VIRTUAL CLASSROOM

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Abstract *Teaching over the Internet is the newest concept in pervasive education to everyone. The facility and comfort of learning online are huge. Students and those interested in learning over the computer and can choose their own timing that is convenient to them and the classes can be taken at their own place and from anywhere they want. The main idea of Virtual Classroom System is to dealing with the disadvantages of stuffy classroom interaction of student and faculty. The Virtual Classroom System replaces the manually physically present system with online Interactive Classroom. In Virtual Classroom System the students need not to attend the classes physically, the teaching sessions are carried out through online by any particular faculty. All that one need is a laptop or personal computers. The clients were provided with different Login ID and passwords at the time of registration that helps them to get connected to the server to the each client. Here the student has the freedom of choosing the faculty and class he wants to attend the lectures.*

*Key Words***: RMI, Networking, Oracle, SWINGS, JDK 1.8, Server, Database**.

1.INTRODUCTION

Today a number of website exist in world wide web online database which having very excellent study materials and information and they are very useful for any student related to their field study Virtual Class Room designed to help faculty and students create and teach courses online or use online technology to help run classes. In educational software circles, it's also often called an e-learning system, a learning management system, or we can say a virtual learning environment.

In the Virtual Classroom System has the following features and functionality:

1. Upload and Download of various assignments, college notices, student's notices, journals, videos.

2. There can be blogs, pdf, forums etc. to discuss various queries and to put up suggestions posted both by students and teachers.

3. Users must have valid User ID and password to login thus creating their individual profiles.

4. Shared documents and media library that can help in active learning of a student.

5. Only admin can register the new faculty profile.

6. The student can ask the doubt to the teacher and it won't be reflected in other students system.

The Virtual Classroom has some main modules they are:

1.1 Teacher Module

The teacher modules has functionalities like passing text files to students, communicating and interacting with them, accepting or denying their requests, clarifying their doubts. Faculty can't register self, they can only register when the admin will add the faculty. Teacher have also chat module by which they can communicate with the student and solve doubt too.

1.2 Student Module

The Virtual Classroom System provides virtual classroom environment that does not require any room physically. The student has to attend the online sessions. He can attend them from any part of the world, he can even view the previous sessions of class for his convenience. All these sessions will be recorded and stored in the databases, the students can make best use of these recorded sessions too. They also have a facility to store the notes given by the faculty.

1.3 Admin Module

In this module admin can change and modify the system according to the requirement of the user. Only admin can add and delete the faculty in to the system, but the student can register by self. If the faculty want to changes in the password or subject then they have to inform to the admin so that admin can reset the password and the other credential. Admin has the permission to handle all the type of the records password, email address, he can see all the record stored in databases.

1.4 Chat Module

In this module faculty and student can communicate by messaging in the group, student can ask the doubts in the group and teacher will give the solution. Chat only be possible in the group, message can't be send as private between the student and faculty.

2. SYSTEM ANALYSIS:

2.1 Existing System

Here the current system is a manual classroom system. We need to allocate a classroom physically to conduct classroom sessions. Both faculty and student need to attend the classes physically and must present in the classroom. We also need to provide some interactive infrastructure for the classroom. Faculty needs to take the daily attendance manually (should be present in the classroom) and store it inside a attendance register. If a student wants asks some doubt or having any problem and explain doubt then entire class will be disturbed. When the faculty is giving some notes the candidate has to store the notes in a notebook manually. Since doing all these manually and must physically present in classroom is uninteresting process, we need to provide online learning channel in the form of interactive classroom.

Disadvantages of this system:

- Both student and faculty needs to physically present in the classroom.
- Faculty needs to take the daily attendance manually and store it in a register.
- Student needs to take down the notes manually.
- Student can't ask the doubts without disturbing others.

2.2 Proposed System

The Interactive Class Room system is to replace the existing traditional manual system with a software solution. The Interactive Class Room is developed with the aim of providing the convenience of learning online using RMI (Remote Method Invocation), is one of the main distributed technologies. This system provides the easy way to both the parties (Faculty and the candidate who wants to attend the class) in learning just by providing or creating Virtual Classroom System. By using this application both faculty and the student can attend the session very easily and communicate with each other very efficiently and can repeatedly ask the doubts.

