

SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA



Department – Information Technology

Session – Jan-july 2021

Group No. 8

Project Report

on

Study Point Learning Application

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Shri Vaishnav Vidyapeeth Vishwavidyalaya

DEPARTMENT OF INFORMATION TECHNOLOGY

DECLARATION

We here declare that work which is being presented in the project entitled "**Study Point Learning Application**" in partial fulfillment of degree of **Bachelor of Technology in Information Technology** is an authentic record of our work carried out under the supervision and guidance of **Ms. Rani Singh** Asst. Professor of Information Technology. The matter embodied in this project has not been submitted for the award of any other degree.

Date:

Student 1 Signature

Student 2 Signature



Shri Vaishnav Vidyapeeth Vishwavidyalaya

SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

PROJECT APPROVAL SHEET

Following team has done the appropriate work related to the “**Study Point Learning Application**” in partial fulfillment for the award of **Bachelor of Technology in Information Technology** of “SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY” and is being submitted to SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE.

Team:

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Date : 09-06-21



Shri Vaishnav Vidyapeeth Vishwavidyalaya

SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

CERTIFICATE

5. This is to certify that **Mr.Adarsh Gyan Rawat, Mr. Aditya Maheshwari Mr. Chetan Mehta and Mr.Rahul Nair** working in a team have satisfactorily completed the project entitled "**Study Point Learning Application**" under the guidance of **Ms. Rani Singh** in the partial fulfillment of the degree of **Bachelor of Technology in Information Technology** awarded by SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY affiliated to SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE during the academic year **July 2020-Dec 2020**.

(Name of Guide 1)

(Name of Guide 2)

Project Guide

Prof. Rani Singh
Project Coordinator

Dr. Jigyasu Dubey
Head, Department of Information Technology

ACKNOWLEDGEMENT

We are grateful to a number of persons for their advice and support during the time of complete our project work. First and foremost our thanks goes to **Dr. Jigyasu Dubey** Head of the Department of Information Technology and **Ms. Rani Singh** the mentor of our project for providing us valuable support and necessary help whenever required and also helping us explore new technologies by the help of their technical expertise. His direction, supervision and constructive criticism were indeed the source of inspiration for us.

We would also like to express our sincere gratitude towards our Director **Dr. Anand Rajavat** for providing us valuable support.

We are really indebted to **Prof. Rani Singh**, project coordinator for helping us in each aspect of our academics activities. We also owe our sincere thanks to all the **faculty members** of Information Technology Department who have always been helpful.

We forward our sincere thanks to all **teaching and non-teaching staff** of Information Technology department, SVVV Indore for providing necessary information and there kind co-operation.

We would like to thanks our parents and family members, our classmates and our friends for their motivation and there valuable suggestion during the project. Last, but not the least, we thank all those people, who have helped us directly or indirectly in accomplishing this work. It has been a privilege to study at SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE

Abstract

Sign language is the preferred method of communication among the deaf and the hearing impaired people all over the world. Recognition of sign language can have varying degree of success when used in a computer vision or any other methods. Sign language is said to have a structured set of gestures in which each gesture is having a specific meaning.

Our project is an effort towards studying the challenges in classification of characters in Indian Sign Language(ISL). A lot of research has been done in the corresponding field of American Sign Language(ASL), but unfortunately the same cannot be said for ISL. Lack of standard datasets, occluded features and variation in the language with locality have been the major barriers which has led to little research being done in ISL.

Sign language is used by deaf and hard hearing people to exchange information between their own community and with other people. Computer recognition of sign language deals from sign gesture acquisition and continues till text/speech generation. Sign gestures can be classified as static and dynamic. However static gesture recognition is simpler than dynamic gesture recognition but both recognition systems are important to the human community.

The sign language recognition steps are described in this survey. The data acquisition, data preprocessing and transformation, feature extraction, classification and results obtained are examined. Some future directions for research in this area also suggested

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Minor Project Report

Study Point Application

Chapter-1

1.1 INTRODUCTION

Nowadays, mobile devices have become a way of life for students especially in higher education. Computers are replaced by compact smart phones that can fit into pocket and can be carried anywhere.

The rapid progress in mobile technology has created a new area which is known as Mobile Learning. Mobile Learning is the next level of learning and teaching process. Also on the other hand the books which may be the reference book and the other publications are costly and difficult to prepare for examination as well as teaching point of view.

Also students who can't afford the reference books can also be benefited by this application. With development of this Android Applications the student would prefer use of mobile devices with educational tool.

Also by developing this app the students and professors would get connected to each other across the globe and can be helpful to each other in context for development related work . They may have suggestions on different ideas and projects from experts and make the best out of there learning and skills sets.

Smart phones are based on operating systems like Android. To design proposed project, smart phones with Android operating system is chosen because penetration rate of Android OS is 70 percent. It is open source and freeware. The application is compatible with all Android versions ranging from Android 6.0 to Android 10.0.

1.2 PROBLEM STATEMENT

As more and more students are using internet to find resources for their study material it is been quite difficult to find good resources and also it is time consuming , because enormous amount and variety of resources available on the internet.

And the doubts of students are not clearing properly ,also they are getting difficulty to find proper content so that they left with incomplete knowledge about the topic. Due to the vast syllabus of the subjects being taught in the institution ,Student are unable to find the important topics of their subjects.

1.3 NEED FOR THE PROPER SYSTEM

A proper system is very important for students to access the resources instead of Searching for hours on internet for study resources and also for finding previous year papers they have to contact for their friends then also sometime they are not getting papers, to solve this problem a proper platform where student can find all their necessary resources within a single platform.

A proper system is where the students can post the doubts and get answers from verified sources, so they don't have to search on various other sites , all their study related doubts will be solved on a common platform. And the student can easily prepare for Examination by giving previous years papers.

1.4 OBJECTIVE

The Objective of our work is to design a robust and efficient system to solve the problem of many students/freshers face to find the right study material (Proper notes, Previous year papers ,Book

1.5 MODULES OF THE SYSTEM

- **Sign up Module** : details of the user and verification using student information at the back-end.
- **Login Module** : user verification using registered phone number.
- **Dash-Board Module** : all the user data and recommend data will be displayed on the Dash-Board Screen.
- **Communication Module** : the module will provide one-to-one communication for user.
- **Forum Module** : the module will provide group of various technical topics where user can post their doubts and get answer.
- **Resources Module** : this module resources available on the application in hierarchical order(Institute->Branch->Semesters->Subjects->(book , notes , paper))

1.6 Scope

Online learning is a wide platform to help students get more educated. With the E-Learning, the concept of learning has differed from the old times. This e-learning platform is widely increased as the each individual contains a smart phone with internet through which, each can access the resources on the websites in minutes.

