GITZZERIA

SOFTWARE REQUIREMENTS SPECIFICATION

VERSION 1.0

GROUP :23

DATE:

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INTRODUCTION

In this introduction, we outline the key features and benefits of our proposed platform, highlighting its potential to transform the way college communities interact with their dining facilities. From order scheduling to secure payment gateways, from virtual queue management to interactive feedback channels, our platform offers a comprehensive suite of solutions designed to meet the demands of modern campus life.

With a focus on convenience, efficiency, and innovation, our platform seeks to address common pain points encountered in traditional dining settings. By embracing cashless transactions, digital menus, and advanced queue management systems, we aim to streamline operations while enhancing the overall dining experience for all stakeholders involved.

SCOPE

The scope of our platform extends beyond mere transactional interactions to foster a dynamic and engaging dining experience within college campuses. By addressing the diverse needs and preferences of our target audience, we aim to create a seamless and enjoyable dining environment that enhances the overall quality of campus life.

1. **User Interface Design:** Creation of an intuitive and visually appealing interface accessible via web and mobile devices, catering to the needs and preferences of college students and faculty.
2. **Authentication System:** Implementation of a secure login system with options for single sign-on integration.
3. **Digital Menu Interface:** Development of a user-friendly digital menu interface featuring detailed item descriptions, images, and filtering options to accommodate diverse dietary preferences and restrictions.
4. **Order Management:** Integration of a robust order management system allowing users to place orders in real-time or schedule them for future pickup with notifications to track order status.
5. **Virtual Queue Management:** Implementation of a virtual queue management system to minimize wait times and optimize order processing.
6. **Secure Payment Gateways:** Integration of secure payment gateways to facilitate cashless transactions.
7. **Feedback and Query Handling:** Incorporation of a chatbot or helpdesk system for efficient handling of user feedback, queries, and support requests.

FEASIBILITY STUDY

1. **Technical Feasibility:**
    - Assess the technical infrastructure needed to support the platform, including servers, databases, and network resources.
    - Evaluate the feasibility of developing the required software components, including user interfaces, authentication systems, order management systems, and integrations with payment gateways and analytics tools.
2. **Economic Feasibility:**
    - Estimate potential revenue streams from the platform by including advertising opportunities.
3. **Operational Feasibility:**
    - Evaluate the willingness of college students, faculty, and canteen staff to adopt and use the platform.
    - Considering the operational impact of implementing the platform on existing canteen operations, including staffing requirements, workflow changes, and customer service considerations.
4. **Legal and Regulatory Feasibility:**
    - Evaluate legal and regulatory requirements related to data privacy, payment processing, accessibility standards, and food service regulations.

REQUIREMENTS

FUNCTIONAL REQUIREMENTS

1. **User authentication**:
   The system must authenticate users with valid credentials before granting access to the platform.
2. **Digital menu interface:**
   The platform should display a digital menu featuring all available food and beverage items offered by the canteen.
3. **Virtual queue management:**
   Users should receive notifications or updates on their order status, indicating when their order is being prepared or is ready for pickup.
4. **Order placement**:
   Users should be able to add items to their cart, specify quantities, and place orders for immediate or scheduled pickup.
5. **Payment processing**:

The system must support various payment methods and securely process transactions.

6. **Feedback submission**:
   Users should have the ability to provide feedback on their dining experience, including ratings and comments on menu items and service.

NON-FUNCTIONAL REQUIREMENTS

1. **Performance**:
   The system should respond to user interactions within two seconds under peak load conditions.
2. **Reliability:**
   The system should be available 99.9% of the time, with scheduled downtime limited to no more than one hour per month.
3. **Security:**
   User data and payment information should be encrypted during transmission and storage to prevent unauthorized access.
4. **Scalability:**
   The platform should be scalable to accommodate growth in user base and transaction volume over time.
5. **Usability:**
   The user interface should be intuitive and easy to navigate, catering to users of varying levels of technical expertise.
6. **Compliance:**
   The platform should comply with relevant legal and regulatory requirements, including data privacy regulations.
7. **Interoperability:** Integration with external services or APIs may be required for features such as payment processing or loyalty program management.

CONCLUSION

In conclusion, the proposed cashless canteen platform offers a comprehensive solution tailored to modernize and optimize the dining experience within college campuses. Through intuitive interfaces, efficient order management systems, and secure payment gateways, the platform aims to streamline operations, minimize wait times, and enhance convenience for students, faculty, and canteen staff. By prioritizing user satisfaction, implementing robust security measures, and fostering engagement through loyalty programs and feedback channels, the platform not only addresses current challenges but also sets the stage for a more

seamless, efficient, and enjoyable dining experience, ultimately enhancing the overall quality of campus life.

REFERENCES

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