Cloud Kitchen

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# Introduction

Cloud Kitchen is all about bringing delicious food to your doorstep with ease and convenience. We believe that great meals should be accessible to everyone, no matter where you are. That’s why we’ve designed our mobile app to make ordering your favorite dishes as simple as possible.

With Cloud Kitchen, you can browse through our carefully curated menu, place an order, and have it delivered straight to your chosen location—all with just a few taps on your phone. Whether you’re at home, at work, or anywhere else, we’ve got you covered. We also offer secure payment options, including online payments and card transactions, so you can choose what’s easiest for you.

But it’s not just about getting your food quickly; it’s about enjoying the whole experience. That’s why we’ve included a feature that lets you share your thoughts and reviews after trying our dishes. Your feedback helps us grow and ensures that every meal you order from Cloud Kitchen is just as good as the last.

At the heart of Cloud Kitchen is a commitment to making every meal special. We’re here to bring you the food you love, whenever and wherever you want it, making each experience with us personal and memorable.

# Purpose

At Cloud Kitchen, our purpose is to revolutionize the way people enjoy food by harnessing the power of modern technology. Our mobile app is designed to streamline every aspect of the food ordering and delivery process, ensuring that our customers have a seamless and satisfying experience from start to finish.

Our mission is to provide a convenient and enjoyable experience for both our customers and our team. The objectives of the Cloud Kitchen app are as follows:

1. **Enhancing Customer Experience:** We aim to make it effortless for customers to browse our menu, place orders, and pay securely, all from their smartphones. The app also allows customers to review their experience, helping us continually improve our service.
2. **Streamlining Operations:** By automating tasks like order processing and payment handling, our team can focus on preparing and delivering high-quality meals, rather than getting caught up in administrative details.
3. **Boosting Efficiency:** The app reduces wait times, minimizes errors, and improves communication between our kitchen and delivery team, ensuring that meals are delivered quickly and accurately to our customers.
4. **Supporting Growth:** As Cloud Kitchen expands, our app is designed to scale easily, adapting to the increasing demands of our growing customer base while maintaining the quality and efficiency of our service.

We believe that by focusing on these key areas, Cloud Kitchen can continue to provide a top-notch dining experience that keeps our customers coming back for more.

# Business Process Overview

At Cloud Kitchen, our goal is to make the process of ordering and enjoying food as simple and satisfying as possible. We achieve this by integrating modern technology into every aspect of our operations.

Our app streamlines order management by allowing customers to place their orders directly through a user-friendly digital platform. This direct ordering system helps reduce errors and delays in the kitchen, ensuring that each meal is prepared accurately and delivered on time.

We’ve developed a comprehensive inventory management system that tracks the availability of ingredients in real-time. This system helps us maintain the right stock levels and sends alerts when supplies are running low, ensuring that we’re always prepared to meet customer demand.

Cloud Kitchen also offers a seamless billing and payment process. Our app updates in real-time to accommodate a variety of payment methods, speeding up transactions and making the process hassle-free for our customers.

Additionally, our app features a customer relationship management (CRM) module. This system keeps track of customer profiles, preferences, and order histories, allowing us to offer personalized service that makes every customer feel valued and appreciated.

In summary, Cloud Kitchen enhances efficiency and effectiveness by leveraging technology to improve the customer experience. This, in turn, supports the growth and success of our business as we continue to deliver high-quality meals and exceptional service.

# Order Management

1. Menu Perusing:

Patrons are able to peruse the complete menu, encompassing dishes, costs, and

descriptive photographs. Orders: Using the website, customers can place direct orders.

Orders are delivered right away to the eatery. Custom orders: Clients may modify their

orders by indicating their preferences or giving further instructions (e.g., spice level, add-

ons).

1. Real-time availability for table bookings:

Through the website, patrons can check the availability of tables and make

reservations. Reservation Management: Ensuring appropriate table distribution,

reservations can be made, cancelled, and modified.

Processing Payments and Invoicing: Integrated Payment Gateway:

Accepts cash, credit/debit cards, e-wallets, and other e-services as payment

methods. Real-time billing: When a customer adds or modifies an order, they receive the

most recent invoices.

1. Management of Inventory:

Tracking stocks in real time: Sales and orders are placed, and inventory is updated

automatically. Low Stock Alerts: Notifies users when there is a shortage of stock,

prompting prompt replenishment. When stock has to be refilled, supplier integration

enables you to accept orders directly from suppliers.