Chapter-2

2.1 EXISTING SYSTEM

In the current scenario student had to face various problem like:

- Students have to search books , PDF on various platform , sometimes it become very hard to find good resource.
- Students have to visit various sites (stack-overflow , Quora , geeksforgeeks etc.) to solve their doubts.(some time its very time consuming)
- It is very hard to find good handwritten notes on the internet .
- Many websites or app don't have any doubt session or any type of assessment.

2.2 PROPOSED SYSTEM

- The purpose of this project is to create an application for students to provide proper platform for study and assess themselves .
- Students using this application will be able to use an easy to use interface in order to solve doubts, solving papers and downloading notes of different users.
- Verified notes should be provided and User authentication is necessary for security purpose , one time password will be sent on registered mobile number to login .
- One of the main purpose of this project is that student can easily get verified notes , previous year papers and books of different author on one single app.
- So that student can save their time on searching notes and also they can save their money in purchasing books.
- In this application we are providing one communication mode in that student can communicate with other to clear their doubts.
- So that on one platform student can learn , assess themselves and easily clear their doubts.

2.3 FEASIBILITY STUDY

2.3.1 TECHNICAL FEASIBILITY

- Minimum 8GB ram or above.
- Intel i5 processor or above is required.
- Android Studio for Application Development.
- Firebase used as a database.
- GitHub is used for managing project repositories.

2.3.2 OPERATIONAL FEASIBILITY

The organization ready for the project and its impact and what are the business, cultural, legal and other hurdles that might stop it from working in practice.

- The Application is fully GUI based that is very user friendly and all inputs to be taken all self-explanatory.
- The application resource data will save the data on the local storage in the user systems.
- The User profile data will be stored on cloud database.

2.3.3 ECONOMICALLY FEASIBILITY

Economic analysis is most frequent used for evaluation of the effectiveness of the system. More commonly known as cost /benefit analysis the procedure is to determine the benefit and saving that are expected from a system and compare them with costs , decision is made to design and implement the system.

This part of feasibility study gives the top management the economic justification for the new system.

Chapter 3

3.2 DATA REQUIREMENTS

- Branch Information: various subjects in the branch
- Semester Information: various subjects been taught in the semester
- Subject Information:
 - Various books , reference books used by the faculties
 - Notes used by the faculties
 - Previous Year Papers

3.3 FUNCTIONAL REQUIREMENTS

3.3.1 For Users

R.1 Create Account

- R.1.1 Login (Existing User)
- R.1.2 Sign-up (New User and also verify by Admin)

R.2 Home Page

- R.2.1 Pin Document
- R.2.2 Pin Directory (Related Department)
- R.2.3 Blocks
 - R.2.3.1 Trending Paper (Related Department)
 - R.2.3.2 Trending Competitive Exam (Related Department)
- R.2.4 Add/Delete Documents (Links, Books, Hand Written
Documents,
Paper)

R.2.5 Drawer

- R.2.5.1 Profile
 - R.2.5.1.1 Complete Profile
 - R.2.5.1.2 Edit Profile
 - R.2.5.1.3 View Profile

R.2.5.2 Setting (Settings Related to Application)

R.2.5.3 About

R.2.5.4 Saved Document

R.2.5.5 Your Highlights

R.2.6 Event Announcement

R.3 Search Section (Search documents, Students, paper, Institute, Processor, Groups, Relevant Questions etc)

Department,

R.3.1 Apply Filter (To Concentrate Related Search)

R.3.2 Saved Document (On click on Download)

R.3.3 View Documents (Without Download or Save)

R.3.4 Rate That Document

R.3.5 Block That Document

R.3.6 Share to Any One

R.3.7 Delete Older Document (means Delete that document
old and not usable)

because that is

R.4 Forum Section (Doubt Section)

R.4.1 Filter (To Categorize)

R.4.2 Ask Question

R.4.3 Say Answer

R.4.4 Rate Answer

R.4.5 Share Doubt To Any-One

R.4.6 Create Group Related Doubt (Like M1,M2,M3)

R.4.7 Join Group

R.4.8 Communicate Directly (One to One)

R.5 Person Section

R.5.1 View Profile (Any One Use That Application)

R.5.2 Follow Person (To Follow Their High Lights and

Instruction)

R.5.3 Report

R.5.4 Ask To Add Your Group

3.3.2 Admin (Creator)

R.1 Manage Users (Reported Users)

R.2 Manage Documents (and any useless documents and Reported
Documents)

R.3 Change Rules

R.4 Manage Category

R.5 update Structure

R.6 Add/Delete Admin

R.7 Approve User verification

3.4 NON-FUNCTIONAL REQUIREMENTS

- Gathering data for the application. (books, notes, paper in digital form)
- User-Friendly GUI for Login Sign up.
- Dashboard for user related Resources.
- Chatting section for student-to-student communication.
- Forum/Discussion section for student doubts.

3.5 SYSTEM SPECIFICATION

Technologies used:

- Android Studio
- Firebase:
 - Real-time database
 - Cloud storage
 - Authentication
- XML
- Java
- GitHub

3.5.1 HARDWARE SPECIFICATION

- Snapdragon 407 Soc and above
- MediaTek's P60 and P70 Soc and above
- 1 GB RAM and above
- 120 MB Storage and above

3.5.2 SOFTWARE SPECIFICATION

- Android Studio 6.0
- Firebase
- GitHub
- Emulator
- Operating System: Windows/Linux

3.6 GOALS OF IMPLEMENTATIONS

- User will be able to provide and use notes provided by other student and teacher.
- User does not depend on other students for study resources.
- User will be able share their doubt in the doubt section and get response by verified user.
- User resources will be stored in a structured format, which makes it easier for them to access any resource at any time.
- User will not have to download resources on their smartphone, they will be able to access all the resources available on the application directly from the cloud.

