# ABSTRACT:

The purpose of this application is to automatize the mess functionality and provide both the student and the admin a smart platform to interact with each other. This system is designed in a favor of the mess management which helps them to save the records of the students about their mess and student details. It helps from the manual work from which it is very difficult to find the record of the students and the mess bills of the students and the information of about those ones who had left the hostel. This particular project deals with the problems on managing a hostel and avoids the problem which occur when carried manually identified of the drawbacks of the existing system with the system which is more user friendly. We can improve the efficiency of the system thus overcome the drawbacks of the existing system. Mess Management System is designed for better interaction between Management, Vendors and Customers. Mess Management System simplifies the requirements for easy process. This software will help the Mess management to work on the certain process i.e., to store data of the students and employees and use it for regular operations and future analysis.

To use this facility the user has to register and with the account credentials he/she can login the account and get connected to the network. Once connected the user can use the functionalities of the mess such as accessing his account information, applying for the leave and checking the menu. On the other hand the mess incharge and manager can log on and check the details and also get to know the number of students visiting the mess that day. This application aims for providing ease to both the users and the admin. Using the information provided by all the users the admin can take necessary decisions on what to be changed. It uses the internet to update all user queries and put it across to the admin.
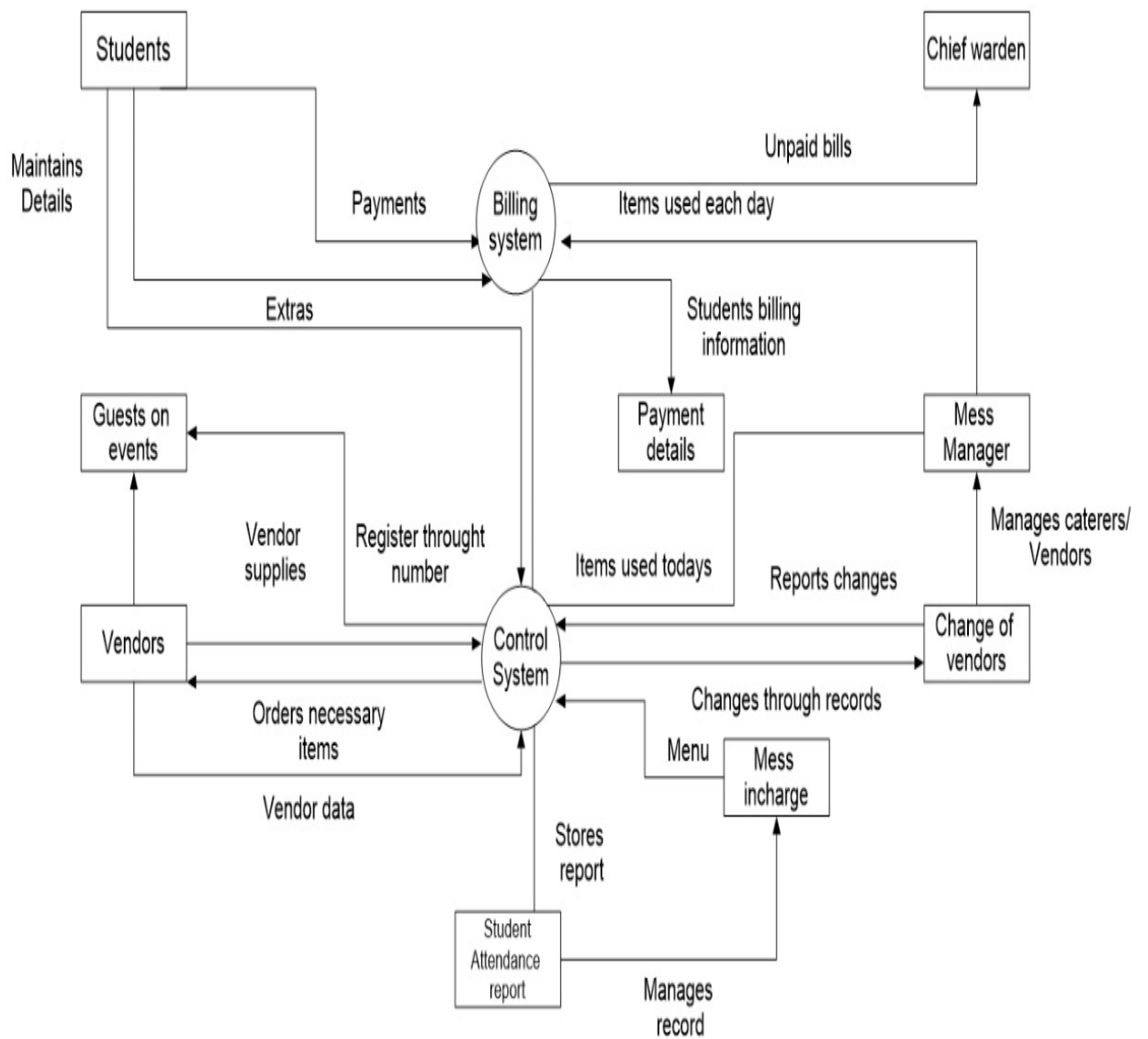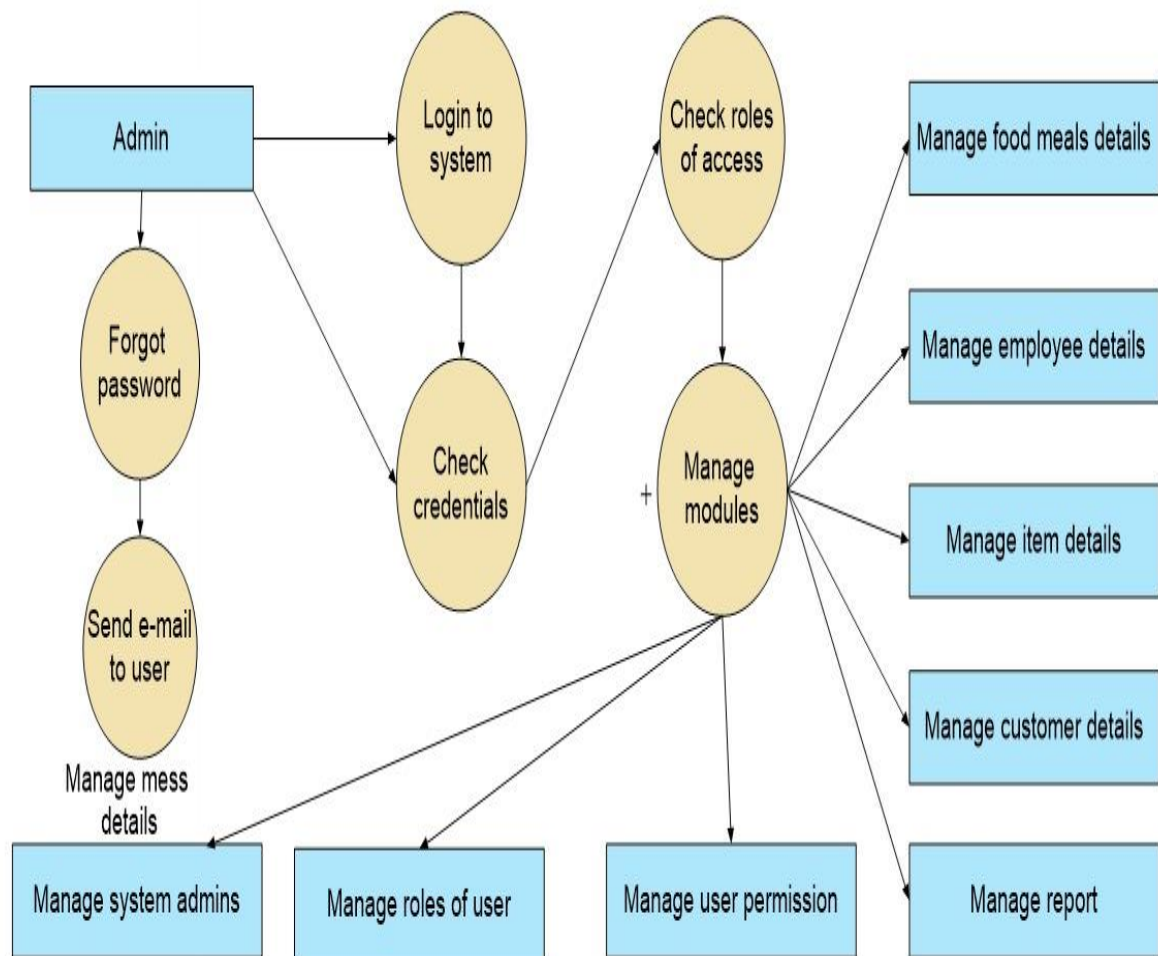
DFD diagram:

