Semester Project Documentation

Semester Project Title: Mess Management system

Student Details

	Student Name	Student Reg #	Student Degree
Student-1	Ijlal Ahmad	2022229	BCE
Student-2	Aqib Muhammad	2022103	BCE

Main Features

1: Manager: (1): See details of students.
(2): See details of servants.
(3): Remove student.
(4): Check Mess Bills of students.
2: Servant: (1): See self-information.
(2): Attendance and adding salary.
(3): Add meal.
3: Student: (1): See self-information.
(2): Add meal.
(3): Check bills.
(4): Mess In.
(5): Mess Out.

Types of Users

1: **Manager**
2: **Servant**
3: **Student**

Requirements Breakdown

(Write requirements of each feature by numbering. For example: Requirements of feature # 1. It will be mentioned as 1.1, 1.2. Similarly for feature # 2 it will be 2.1, 2.2, 2.3 ... etc.

1.1: student record: student reg no. ---- Variable

For loop ---- for comparing student reg no with given reg no.

Show record function of students

1.2:servant record: Variable mgn_ser ----variable entered by manager of servant

> **For loop ---- for comparing servant id with given id.**

> **Void show function of servant to show info**

1.3: remove student: student reg no. ---- Variable

> **For loop ---- for comparing student reg no with given reg no.**

1.4: mess bill: student reg no. ---- Variable.

> **For loop ---- for comparing student reg no with given reg no.**

> **Using mess bills function of student class with the help of friend function.**

2.1;servant self record: servant id(variable).

> **For loop for comparing this id with servant id.**

> **Show function of servant.**

2.2:salary and attendance : servant id(variable).

> **For loop for comparing this id with servant id.**

> **Add salary function to add up in salary.**

2.3:Add meal: student reg no. ---- Variable.

> **For loop ---- for comparing student reg no with given reg no.**

> **Add meal function of student.**

3.1:Show info: student reg no. ---- Variable.

> **For loop for comparing this id with servant id.**

> **Show function for showing students data.**

3.2: Add meal: student reg no. ---- Variable.

> **For loop ---- for comparing student reg no with given reg no.**

> **Add meal function of student.**

3.3: mess bill: student reg no. ---- Variable.

> **For loop ---- for comparing student reg no with given reg no.**

Using mess bills function of student.

3.4:Mess in: student reg no. ---- Variable.

    For loop ---- for comparing student reg no with given reg no

    Using mess in function to make mess in.

3.5:Mess out: student reg no. ---- Variable.

    For loop ---- for comparing student reg no with given reg no

    Using mess out function to make mess out.

Reprository Link

https://github.com/2022229/CS_project/blob/95d6e6e0ea712321b345650924774ea233c01e63/cs_project/cs_project.cpp

GUI Screens / Design / Wireframes
(Think what kind of GUI your application should have. Make a simple and easy one, you do not need to create complex design, copy, and paste screenshot of your design under this heading)

Features to Codding Matrix
(In the following table you will mention the following items for each feature, mention the items in each column for each feature of your application)

Sr no.	Feature Name	OOP Type Used	Functions Created	Variables / Obj Created	Line of Code Written
1.	Show info	single inheritance	Show info	Int type,string type,students,servants	Multiple line
2.	Add meal	Friend classes	Add meal	Int type,students	Multiple line
3.	Mess bill	Function within class	Mess bill	Int type,studenst	Multiple line

4.	Mess status	Function within class	Mess in,Mess out	String type	Multiple lines
5.	Remove student	Accessing one class from another		Manager,students	Multiple line