Chapter 4-DESIGN

4.1 Function Oriented Design

4.1.1 DFD Level 0 Design

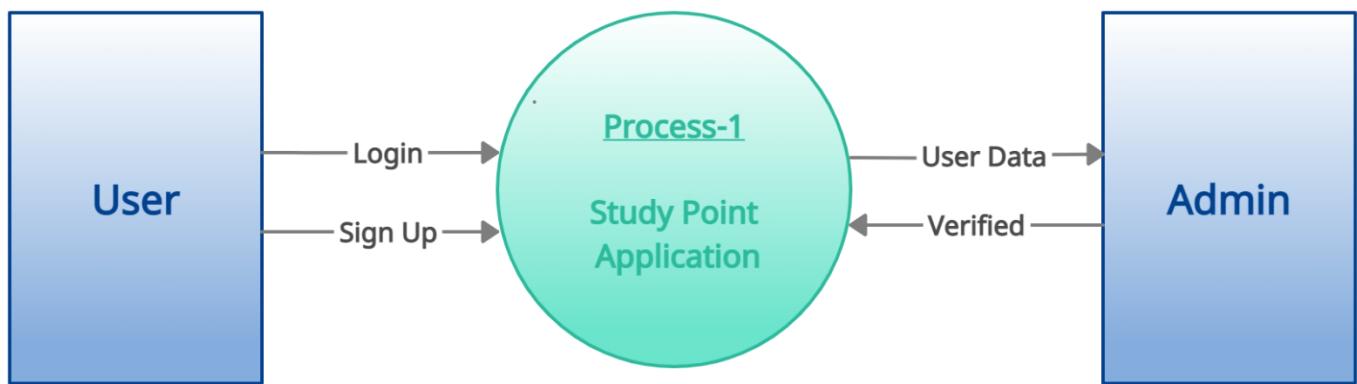


Fig 4.1.1: - DFD Level 0

4.1.2 DFD Level 1 Design

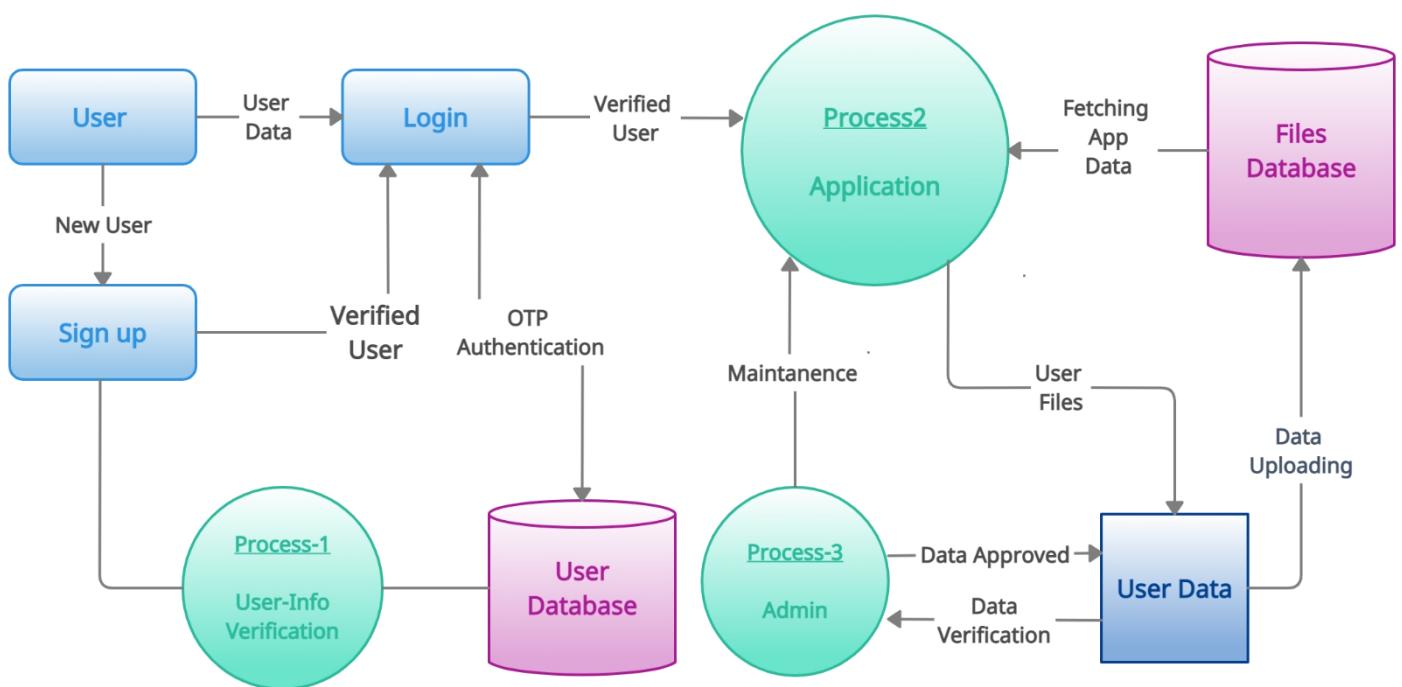


