

COMSATS UNIVERSITY ISLAMABAD ABBOTTABAD CAMPUS

PROJECT

SUBMITTED TO: Mr. MUKHTIAR ZAMIN

PREPARED BY: AHMED IRSHAD HUSSAIN

(SP23-BSE-045)

CLASS: BSE-5B

INCLUDES: PROJECT

COURSE: SOFTWARE DESIGN & ARCHITECTURE

FEE ACCOUNT SYSTEM

Project Description:

The Fee Account System is designed to streamline the management of student fee records in educational institutions. It ensures accuracy, transparency, and ease of tracking payments, dues, and

financial reports. The system automates manual processes, supports real-time updates, and improves financial record-keeping efficiency.

Team Members:

☐ Ahmed Irshad – Group Leader
☐ Sudais – Team Member
☐ Shayan – Team Member
☐ Khizar – Team Member
$\ \ \square Mashood-TeamMember$
☐ Kamran – Team Member

USE CASES:

Ahmed Irshad (Login, Registration client, validate info, generate ID, save data)

Shayan Mughal (Submit Invoice, delete invoice)

Sudais Murad (Process Payment)

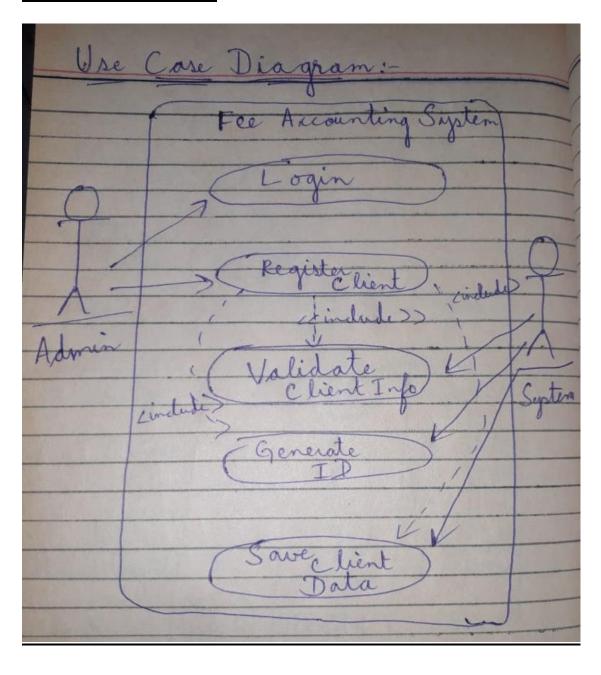
Hafiz Khizar (Generating Fee Receipt)

Mashood Azam (Send Payment Reminder)

Kamran Fiaz (View Payment History)

Note: This document only includes the work of Ahmed Irshad Hussain on his use cases!

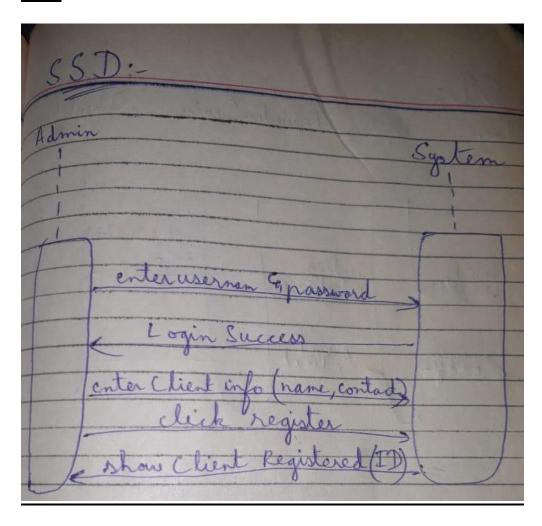
USE CASE DIAGRAM:



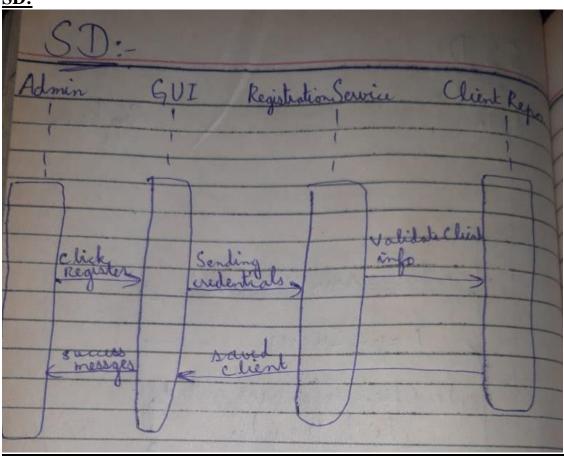
FULLY DRESSED USE CASE:

Use Case Name	Register Client
Primary Actor	Admin & System
Goal	To register a new client with name, contact,
	and course details
Preconditions	Admin must be logged in
Postconditions	New client is stored in memory and can be
	viewed later
Main Success Scenario	1. Admin opens registration form
	2. Admin fills name, contact, and course
	3. Admin clicks 'Register'
	4. System validates input
	5. System generates client ID
	6. System stores client
	7. System shows success message
Extensions	3a. Fields are empty → Show error and retry
	4a. Data invalid → Show error and retry
Frequency	Frequent
Priority	High
Business Rules	Client ID must be unique (e.g., timestamp-
	based)
Notes	Currently uses in-memory storage (no DB)

SSD:



<u>SD:</u>



CLASS DIAGRAM:

Class Diagram Main Imain (String ()) Registration Form () Thandle Register (help)	calls
Client Repa Client L'int calls Save Client void + get all clients L'int & Client	Registration Service - client Repository + Register Chient (name, contact, course) + get all clients (): List
stores	- Chied ID: String - name: String - Contact: String - course: String + get Client ID() I + get Contact + get Contact + get Contact + get Course