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| animatedLOGO | **Assignment No. 01 (Graded) SPRING 2025 CS403P- Database Management System (Practical)** | | **Total Marks: 20**  **Due Date: 02/05/2025** |
| ***Instructions:***  **Please read the following instructions carefully before solving & submitting the assignment solution:**  **It should be clear that your assignment will not get any credit (zero marks) if:**   * **The assignment is submitted after the due date.** * **The submitted assignment solution does NOT open or the file is corrupt.** * **The assignment is copied (from other students or ditto copy from handouts or the internet).** * **Please ensure that your assignment submission is in .doc or .docx format. Other formats such as scanned images, PDFs, .zip, .rar, .bmp, etc., will not be accepted.**   ***Objectives:***  The objectives of this assignment are:   * **Understand Data Flow Diagrams (DFD):** Gain a clear understanding of the concept of Data Flow Diagrams and learn to draw Context Level DFDs. * **Explore System Components:** Familiarize yourself with entities, attributes, relationships, and cardinalities within the system.   **For any query about the assignment, contact at** [**cs403p@vu.edu.pk**](mailto:cs403p@vu.edu.pk)  **GOOD LUCK** | | | |
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| **Scenario:**  Consider a scenario where you are required to design a database for a well-known online food delivery service. The platform allows customers to browse menus from different restaurants, add food items to their shopping carts, and proceed to place orders. The database should store information about restaurants, customers, menu items, orders, and order details. Each restaurant has a unique ID, name, contact information, and location.  Restaurants can offer multiple food items, each with its own name, price, description, and availability status.Customers can create accounts on the platform, with each customer having a unique customer ID, name, email address, phone number, and delivery address. Customers can add menu items to their shopping carts and proceed to checkout to place an order. Orders are associated with customers and contain information such as order ID, order date, and total amount.  Each order can include multiple food items, with details such as the quantity of each item ordered and the price at the time of purchase. The system also tracks payment details for each order.  **Question No. 01:**   * Draw a Context Level Data Flow Diagram (DFD) for the Food Ordering System scenario provided above.   **Question No. 02:**   * Identify all possible **entities** and their **attributes** within the given system. * Extract and outline all **relationships** among these entities. * Draw a comprehensive **Entity Relationship Diagram (ERD)** of the Food Ordering System, showing all entities, their attributes, and relationships among them.   **Guidelines:**   * **Standard UML Notations:** Utilize standard UML symbols for entities, attributes, relationships, and cardinalities as outlined in the handouts. Follow proper naming conventions for entities, attributes, and relationships as specified in the handouts. * **Diagrams Submission:** If you are using a drawing tool (such as MS Paint or MS Visio), be sure to copy and paste your class diagram into your final MS Word (.doc) file. |
| **Lectures Covered:** This assignment covers lectures **1 - 9**.  **Deadline:** Your assignment must be uploaded/submitted on or before the due date **2nd May, 2025**. |