# Prototype / UI

## Loading Menu:

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| --- | --- |
| Figure 1 : Intro Page |  |
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## Sign Up and Sign In:

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| --- | --- |
| Figure 2 : Sign Up | Figure 3 : Sign In |
|  |  |

## Forget Password and Verification:

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| --- | --- |
| A screen shot of a phone  Description automatically generated  Figure 4: Forget Password | A screenshot of a phone  Description automatically generated  Figure 5: Verification |

## Validation and Change Password:

|  |  |
| --- | --- |
| Figure 6: Validation | A screenshot of a login screen  Description automatically generated  Figure 7: Change Password |

## Home Page and Cusine Description:

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| --- | --- |
| Figure 8: Home Page | Figure 9: Cusine Description |
|  |  |

## Food Search and Food Filter:

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| --- | --- |
| Figure 10: Food Search | Figure 11: Food Filter |

## My Cart and Add to Cart:

|  |  |
| --- | --- |
| Figure 12: My Cart | Figure 13: Add to Cart |

## Check Out And Location:

|  |  |
| --- | --- |
| Figure 14: Check Out | Figure 15: Location |

## Payment Method and Credit Card Info:

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| --- | --- |
| Figure 16: Payment Method | Figure 17: Credit Card Info |

## Payment Details and Add New Address:

|  |  |
| --- | --- |
| Figure 18: Payment Details | Figure 19: Add New Address |

## My Profile(edit) and Review:

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| --- | --- |
| Figure 20: My profile | Figure 21: Review |

# Usability Test Questions:

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| Figure 22: Question 1 |

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| Figure 23: Question 2 & 3 |

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| Figure 24: Question 4 & 5 |

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| Figure 25: Question 6 & 7 |

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| Figure 26: Question 8 & 9 |

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| Figure 27: Question 10 & 11 |

# Response Sheet:

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| Figure 28 : Resposse Sheet 1 |

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| Figure 29: Response Sheet 2 |

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| Figure 30: Response Sheet 3 |

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| Figure 31: Response Sheet 4 |

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| Figure 32: Response Sheet 5 |

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| Figure 33: Feedback |

# Ananalysis of Conducted Usability Testing:

The usability testing for **Cloud Kitchen** provided very positive feedback from users. Participants particularly appreciated the convenience of ordering food from the comfort of their homes, with many expressing strong support for this feature. The process of creating and logging into accounts was generally regarded as straightforward, with most users finding it easy to manage.

The design of the app also received favorable reviews. Users rated the interface from good to exceptional, indicating that the navigation and overall user experience were both well-received and effective. The feedback suggests that the app’s layout and functionality make it easy for users to find what they need and complete their orders without hassle.

Overall, the app is considered successful in meeting its objectives. Users not only provided valuable suggestions for improvements but also shared numerous positive comments about their experiences. This strong feedback highlights the app’s effectiveness in delivering a seamless and satisfying food ordering experience.

# Usability Component Analysis for Cloud Kitchen:

1. **Home Delivery Orders:**

Customers really appreciate the convenience of ordering food from home. This feature seems to be a hit, making the ordering process not only easier but also more accessible, which is exactly what we aimed for.

1. **Simple Account Setup and Login**

Setting up an account and logging in is generally seen as straightforward by most users. While it's already pretty user-friendly, there’s always room to make it even simpler.

1. **User Interface/User Experience Design**

The app's design has received a lot of positive feedback. Users find it both visually appealing and easy to use. However, staying on top of user feedback and making small improvements over time will help us keep the design fresh and functional.

1. Ease of Navigation:

One of the standout points from the feedback is how easy it is to navigate the app. Whether it’s moving between the main page, menus, carts, or profiles, users seem to have little to no trouble, which is a great sign that the design is intuitive.

1. Effective Media Presentation:

Users noted that the images and media within the app load quickly and look great. This balance between speed and quality adds to the overall user experience, making the app more enjoyable to use.

1. Achivement of Goals:

A lot of users have said they’re happy with the app and would recommend it to others. This kind of positive feedback is a good sign that word-of-mouth could help us grow.

1. Potential For Recommedation:

A lot of users have said they’re happy with the app and would recommend it to others. This kind of positive feedback is a good sign that word-of-mouth could help us grow.

1. Overall User Experience:

A lot of users have said they’re happy with the app and would recommend it to others. This kind of positive feedback is a good sign that word-of-mouth could help us grow.

