

Gourmet Restaurant Management System

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Abstract: This report presents a descriptive summary of the implementation of the Gourmet Restaurant Management System (GRMS). The proposed tools to be used for implementation of the front-end of the project are HTML5, CSS and Python. The back-end tools include Sqlite and BerkelyDB. These are prone to changes during the course of the project.

Key words: BerkelyDB, CSS, GRMS, HTML5, Python, Sqlite

1. PROJECT REQUIREMENTS

The main requirements of the project design are the front-end and back-end components. The following specifications will be taken into consideration for the implementation of the two components of the design.

- Meals database
- Client database
- Dishes: ingredients, calories, type of meal, price
- Efficient database relations
- Robust user interface

2. EXPANDED PROJECT DESCRIPTION

The user interaction of the GRMS will consist of a client, administrator and auditor. The roles of the mentioned users are listed in Table 1 below.

User	Role
Client	Registration, log-in, meal selection, reservations, payments
Administrator	Log-in, stock taking, monitor payments, set meal prices, update specials
Auditor	Monitor the overall operation of GRMS

Table 1 : Table to test captions and labels

3. FRONT-END COMPONENT OF GRMS

This section is allocated to Milka Madahana and Sibonelo Xulu. The front-end of the project consists of the following specifications:

- Graphical User Interface (GUI). This will be achieved using HTML5 and CSS.
- Script (Dynamic Web Page). The implementation will be carried out on Python.

4. BACK-END COMPONENT OF GRMS

This section of the project will be implemented by Asithandile Malote and Mfundo Ntini.

The back-end component consists of the database model of the GRMS. In addition, the database models relationships to illustrate the user interactions with the GRMS, the relationship between the meals database and client database. The meal database will be linked to the ingredient, calories and price database. Sqlite and BerkeleyDB are suggested as tools for the implementation of the database system.

5. INPUT-OUTPUT DESCRIPTION OF GRMS

The input to the GRMS will be the client interaction with the GUI. This SQL commands will then allow the to access the tables in the database. The client is to login to the system via their user credentials and once that

information has been captured the client can then navigate their way around the site. The site will allow the client to choose an order via a drop down menu. Once the base order has been chosen the client can add or remove side ingredients of their choice with little limitations. Upon the confirmation of the order the site will then output to the client the amount of money the order costs and the nutritional information of the order. The administrator can also login to the system but with different permissions as compared to the client. the administrator can change the available base orders and side ingredients currently on the database and can also update the prices if need be.

6. CONCLUSION

HTML5, CSS and Python will be used for the front-end of the project whilst Sqlite and BerkeleyDB will be used for the back-end. Careful attention is to paid in the database design and table relations such the system is efficient without repetitions and an acceptable level of information integrity