

# **UTD Dining and Meal Plan System**

**Course Title: Database Foundations for Business Analytics (BUAN 6320.004)**

## **Group Members:**

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**Narrative Description:** Our proposed database project is to design and implement a system for the University of Texas at Dallas' (UTD) Dining and Meal Plan to make eating on campus easier and more efficient for its students. Right now, it's a bit tricky for students to know how many meals they have left, change their meal plan, or even find foods that fit their dietary needs. Our project i.e., UTD dining and meal plan system based on SQL, which is a type of computer language to manage information, will help to solve this problem.

With this new system, everything about campus dining will be in one place. Students can easily see and manage their meal balances, pick a different plan if they want, and even get suggestions on where to find certain foods. This means no more guessing or wasting time figuring things out. The idea is to make the dining experience at UTD smoother and more personalized for everyone. The system will help administrators manage available dining options, meal plan subscriptions, and student/staff dining transactions.

**Problem/Opportunity:** The current UTD dining system lacks a centralized platform, leading to inefficiencies in meal planning, underutilization of meal plans, and inadequate addressing of dietary preferences. Implementing a SQL-based Dining and Meal Plan System offers an opportunity to streamline meal plan management, optimize food preparation based on real-time demand, and cater to diverse dietary needs, enhancing the overall dining experience for students.

### **Information Needs**

To solve this problem and capitalize on this opportunity, our system would need:

- Detailed data on different dining options available at UTD.

- Real-time tracking of meal balances for students.

- Dietary preference and restriction information for each student.

- Feedback mechanism for students to rate and review dining experiences.

- Analysis tools for the administration to understand demand and preferences.

### **Initial List of Entities (Tables)**

**Students:** Records of students personal information, meal plan, dietary preferences, and balance.

**MealPlans:** Details of various meal plans, including plan name, price, and meals per day.

**DiningHalls:** Information about dining halls, such as name, location, opening and closing times.

**Menus:** Records of menus offered at dining halls, including the date and meal type.

**MenuItems:** Detailed information about menu items, including dish name, ingredients, calories.

**DietaryPreferences:** Various dietary preferences with names and descriptions.

**StudentTransactions:** Transaction history of students, including which dining hall, menu item, and date of transaction.

**Feedback:** Feedback provided by students, including content, rating, and date.

**Coupon:** Different types of coupon code on different meal plan or combo meal.

**Responsibilities:** The responsibilities for this group project have been equally distributed among the team members with the goal of ensuring hard work and proper efforts. Not to mention, the group has ensured to consistently communicate with each other and adhere to the deadlines by taking care of it ahead of time.