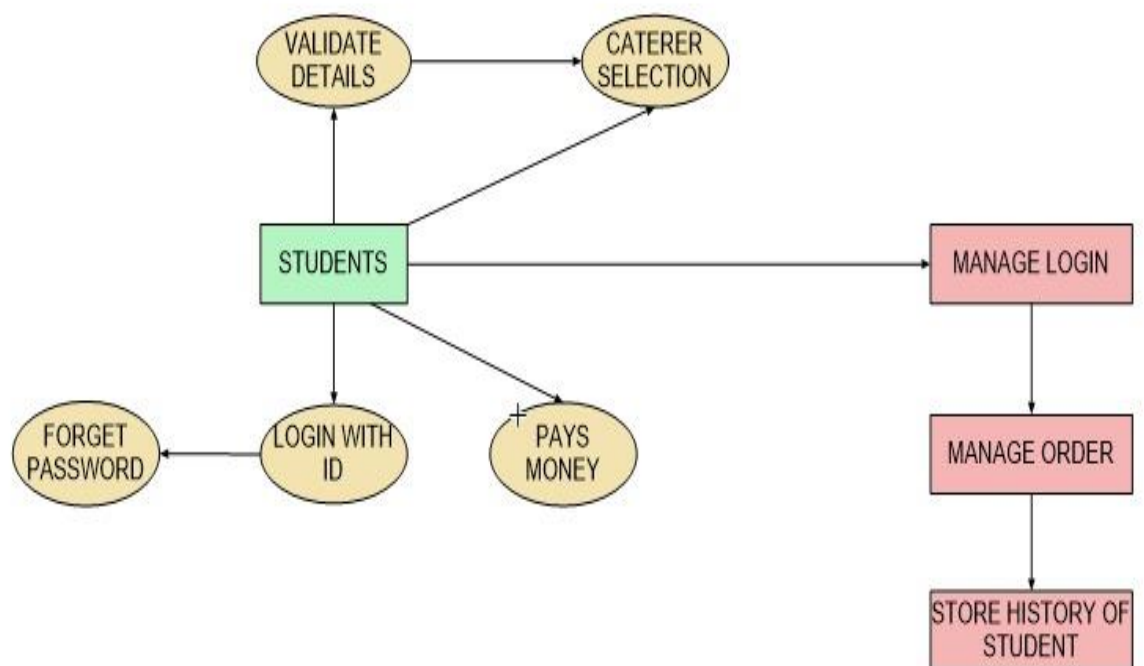## Context Level diagram:
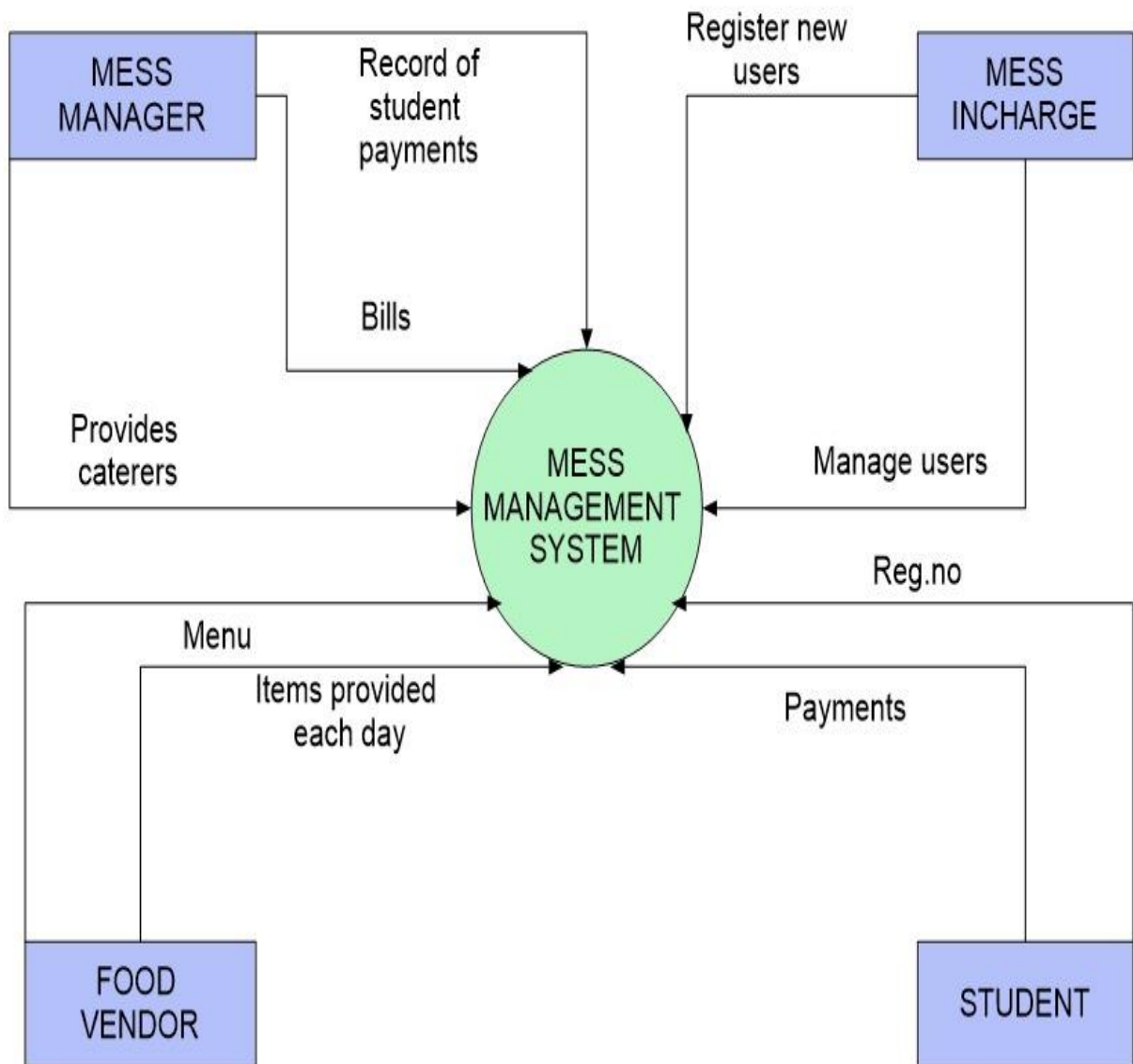