Fig 4.1.2: - DFD Level 1

4.2 Use Case Diagram

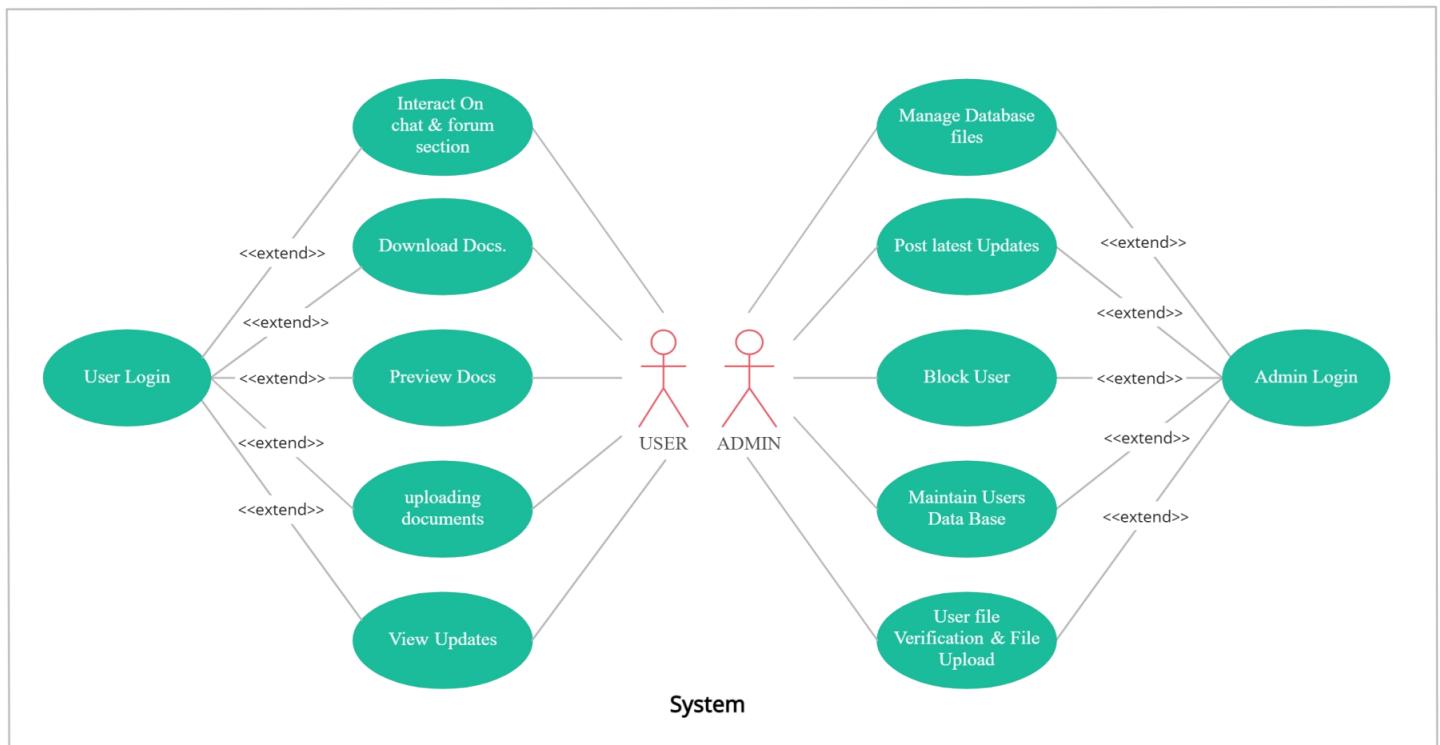


Fig 4.2.1: - Use Case Diagram

4.3 Activity Diagram

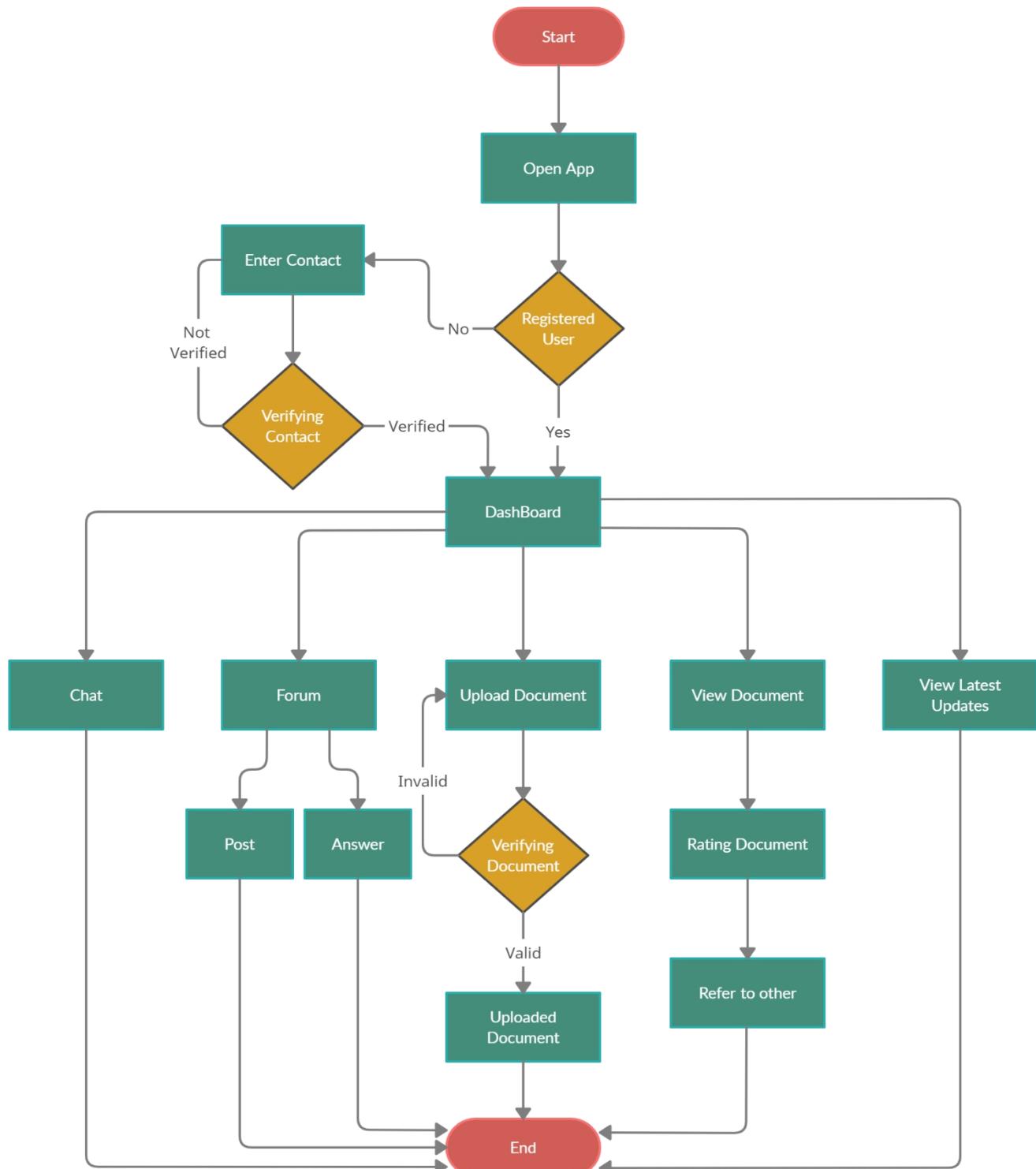


