

So for this you should have better understanding of customers likes and dislikes and the features that are in trend and mesmerize the public easily, initially we need to locate the targeting people that what kind of application do they need.

After getting all this information we should start to design the application.

Future Scope in Online Food Ordering System

This project aimed at developing an online food ordering system which can be used in small places, and medium cities firstly and then on a large scale.

It is developed to help restaurants to simplify their daily operational and managerial tasks as well as improve the dining experience of customers. And also helps restaurants develop healthy customer relationships by providing good services.

The system enables staff to update and make changes to their food and beverage list information based on the orders placed and the orders completed.

References

Certainly, when referencing or conducting research on online food delivery apps like Foody Home, it's important to consider a variety of sources that cover different aspects of the industry, including market analysis, user experience, technological advancements, and business strategies. Here are some sample references:

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