Zero level :
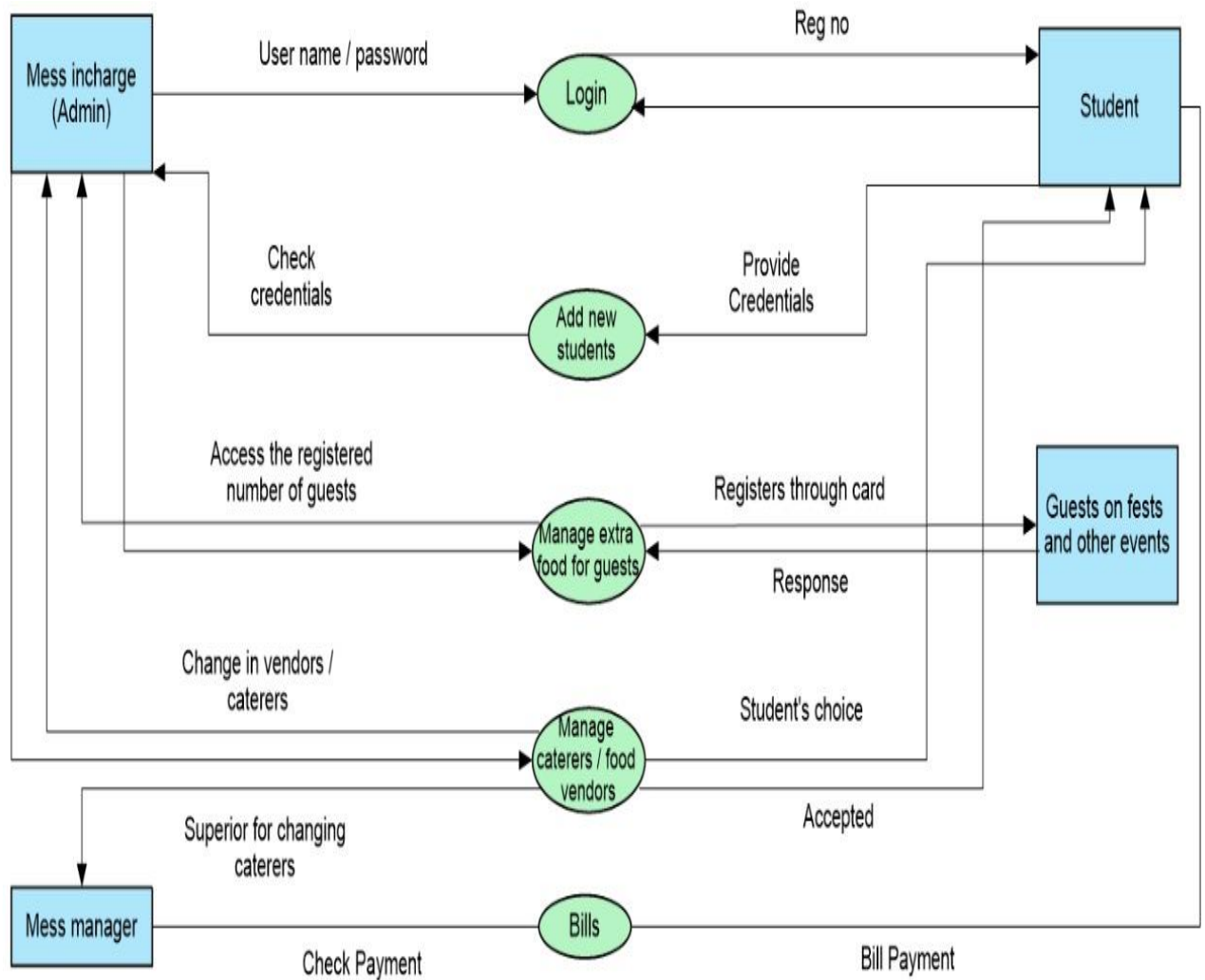
First Level DFD:

Second Level DFD:

For Admin Login:

For Student Login:

Architectural Pattern:

Components are objects, Data and associated operations, Connectors are messages and method invocations, Style invariants, Objects are responsible for their internal representation integrity, internal representation is hidden from other objects.

Advantages: An object hides its representation from its clients, it is possible to change the implementation without affecting those clients.

• "Infinite malleability" of object internals

• System decomposition into sets of interacting agents

• Additionally, the bundling of a set of accessing routines with the data.

Disadvantages: The most significant is that in order for one object to interact with another (via procedure call) it must know the identity of that other object.

• Further there can be side effect problems: if A uses object B and C also uses B, then C's effects on B look like unexpected side effects to A, and vice versa.

Components: The sub programs like bank managing system, Payroll system

Connectors: Menu Feedback, Payment request, Print receipt are called connectors.

Topology: First payment done should be validated then the receipt should be downloaded Semantic

Constraints: Only adjacent layers can have communication

LAYERED ARCHITECTURE:

Hierarchical system organization "Multi-level client-server". Each layer exposes an interface (API) to be used by above layers. Each layer acts as a Server: service provider to layers "above". Client:

service consumer of layer(s) "below". Connectors are protocols of layer interaction

Advantages:

First, they support design based on increasing levels of abstraction.

• Second, they support enhancement.

• Third, they support reuse.

Disadvantages:

• Not all systems are easily structured in a layered fashion

• Difficult to define system-independent layers

• Component: The sub programs like official website, login, showing the Candidate transaction status are called as the components.

• Connector: The action that we are going to take place in between the components was called as the connectors.