Fig 4.3.1: -User Activity Diagram

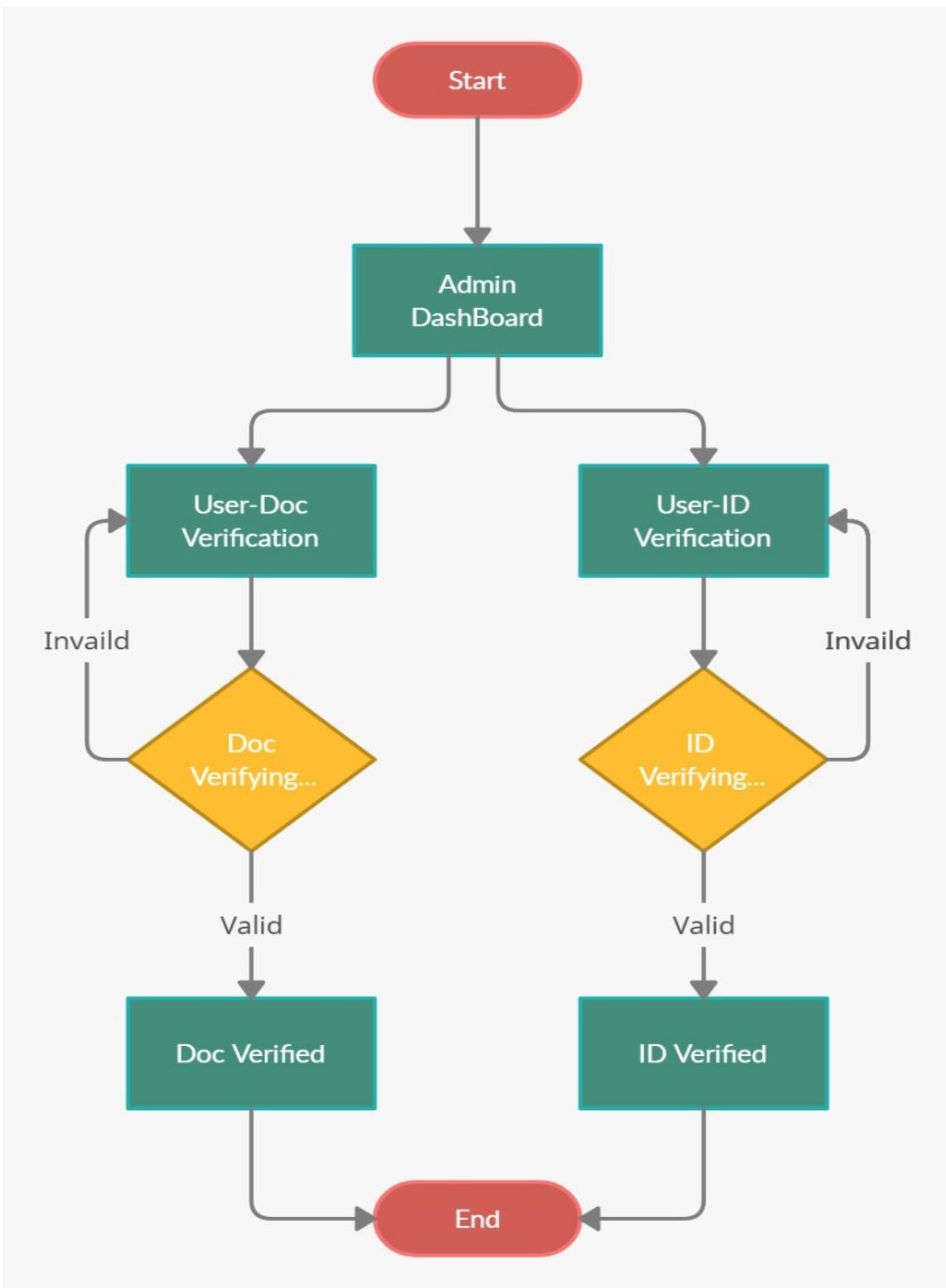


Fig 4.3.2: - Admin Activity Diagram.

4.4 Sequence Diagram.

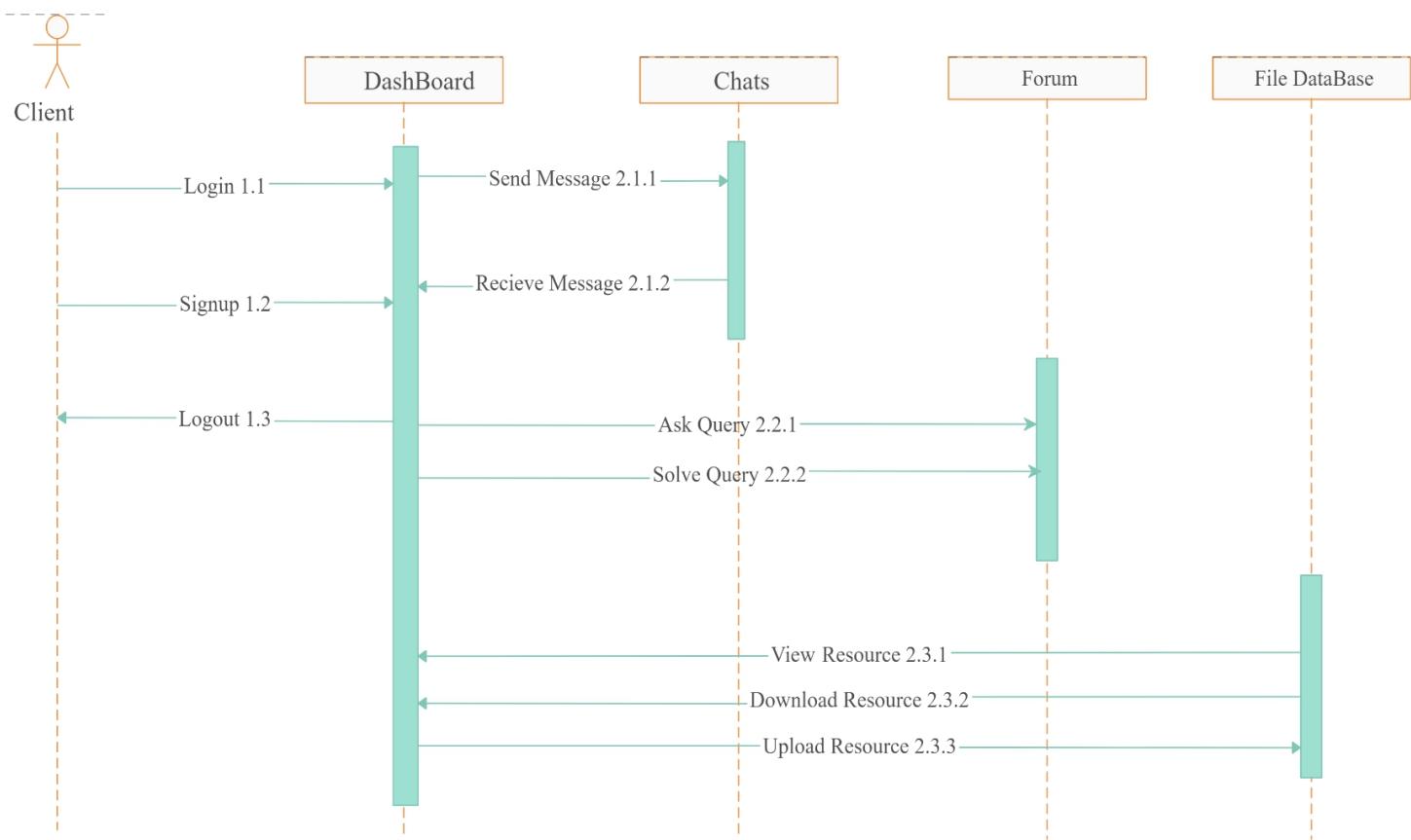


Fig 4.4.1:-Sequence Diagram.

