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| animatedLOGO | **Assignment No. 01 (Graded) SEMESTER FALL 2020 CS304- Object Oriented Programming** | | **Total Marks: 20**  **Due Date : 26/11/2020** |
| ***Instructions***  **Please read the following instructions carefully before solving & submitting assignment:**  **It should be clear that your assignment will not get any credit if:**   * **The assignment is submitted after due date.** * **The submitted assignment is other than .doc/.docx file.** * **The submitted assignment does NOT open or file is corrupted.** * **The assignment is copied (from other student or copied from handouts or internet).**   ***Solution Uploading instructions***   * For clarity and simplicity, you are required to Upload/Submit only **.DOC/.DOCX file** * Copy/Paste your class diagram in your final MS Word file if you are using any drawing tool (MS Paint, MS Visio etc.). Images submitted as solution files will not be accepted.   ***Objective***  The objective of this assignment is:   * To give you the idea of practical implementation of the OOP concepts like abstraction, encapsulation, inheritance, association, generalization, specialization, and UML class construction**.**   **For any query about the assignment, contact at [CS304@vu.edu.pk](mailto:CS304@vu.edu.pk)**  **GOOD LUCK** | | | |
|  | | **Marks: 20** | |
| **Problem Statement:**  Suppose the election commission of Pakistan has to conduct the election in Pakistan, due to the current pandemic situation, the commission cannot allow people to come out to cast their votes.  So, it is decided to launch an "E-Voting System" so that people can cast their votes without going outside.  The system will take care of the activities of two types of users (voters and admin) voters will be able to cast their vote against a specific candidate of their choice and an admin will take care of the whole process of managing voters, candidates, and declaration of result.  **Perform the following tasks according to the given scenario :**   1. Extract the main objects (entities) of above system. 2. Find the necessary attributes and functions that need to be associated with each object. 3. Identify the relationships among identified objects.   **4. Construct a final comprehensive Class diagram showing all classes and their relationships along with their attributes and functions.**  **Important things to consider:**   1. As happens in real world that everyone visualizes a problem in a different way so the solutions of all students may vary based upon their own thinking. 2. You have to use standard UML notations for objects, classes, and their associations. 3. Besides problem statement; objects, properties, and functions of a system can also be extracted from domain knowledge. | | | |
| **Lectures Covered:** This assignment covers Lecture # **1-6**  **Deadline:** Your assignment must be uploaded/submitted within due date i.e. 26th November, 2020. | | | |