Air University Multan Campus
Department of Computer
Science CS 382 Visual
Programming
Instructor:
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Online voting Application

SEMESTER PROJECT

This C# program, titled "Online Voting Application," is a simple console-based application that allows users to register, log in, view a list of candidates, and cast their votes in an election. The project is designed to demonstrate the basic concepts of user authentication, candidate listing, and voting functionality.

THE SYSTEM SHOULD PROVIDE THE FOLLOWING CORE REQUIRMENTS

User Class:
- Represents users of the application.
- Contains properties for their usernames and passwords.
- Allows users to register by providing a username and password.

Candidate Class:
- Represents candidates participating in the election.
- Has a property for the candidate's name.

Election Class:
- Contains a list of candidates, allowing the application to manage and present the candidates to the users.

Main Method:
- The entry point of the application.
- Runs in a loop, presenting a menu based on whether a user is logged in or not.
- Users can perform the following actions:
- Register: New users can register by providing a username and password.
- Log in: Existing users can log in by providing their credentials.
- View Candidates: Displays a list of candidates participating in the election.
- Cast Vote: Allows logged-in users to vote for their preferred candidate.

Register Method:
- Allows new users to register by inputting a username and password.
- The registered user is added to the list of users.

Login Method:
- Verifies the user's credentials against the registered users.
- If the login is successful, the user is stored in the **current User** variable, allowing them to access other functionalities.

View Candidates Method:
- Lists the candidates participating in the election.
- Displays their names along with corresponding numbers to help users identify and select their preferred candidate.

Vote Method:
- Available only to logged-in users.
- Allows users to cast their votes.
- Users can select a candidate by entering the candidate's corresponding number.
- The program should ensure that each user can vote only once and update the candidate's vote count accordingly.