4.5 Class Diagram

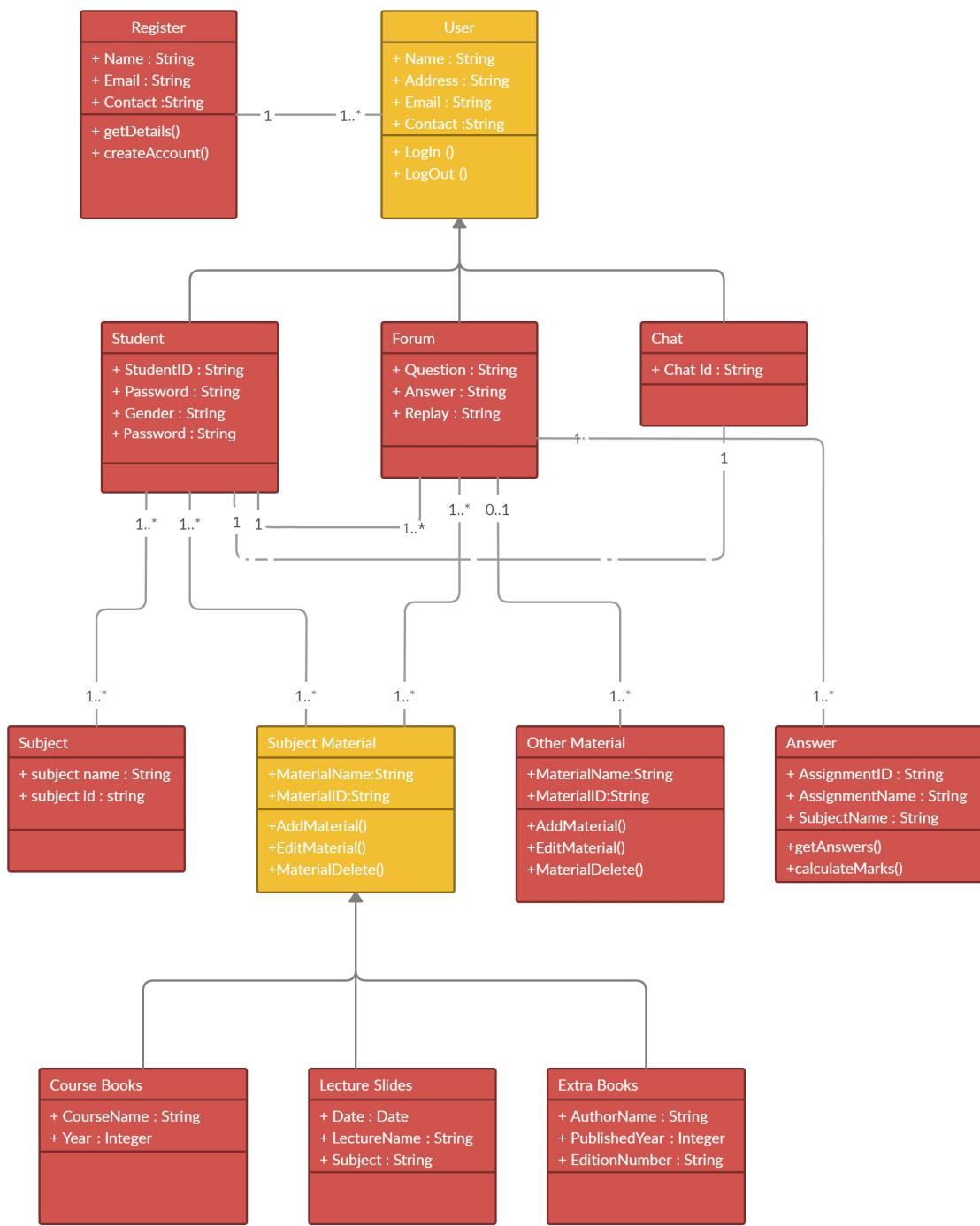
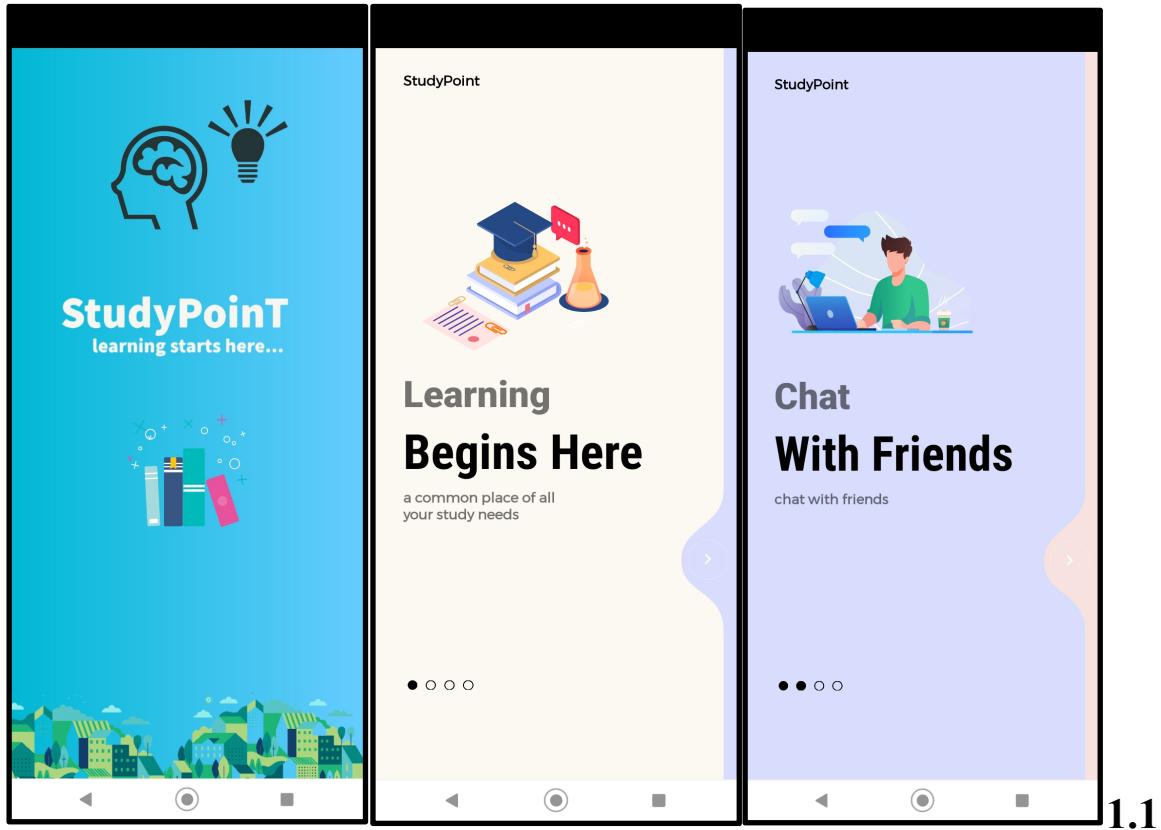