• Topology: Before Notification is sent it should check the payment status first

LAYERED ARCHITECTURAL STYLE:
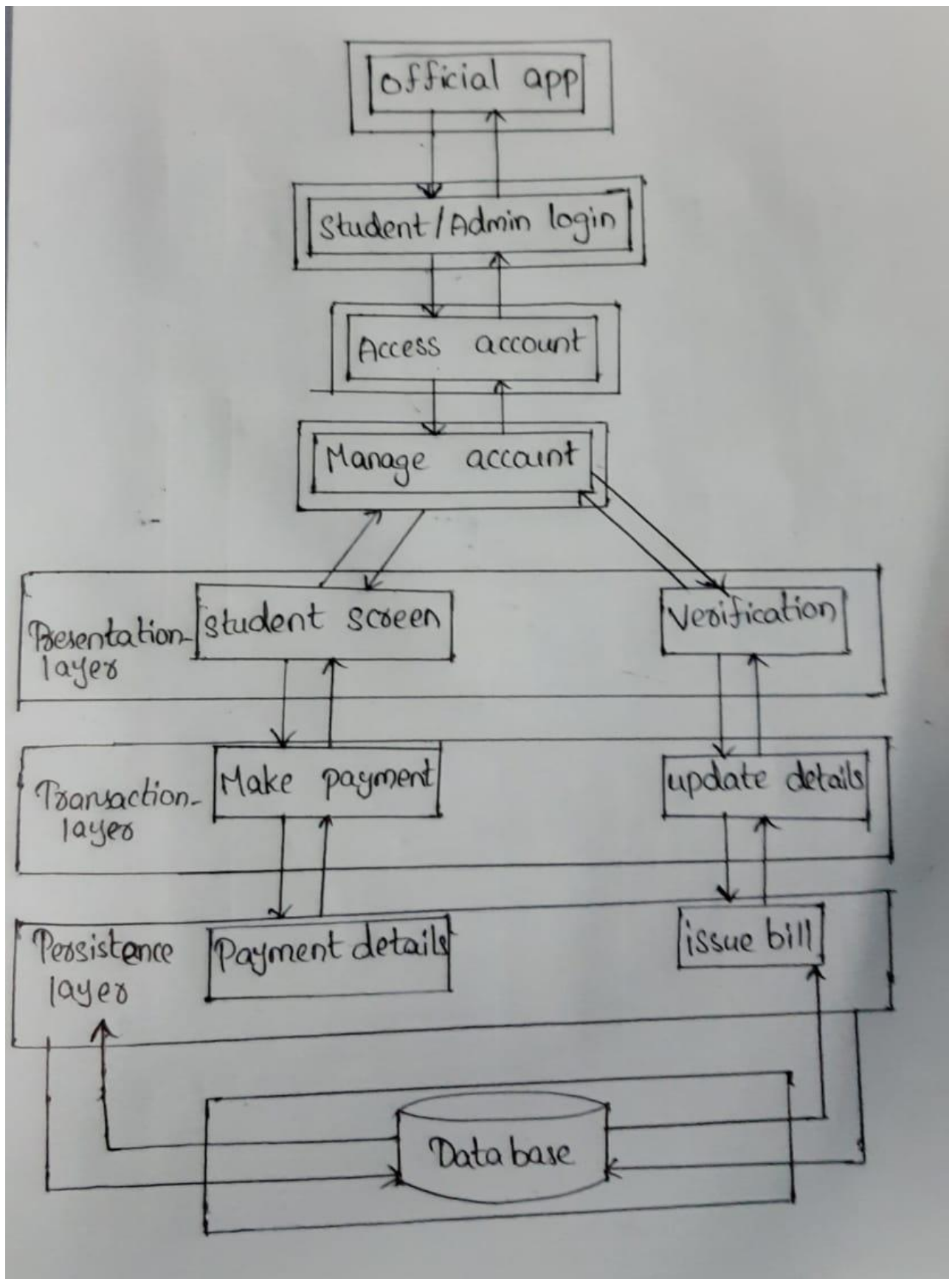
JUSTIFICATION:

The layered architecture pattern is a solid general purpose pattern, making it's a good starting point for most applications. In our system database is a main part as there is a lot of information to be stored. This layered architecture helps a lot in storing the data in a database. Also, the ease of development is high. Ease of development gets a relatively high score, mostly because this pattern is so well known and is not overly complex to implement. The testability is also high. Because components belong to specific layers in the architecture, other layers can be mocked or stubbed, making this pattern is relatively easy to test. A developer can mock a presentation component or screen to isolate testing within a business component, as well as mock the business layer to test certain screen functionality.

