Software Requirements Specification

for

DIGITAL WAITER

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version
NISHOK	24th Feb 17	First revision	1.0

1.   Introduction

1.1   Purpose

The purpose of this project is integration of conventional manual servies like order,menu provision,food delivery and payment services in restaurants within a single application termed as Digital Waiter. The application aims to improve customer experience and provide additional functions not present in usual restaurants.

1.2   Product Scope

The scope of the application is as follows:
1)Maintain a database of menu items and features, order details and payment details.
2)Development of Digital Waiter application.
3)Application of software is mentioned as below:
   a) Present an interface to display item,order,payment,benefits and miscellaneous details.
   b) Provide notifications and feedback portal.

1.3   References

Www.wikipedia.org
https://10.5.18.110/moodle/pluginfile.php?file=%2F10706%2Fmod_resource%2Fcontent %2F1%2FSRS_EXAMPLE2.pdf

2.   Overall Description

2.1   Product Functions

1) Maintain a database of available items with prices, health warnings, composition and miscellaneous.
2)Provide interface to display order,waiting time,delay with digital timer included.
3)To facilitate cashless payment on the spot with a receipt through SMS to mobile.

2.2   Operating Environment

The software is developed for the Windows Operating System platform, Android Operating System, IOS and also Linux based operating systems. It will run on any Linux based OS. and on Windows 7 and after based Windows OS, IOS 7 and above , Android Lollipop and above. The software also coexists with Paytm and Google Wallet for cashless transactions.Software sends bill receipt via sms to customer.

2.3   Design and Implementation Constraints

There will be two major constraints:
1)Interfacing with Google Wallet/PayTM.
2)Number of users accessing the application at the same time might affect database updation speed.
3)Memory requirement should not be high.

2.4   Assumptions and Dependencies

It is assumed that the unix system used for building the software should be compatible with components of the software.It is assumed that products Google Wallet, Paytm and SQL work free of bugs

2.5   Input and Output Specifications

Input expected is as follows
1)User ID (make new account if not present)
2)User mobile and account details
3) Order/ booking request
4)Feedback/suggestion

Expected output is as follows
1) Menu items
2) Order status
3) Offer notifications / other advance notifications

3.   External Interface Requirements

3.1   User Interfaces

Interface screens with interactive gui for better experience with icons,buttons and clear fonts..
Database is displayed in tabulated and formatted form.

3.2   Hardware Interfaces

Windows/Mac/Linux personal computers/laptops with I3 or above processors(1.7 GHZ and above) or Windows/Android/IOS smartphones with 1.7 GHZ dual core processor and above) with touch/mouse input and screen with minimum 2 GB RAM.

3.3   Software Interfaces

Language used: C++
Platform: Unix(version 2.6..32-642.11.1.e16.centos.plus.x86_64)
Tools: GUI and other open tools

IDE: gcc
Database: MySQL.
Shares interfaces with Google Wallet,Paytm.

3.4 Communications Interfaces

Application uses mobile networks to send receipts as SMS . There is no specific browser required as application will directly use network connection like a browser to download data.

4. Functional Requirements

4.1 Menu item details

To maintain a menu database of available food items served by restaurant with special prices if any, brief description of item with health warning, composition, seasonal and other miscellaneous details. To also display said database in menu card form to customer.

4.2 Order details

To store order status, expected waiting time and predicted delay if any in a database and display said details to user in formatted form. Status details will be refreshed every 5 minutes.

4.3 Cashless transaction

To facilitating cashless payment on the spot by integrating payment system with PayTM/Google Wallet. User with click of button next to order completes transaction. To send a receipt of transaction in formatted form via SMS to user mobile number.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The primary performance requirement is speed of internet network so that order updates and status updates are reflected in real time. In case of large number of users accessing the application once, the speed at which updates are refreshed might go down due to traffic.

5.2 Software Quality Attributes

a)Availability:
The users should be able to download the software if they have basic internet connection.

b) Reliabiltity:
The software is reliable and unforeseen calamities like power shortage or system crash will not do harm to your profile or undergoing order/cash transaction.They will simply be put on hold.
c) Portability: The software is basically built for home computers and mobiles.
d) Maintainability:
Software updates will be made available every month to maintain smooth running.
e)Security:
The system is highly secure.All confidential information of user in their accounts are hidden from other parties upto required extent.
f)Modifiabilty:
Application is not open source and hence cannot be modified without developer consent.
g)Safety requirements:
There are no safety requirements with this application. In case of device hazards, data flow is stopped and reverted to previous safe state hence not corrupted or compromised.
h)Flexibility:
Application is easily modifiable by developer to maintain and update with changing environment.

5.3 Security requirements

The software should be secure and user details/cash transactions should be uniterceptable. Secure encryption processes will be done on details and then transferred to prevent security risks. User details will be hidden from other users. No 3rd party advertisements will be displayed in software to prevent security risks.

6. Other Requirements

User interface should be effective and interactive and appealing for maximum effect. Software should be approved for use in respective area without violating any rules and regulations of CopyRight Act and existing patents in the country in which it is used.