Advantages of this System:

- Providing Virtual class room environment which doesn't require any room Physically.
- Provides effective communication interface between the faculty and the student.
- The student can ask the doubt from the faculty and it will not be seen in other student's system.
- Student has the facility to download all the notes and lectures issued by the faculty.
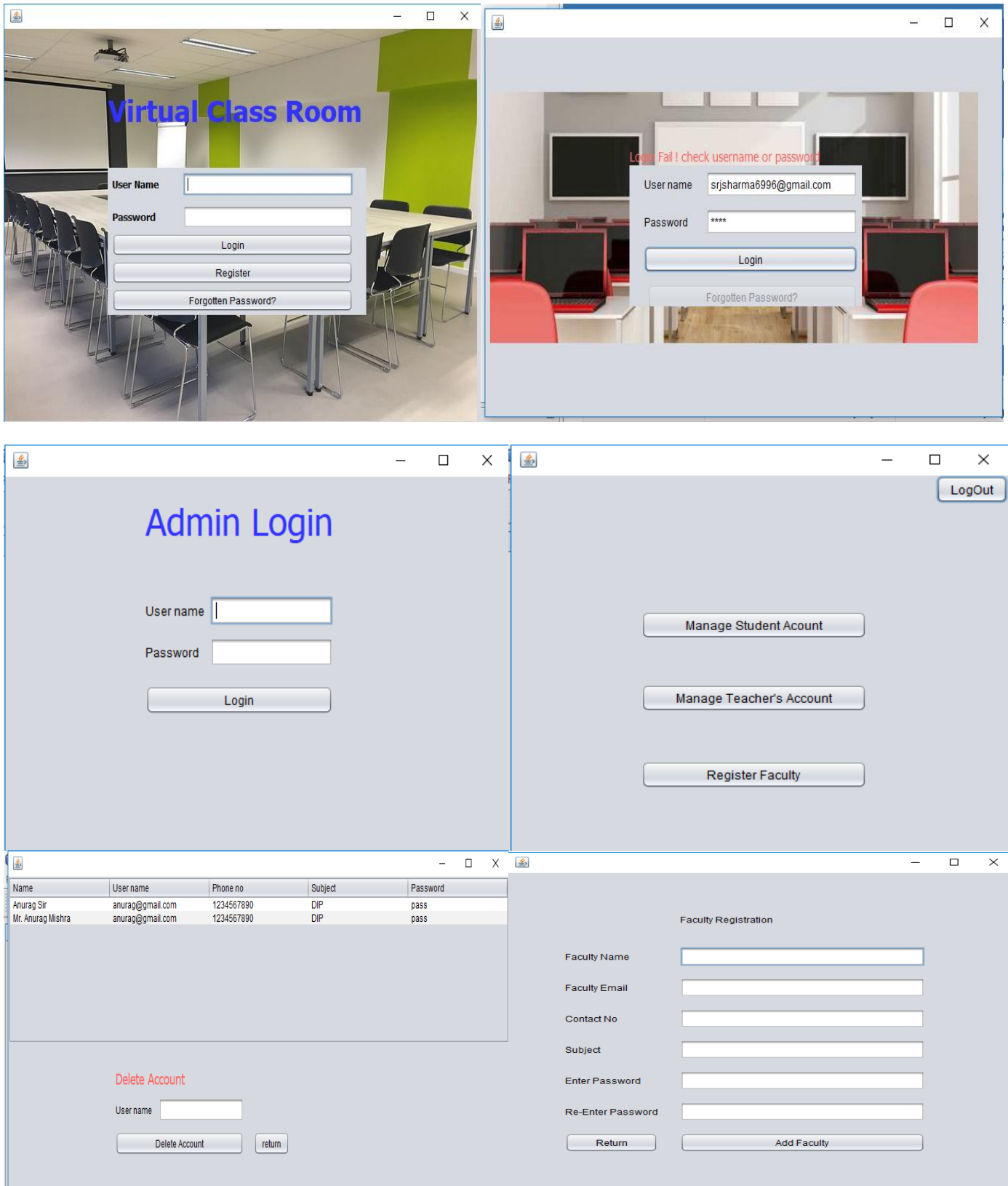
3. REQUIREMENT SPECIFICATION
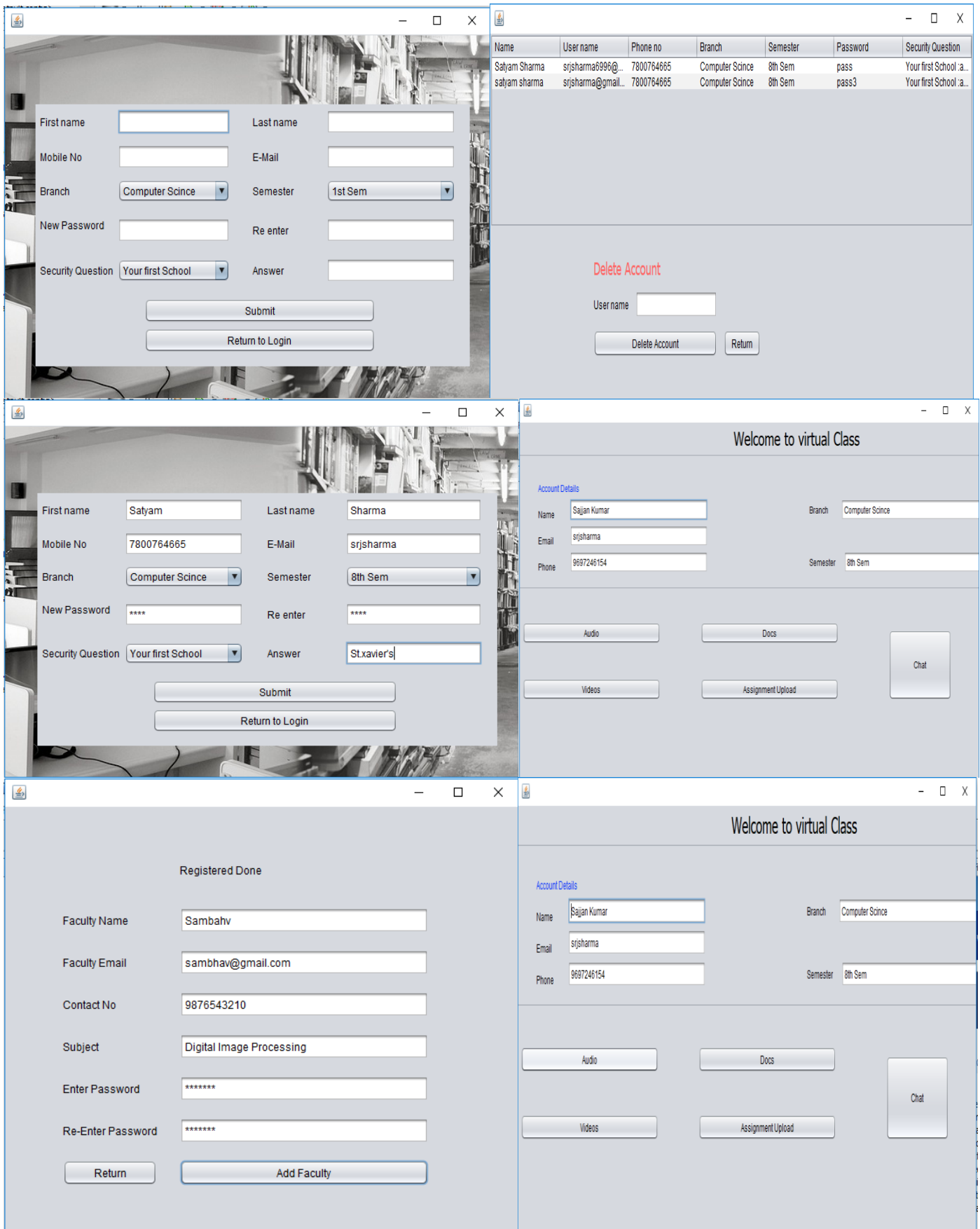
3.1 Software Requirements:

- JDK1.4.1_01
- SWINGS
- RMI
- NETWORKING
- ORACLE

3.2 Hardware requirements:

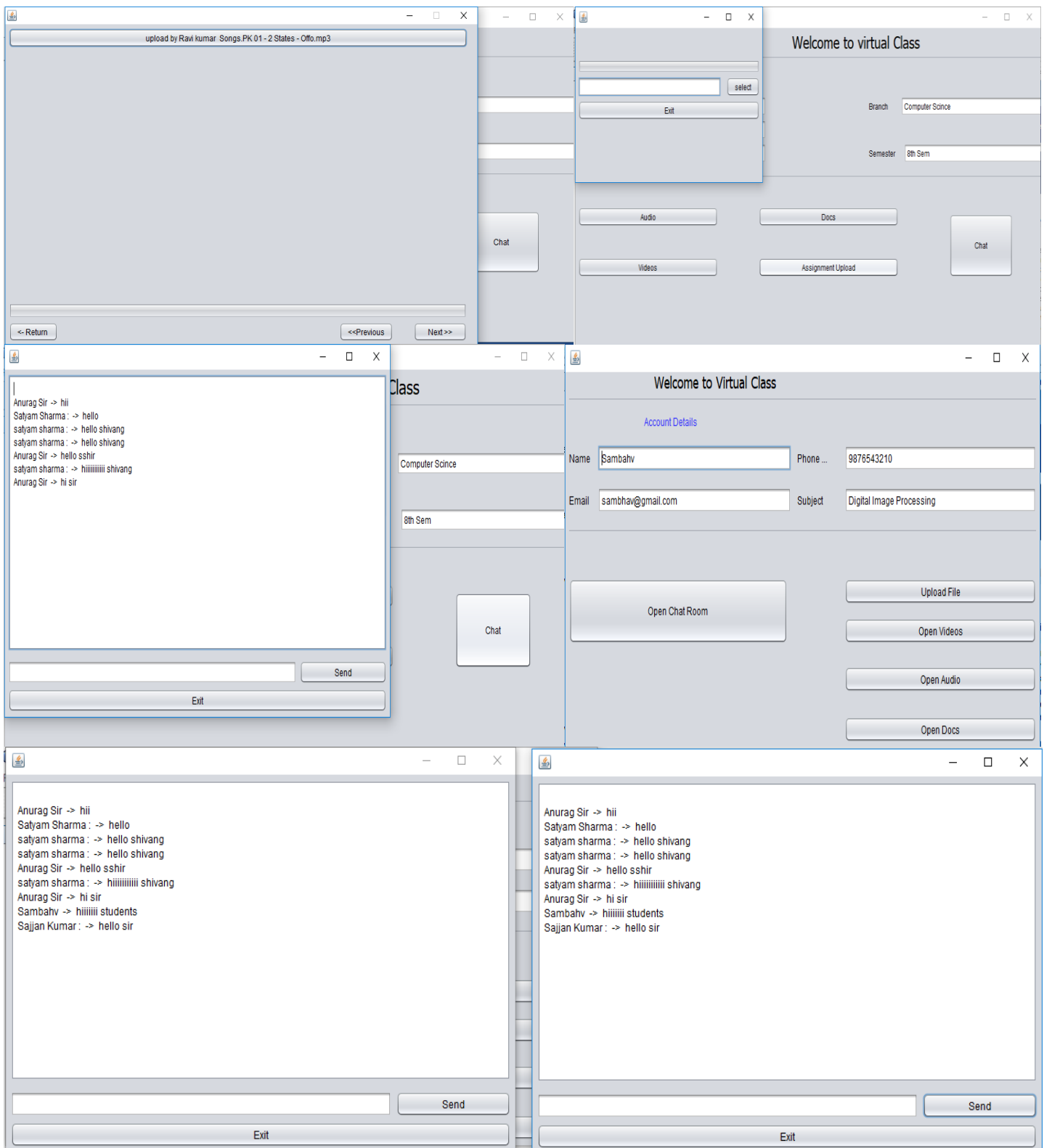- 256 MB RAM
- 40 GB Hard disk
- Pentium-IV

4. SOME SNAPSHOTS OF THIS PROJECT:

upload by Ravi kumar Songs.PK 01 - 2 States - Offo.mp3

<- Return   <<Previous   Next >>

Welcome to virtual Class

Branch   Computer Scince

Semester   8th Sem

Audio   Docs

Videos   Assignment Upload

Chat

Chat

Anurag Sir -> hii
Satyam Sharma : -> hello
satyam sharma : -> hello shivang
satyam sharma : -> hello shivang
Anurag Sir -> hello sshir
satyam sharma : -> hiiiiiiiii shivang
Anurag Sir -> hi sir

Send

Exit

Class

Computer Scince

8th Sem

Chat

Welcome to Virtual Class

Account Details

Name   Sambahv   Phone ...   9876543210

Email   sambhav@gmail.com   Subject   Digital Image Processing

Open Chat Room

Upload File

Open Videos

Open Audio

Open Docs

Anurag Sir -> hii
Satyam Sharma : -> hello
satyam sharma : -> hello shivang
satyam sharma : -> hello shivang
Anurag Sir -> hello sshir
satyam sharma : -> hiiiiiiiii shivang
Anurag Sir -> hi sir
Sambahv -> hiiiiiii students
Sajjan Kumar : -> hello sir

Send

Exit

Anurag Sir -> hii
Satyam Sharma : -> hello
satyam sharma : -> hello shivang
satyam sharma : -> hello shivang
Anurag Sir -> hello sshir
satyam sharma : -> hiiiiiiiii shivang
Anurag Sir -> hi sir
Sambahv -> hiiiiiii students
Sajjan Kumar : -> hello sir

Send

Exit

select

Exit

4. CONCLUSIONS

The purpose of this project is to provide the education mode in interactive way, so that every student can take the interest in the clearing doubts and learning as well as teachers or faculty. This project can also help to collect and downloads the notes easily form anywhere.

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