Fig 4.5.1:-Sequence Diagram

Overview

1. StudyPoint Introduction



StudyPoint



Forum With Group

a place or meeting where people can exchange and discuss ideas

• • • ○



1.4

StudyPoint



Doubt Solving

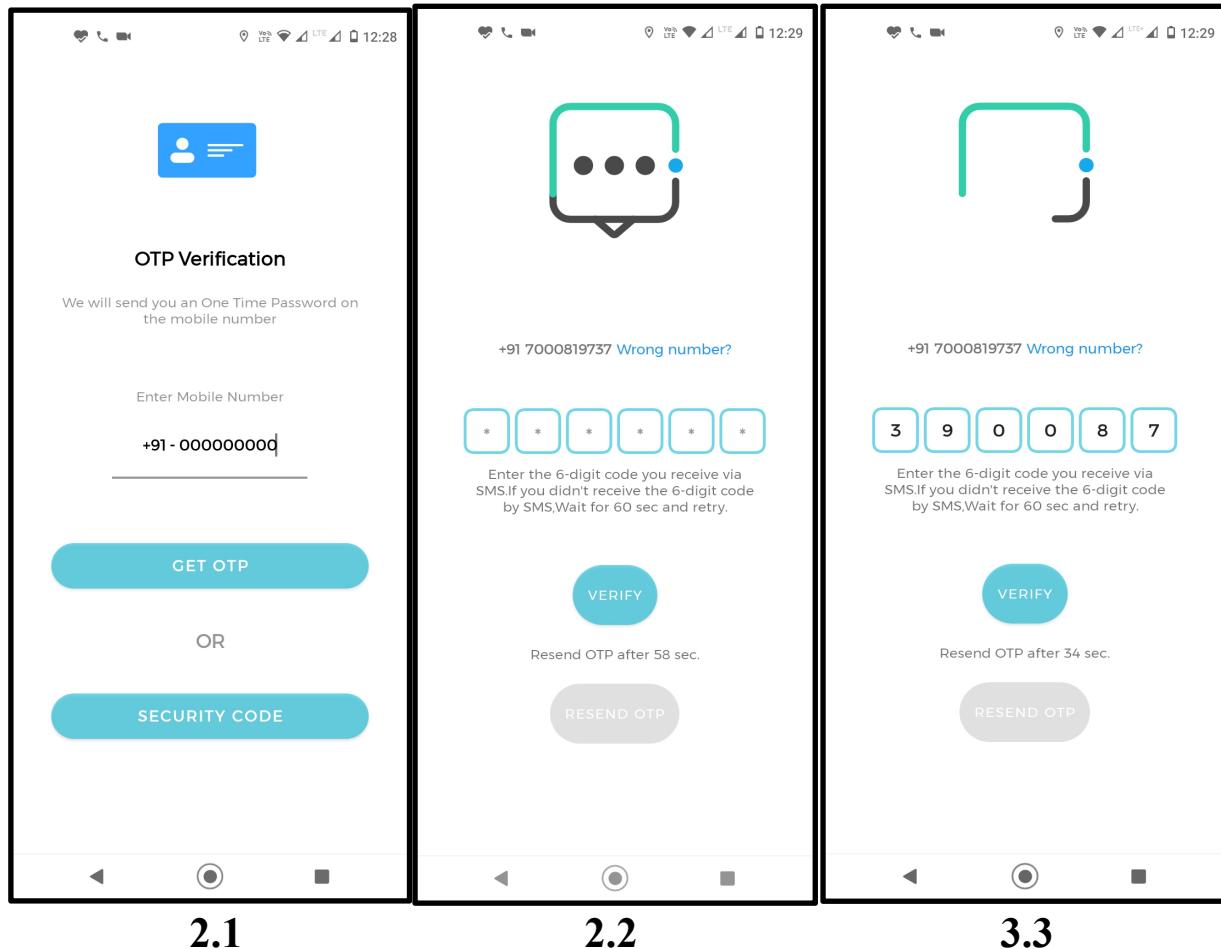
ask, share, communicate,
solve

• • • •



1.5

2. StudyPoint Registration



3. StudyPoint Registration

The image displays three sequential screenshots of a mobile application for user registration. The interface is a light gray color with blue and black text.

Screenshot 3.1: The screen shows a welcome message "WELCOME" and "SIGNUP TO YOUR NEW CLASSROOM". There are three tabs at the top: "COLLEGE STUDENT" (selected), "FACULTY", and "SCHOOL STUDENT". Below the tabs are input fields for "Full Name" (placeholder "Full Name"), "Age" (placeholder "Age 21"), "University" (placeholder "SVVV"), "Branch" (placeholder "IT"), "Year of Graduation" (placeholder "2022"), "Security Code" (placeholder "....."), and "Choose your ID Proof" (placeholder "No File"). A "DONE" button is at the bottom.

Screenshot 3.2: The "Full Name" field now contains "Adarsh Gyan Rawat". The "Age" field shows "21". The "University" field shows "SVVV". The "Branch" field shows "IT". The "Year of Graduation" field shows "2022". The "Security Code" field shows ".....". The "Choose your ID Proof" field shows "image:1548". The "DONE" button is at the bottom.

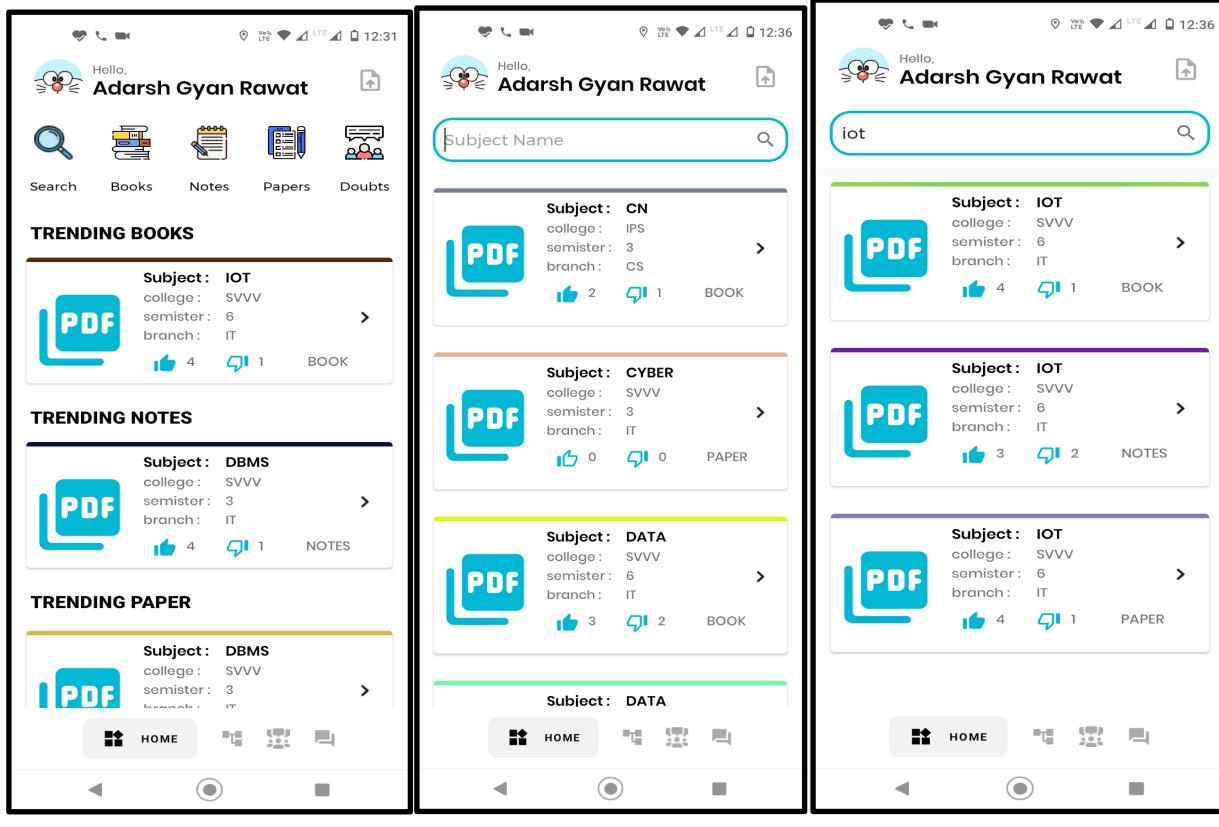
Screenshot 3.3: The "Full Name" field still contains "Adarsh Gyan Rawat". The "Age" field shows "21". The "University" field shows "SVVV". The "Branch" field shows "IT". The "Year of Graduation" field shows "2022". The "Security Code" field shows ".....". The "Choose your ID Proof" field shows "image:1548". The "DONE" button is at the bottom.