Methodology:

Input :

- ID
- Phone_Number
- User_name
- Password
- Login

Output :

- Student information
- Details of mess worker
- Menu list
- Display complaints of students
- Leave Applications
- View Attendance
- View Payment Dues

Total number of the activities :

- Management login
- Mess_Manager login
- Student login
- Mess_worker login

Management login contains the following features:

- Add students
- Show Student's preferences
- Add workers
- To show the leave application

- Work to do for the workers

- Show Mess Menu

- Edit Mess Menu

- Student complaints

- Groceries

Mess_manager login contains the following features :

- Display the Mess Menu

- Updating Student Mess Dues

- Add Workers

Student login contains the following features :

- To view Mess Menu

- To view Mess Dues

- To Complaint the Management - About the food review

- To choose preference

Workers Login portal contains the following features :

- Leave Applications

- Complaints about - Salary , shift timings

Converting Text to the Programme :

LOOP :

- Get Administration login

- Get Mess_Manager login

- Get Mess_Worker login

- Get students login

CASE 1 of the type :

- Update students profile

- Update Mess Menu

- Registration to the Workers

- Provide Menu details

CASE 2 of the type :

- Manage dues

- Post the complaints

- Ask the queries

END CASE :

- Print bill receipt

- print user profile

END LOOP

Problem Statement:

We can make a software where each mess worker can login using a username and password, where they can view their daily attendance, their salary and can also apply for leave. The manager can also login to this to approve leaves. Each student can maintain an account here and login with their username and password to get the information about their preference they kept and also see the monthly mess charge. They would also be able to find any mess fines and see if their mess duties. They could also complain against the mess in the online complaint register.

This system would reduce the strenuous work of the mess and also be a fair system where the students would pay for what they eat. It would be lot easier if everything would be present at a same place and open for everyone to have a look at into the mess working system and reduce the tiresome and time-consuming work of maintaining handwritten lists.

Discussions:

Mess Worker

● The mess workers should be able to login with their username and password.

●They can view their daily attendance, salary

●They can apply for leave.

Mess Manager

●The mess manager should be able to login with his/her username and password.

● An attendance list and leave applications of all the mess workers accessible only to the manager.

●The manager should be able to view the complaints in the complaint portal.

●The manager should be able to view the list of groceries, its price, quantity available and their status of delivery.

Students

● A menu list is available to all the students.

● A list of food from which student can choose their preference.

● Information about their preference, monthly mess charge, mess fines and mess duties.

●A complaint portal for the students

Operating Environment :

The software will be a web based system in which a server will store all the information of mess workers, manager, students and other data which will be customizable by the respective users. The user end will be a graphical interface.

Features:

1.It will be used for Hostel / Mess Meal management

2.Login System is used for mess manager, mess incharge and student.
3.Dashboard Gives you the whole query & information's of mess members meal systems.

4.Mess incharge can validate the details of students.

5.On fests mess manager can manage the food for guests and visitors.

6.Mess manager verifies the dues and bill payment of students.

7.One can change their mess/caterer according to their wish through dashboard.

8.leave application can be generated easily through the portal.

9.Meal menu can be viewed through portal on that day one hour before the meal.

10.Due to the user friendly interface of the application, the particular viewer of the program doesn't have to be educated exclusively and can use the application easily.

11.Admin can monitor and maintain of track of the entirety going on which gives him a better manage over the portal.

Result:

Login Pages:

Mess Manager Login :

Mess Workers Login :

Student Login :

Manager Workspace :

Manager Functionalities :

Add Worker Portal for Manager :

Add Worker

Name	
ID	
Username	
Password	
Phone no.	
Salary	
Back	Submit

Show Workers Portal for Manager :

File   Edit

Workers

wname	wid	wusername	wpassword	wphone	wsalary	attendance
pappu	1	pappu	pappupass	998	0	0
Raju	2	raj	rajpass	989	40	60
harsh	123	hp235	pass345	0	0	0

Back

Display of Leave Applications :

name	ndays	why

Leave Applications

Back

Add Student :

Add Student

Name

ID

Username

Password

Phone no.