# Application of Nielsen’s Heuristic Principles and Shneiderman’s 8 Golden Rules in Cloud Kitchen

1. **Standards and Consistency:** Cloud Kitchen sticks to a consistent look and feel throughout the app. The colors, fonts, and buttons are uniform, making it easier for users to find their way around without getting lost or confused.
2. **Visibility of System Status:** The app does a great job of keeping users in the loop with timely updates on their orders and clear confirmations of actions. This transparency helps users feel confident about what's happening at every step, whether they’re ordering or waiting for their food.
3. **Match Between System and Real World:** Cloud Kitchen uses language and visuals that are easy to understand, drawing on familiar concepts from the world of food and delivery. This makes the app feel intuitive, almost as if it’s speaking the user’s language.
4. **User Control and Freedom:** Users have the flexibility to correct mistakes, like modifying or canceling orders, without much hassle. This feature is key to reducing frustration and making the overall experience smoother.
5. **Error Prevention:** The app is designed to help users avoid common mistakes. With clear options to confirm or cancel actions and timely alerts about potential issues, users are less likely to run into trouble.
6. **Recognition Rather Than Recall:** Cloud Kitchen makes things easier by highlighting recent orders and frequently used items. This approach means users don’t have to remember every little detail, making the app more user-friendly.
7. **Flexibility and Efficiency of Use:** The app offers quick access to popular features and custom recommendations, catering to both new users and seasoned pros. This flexibility allows users to tailor their experience, making the app work better for them.
8. **Aesthetic and Minimalist Design:** The design of Cloud Kitchen is clean and straightforward, focusing on what really matters without unnecessary clutter. This minimalist approach helps users stay focused on what they want to do, making the app easier to use.

# Reflection on the Development of Cloud Kitchen App:

The development of the Cloud Kitchen app was a journey that required careful attention to usability principles, with the goal of refining and enhancing the user experience. By incorporating Shneiderman’s 8 Golden Rules and Nielsen’s heuristic concepts, we aimed to create a balanced design that addressed key usability concerns. The inclusion of features like error prevention, intuitive navigation, and consistent design elements resulted in an interface that users find both engaging and effective.

One of the most telling indicators of our success has been the positive feedback from customers, particularly regarding the ease of managing accounts and placing orders from the comfort of their homes. This feedback underscores the effectiveness of our design choices. Additionally, the app's performance—characterized by quick load times and responsive interactions—has been well-received, affirming the importance of our speed optimization efforts. This user satisfaction highlights how critical it is to align our design with real-world needs and preferences.

Throughout the development process, we also placed a strong emphasis on flexibility and continuous improvement. User feedback has played a crucial role in guiding iterative updates, ensuring that the app remains relevant and useful. Looking ahead, the project is well-positioned for growth, with a commitment to enhancing features and integrating new technologies to meet evolving customer demands. In summary, the development of Cloud Kitchen has established a strong foundation for future advancements, reflecting our dedication to delivering an exceptional food ordering and delivery solution.

# Research and Report writing:

## Data Piracy:

In the digital age, data piracy—the unlawful access, use, or dissemination of data has

grown to be a serious problem. It includes a wide range of actions, including as data theft,

hacking, and the unauthorised distribution of anything protected by copyright. Data piracy

jeopardises the integrity of the digital economy in addition to people's and enterprises' security

and privacy. Data has become a valuable asset due to the increased reliance on digital platforms,

which makes it a prime target for unscrupulous actors.

One of the major ethical concerns in data piracy is the violation of privacy. Unauthorized

access to personal information, such as social security numbers, financial records, and private

communications, can have severe consequences for individuals, including identity theft and

financial loss. Regulations like the General Data Protection Regulation (GDPR). Fighting data

piracy requires a strong focus on data security. To prevent unwanted access to their data,

businesses need to put strong security measures in place, like encryption, multi-factor

authentication, and frequent security audits. Furthermore, one of the most important ways to stop

breaches is to teach staff members and users about the dangers of data theft and the value of data

protection. In addition to assisting with regulatory compliance, a proactive approach to data

security fosters stakeholder and customer trust.

Organisations such as the Data Security Council of India (DSCI) and the Internationa

Association of Privacy Professionals (IAPP) have developed ethical principles that highlight the

need of responsible data management and the need to protect individuals' privacy. Businesses are

urged to follow these recommendations to guarantee that their data practices are open and

honest.Examples from real life demonstrate the terrible effects of data piracy. Over 147 million

people's personal information was compromised in the 2017 Equifax data breach, which had

serious legal and financial repercussions for the corporation. This example emphasises how

crucial it is for businesses to have robust data security procedures in place and to exercise

caution while safeguarding customer information.

In conclusion, in the digital age, data piracy presents serious moral and legal issues.

Businesses can successfully fight data piracy and safeguard the information of their clients by

abiding by data protection regulations, putting strong security measures in place, and sticking to

ethical standards. To establish a safe digital environment, business executives and IT specialists

must collaborate. This will guarantee that data is managed appropriately and that stakeholders'

and consumers' trust is upheld. Businesses may prosper in a data-driven environment by

adopting ethical data procedures and being watchful for possible hazards.

# References:

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# Figma Link:

<https://www.figma.com/design/a7lEqscvUkgsdQASOP1EPR/Cloud-Kitchen?node-id=0-1&t=smg2ylHtnjoC9Smt-1>