 **Department of Computer Software Engineering**

University of Engineering & Technology, Mardan

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| **Target CLO-1, CLO-2, CLO-3, CLO-5 PLO-3, PLO-5, PLO-11, PLO-10** |

**Lab Number 2**

**Software Construction & Development Lab**

**Name:** **Roll No:**

**Semester: 5th Total Marks: 12**

**Instructor: Engr. Muhammad Humayun Khan**

**Software Construction Fundamentals**

**Question: Implement the following scenario using any language or IDE**

Implement an application as **“UETM OS”.** After execution, there should be display of any logo of your own choice and the application should ask for username and password of the user. The username and password should be hard coded (one-time username & password for application). Upon successful login, the next console page should display the current year, date, month, hours, minutes and seconds at top of the console page. The console page should have two choices such as “To Run the Application” and “Exit”. The “Exit” option should quit the application. After selecting choice number one, the third console page should display the current year, date, month, hours, minutes and second at top of the page along with “Menu” and “Exit” option. The “Exit” option should quit the application. Upon selecting “Menu” Option, the console page should display “Main Menu” heading at top of the page along with current year, date, minutes, hours and seconds. The same console page should consist of:

* Phone Book
* Applications
* Games
* Music
* Exit
* Back

The Phone Book, Applications, Games and Music should have the option to return back to main menu or exit the application. The phonebook should have the functionality to store and display user information such as name, contact number, gender and address.

Upon selecting “Applications”, the console page should have an application that can turn on the bulb red while pressing the Up Arrow Key.

Upon selecting Games, the user should be able to play the “Archery Game” in which the dummy character will move up and down and the user has to shoot the character while pressing the Up Arrow Key. If user shoots the character, then display the score, quit the game and vice versa. The console page should have option to play the game again or go back to main menu.

The “Music” menu consists of two options such as “Singer 1” and “Singer 2”. Both options should play different kind of music.

The “Exit” and “Back” options should exit to the application and to return back to previous menu respectively.