Back   Submit

Display Students :

sname	sid	susername	spassword	sphone	messdue
			Students		
sravan	1	sar	sarpass	420	1222
vaj	2	vajp	vajpass	69	0

Back

Display of Mess Menu :

Mess Menu

day	breakfast	lunch	snacks	dinner
Monday	bread, omlette	fish	momo	dal
Tuesday	methi paratha	aalu	samosa	capsicum
Wednesday	puri	channa	pastry	chicken
Thursday				
Friday				
Saturday				
Sunday				

Back

Edit Mess Menu :

Edit Mess Menu

Day   [_____]   [Search]

Breakfast   [_____]

Lunch   [_____]

Snacks   [_____]

Dinner   [_____]

[Update]   [Delete]   [Back]   [Insert]

View Mess Dues of Students :

Student

ID   [_____]   [Search]

Name   [_____]

username   [_____]

Password   [_____]

Phone no.   [_____]

Mess dues   [_____]

[Update]   [Delete]   [Back]

Student Functionalities :

Welcome Page of Students :

Welcome ! ...
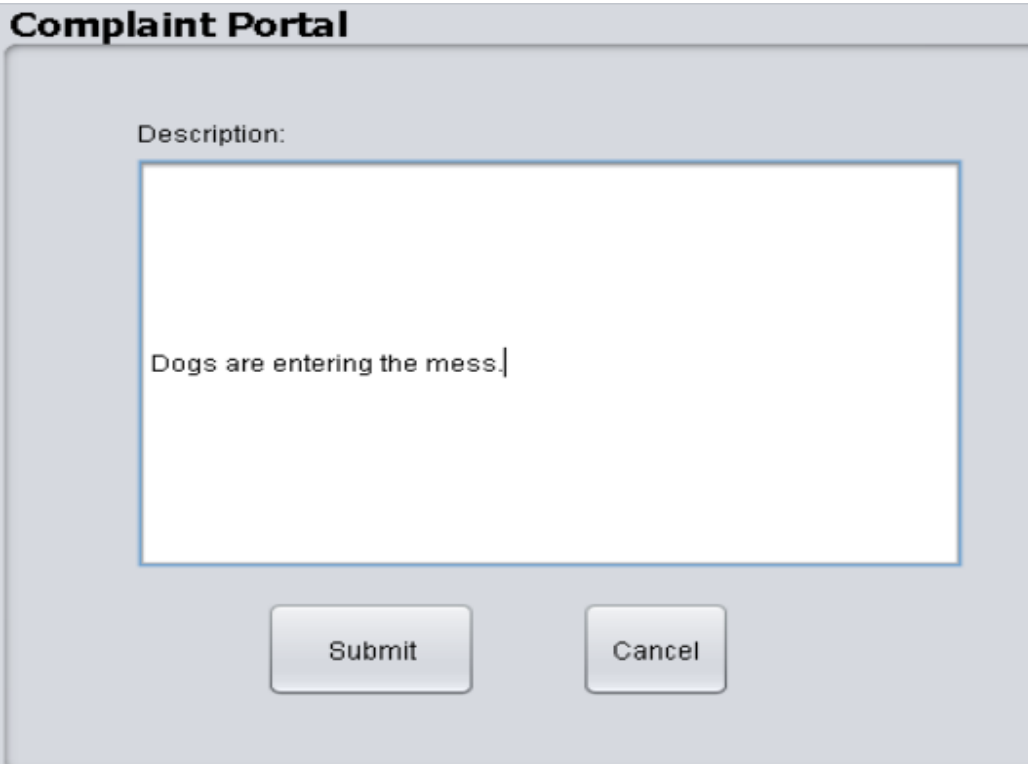
> View Mess Menu
>
> View Mess Dues
>
> Complaint
>
> Choose Preference

Complaint Portal of Students :

Complaint Portal

Description:

Dogs are entering the mess.

Submit   Cancel

Leave Application :

CONCLUSION & FUTURE WORK:

This platform can be enforced on both small and large-scale businesses. Due to the userfriendly interface of the application, the particular viewer of the program doesn't have to be educated exclusively and can use the application easily. Admin can monitor and maintain of track of the entirety going on in his business which gives him a better manage over his business. The fully automated system eliminates the need to manipulate details in terms of the amount of food items sold on a regular basis, items available in the store. This study addresses the large-scale institution canteen business issue and ultimately suggests a working solution to the same.

References:

- Canteen Food Ordering Android System

- "Automated Food Ordering System with Real-Time Customer

  Feedback" resourse

- Hostel accomodation system as reference.

- VIT mess management system.