

Cloud Kitchen

SE-441 - Software Project Management Document



Submitted To

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1 Project Vision

Our vision is to revolutionize the food delivery industry in Pakistan by introducing a **cloud kitchen** model that focuses exclusively on preparing homemade, hygienic, and budget-friendly meals for delivery. We aim to empower women and aspiring entrepreneurs to start their food businesses from home, while providing customers with convenient, customizable, and high-quality dining options. By eliminating the need for dine-in spaces, we strive to create a sustainable and inclusive platform that meets the growing demand for reliable and personalized food services.

2 Project Mission

Our mission is to create a **trustworthy, homemade food delivery service** that prioritizes transparency, quality, and customer satisfaction. We will offer daily and weekly menus with the option for personalized meal customization, allowing customers to tailor ingredients, portion sizes, and spice levels to their preferences. Additionally, we will enable customers to request specific dishes by notifying the kitchen in advance, ensuring a unique and satisfying dining experience. Through innovation and dedication, we aim to set a new standard for convenience, hygiene, and affordability in the food delivery industry.

3 Objective

- Establish a cloud kitchen that prioritizes hygiene, trust, and customer satisfaction.
- Offer a **customizable menu** made for individual preferences, allowing users to request specific dishes in advance.
- Implement a **review-based quality assurance system** for transparency.
- Utilize Agile methodologies to **continuously improve** based on user feedback.
- Introduce an AI-powered chatbot to enhance customer experience:
 - If a user has dietary restrictions or health conditions, the AI can suggest suitable meals based on their dietary needs.
 - If a user is unsure about what to eat, the AI can suggest meals based on their mood or cravings and recommend dishes available from our kitchen that match the user's preferences.

4 Project Scope

4.1 Key Deliverables

- **A functional cloud kitchen platform**, including a website and mobile app for seamless ordering.
- **User profiles** with order history and personalized preference tracking.
- **A food customization system** allowing users to adjust spice levels and personalize their meals.
- **AI integration** to recommend food options based on dietary needs, health conditions, and cravings.
- **A transparent review system** to ensure quality control and customer trust.
- **An efficient delivery service** ensuring timely and hygienic food delivery.

4.2 Constraints

- **Restaurant Food** will not be available on our platform, as the focus is exclusively on home-made cuisine. And it will not support dine-in services, as it is a cloud kitchen model.
- **Geographical Limitations:** Services may initially be limited to specific areas, with gradual expansion based on demand and logistics.
- **Menu Customization Limits:** Customization options will be restricted to available ingredients and kitchen capabilities. Special dish requests will require prior notification (e.g., 7-8 hours or a day in advance) to ensure preparation.

4.3 Minimum Viable Product (MVP)

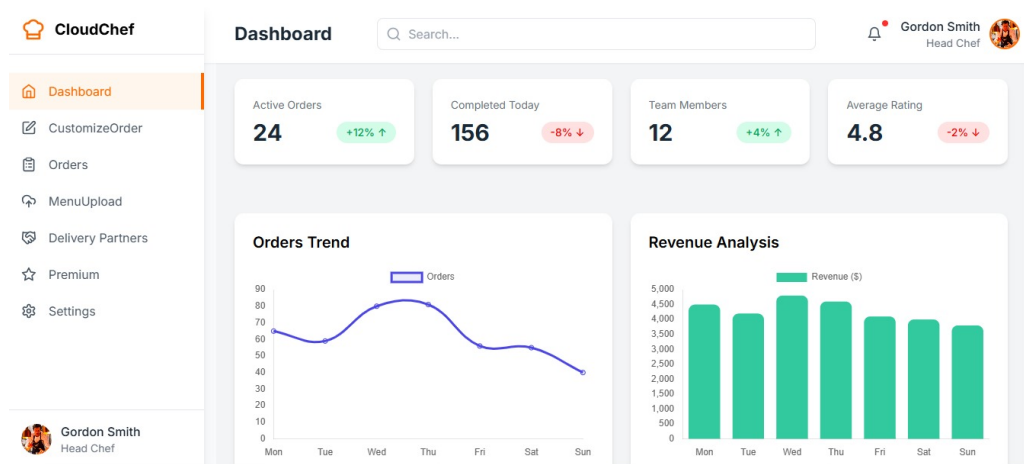


Figure 1: MVP

4.4 Agile Approach (Bonus Task)

The MVP was developed using agile methodologies to ensure flexibility and responsiveness. Key practices included:

- **Iterative Development:** Delivered in incremental stages, focusing on core features first.
- **User Feedback:** Regular feedback loops guided prioritization and improvements.
- **Modular Design:** Built with scalability in mind for easy updates and feature additions.
- **Continuous Improvement:** Tools like Jira & Terllo and CI/CD pipelines enabled rapid testing and deployment.

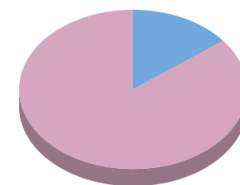
This approach ensured quick value delivery, adaptability to user needs, and minimized development risks.

5 Business Alignment

5.1 Market Demand & Growth Strategy

The food delivery market in Pakistan is growing rapidly, with an annual increase in online food orders. Surveys indicate that 85% of customers prefer home-made food for its perceived hygiene and quality, but existing platforms lack reliable options.

Count of Do you think cloud kitchen service should increase in Pakistan?



We will use **Social Media Marketing** to leverage platforms like Instagram, X (Twitter), Facebook, and TikTok for customer engagement. Additionally, we will implement a **Referral System** that offers discounts to customers for inviting new users.

5.2 Novelty & Competitive Advantage

- **Existing Solutions:** Competitors like FoodPanda focus on restaurant food, with limited options for home-made meals and most platforms do not offer advanced customization or AI-driven recommendations.
- **Customizable menus:** Users can design their meal and can adjust species according to their taste.
- **AI Integration:** Users can use this feature for specific food menus according to their health and diet plans and their food craving. It will also suggest food from their preferred kitchens.

Count of Can you get customized food as per your preference from a cloud kitchen?