3.1

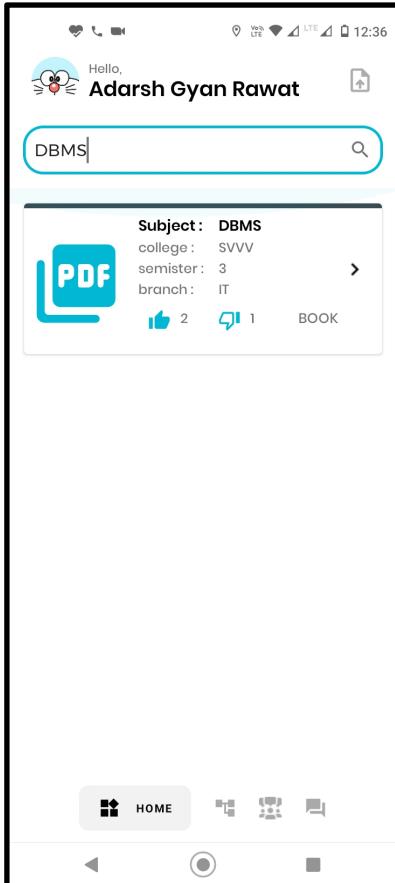
3.2

3.3

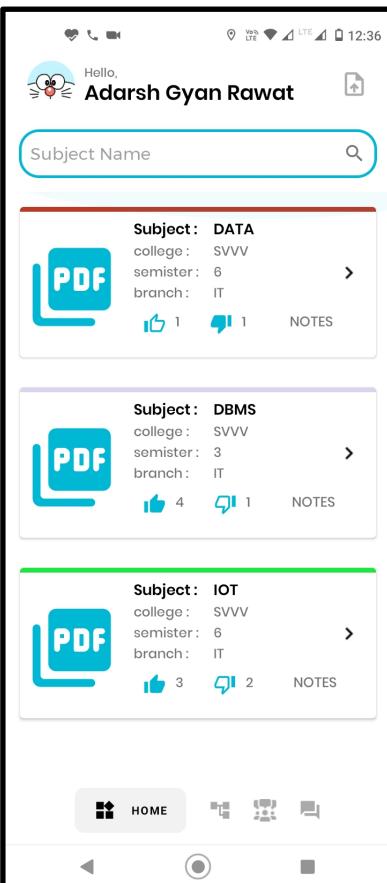
4. StudyPoint Dashboard Icons



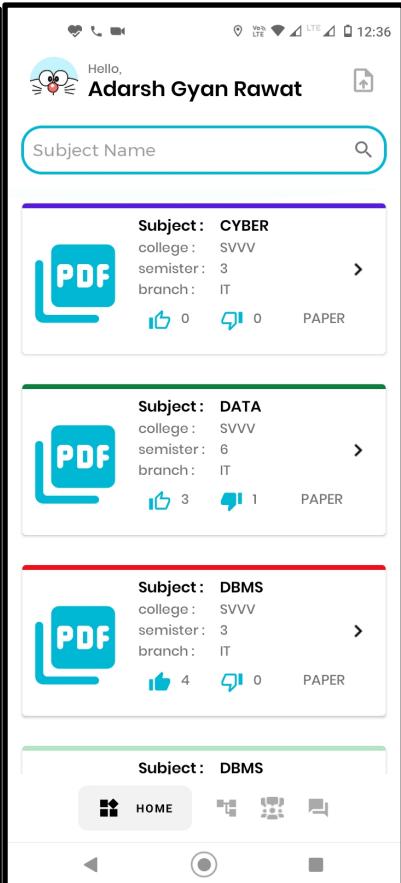
5. Icon Selection



5.1



5.2



5.3

6. Study-Resource Branches

The image displays three screenshots of a mobile application interface, labeled 6.1, 6.2, and 6.3, arranged horizontally.

Screenshot 6.1: Shows a list of branches under the year 2021. The visible branches are SUUU, IT, SEM - 6, SEM - 4, DATA STRUCTURES, BOOK, NOTES, PAPER, SEM - 1, SEM - 3, and IPS. A "BRANCHES" button is at the bottom.

Screenshot 6.2: Shows a detailed view of the IT branch under the 2021 category. It lists SEM - 3, DBMS, NOTES, BOOK, and PAPER. Under DBMS, there are links for DBMS PAPER 1, DBMS PAPER 2, and DBMS PAPER 3. A "BRANCHES" button is at the bottom.

Screenshot 6.3: A promotional slide for "INTERNET OF THINGS" from tutorialspoint.com. It features a circular diagram with icons of a person, a smartphone, a laptop, a lightbulb, and a book. The text "INTERNET OF THINGS" is prominently displayed in the center. Below the diagram, the tutorialspoint logo and website URL "www.tutorialspoint.com" are shown, along with social media links for Facebook and Twitter. A "BRANCHES" button is at the bottom.

6.1

6.2

6.3

7. Upload-Study-Resources(Verified User-Only)

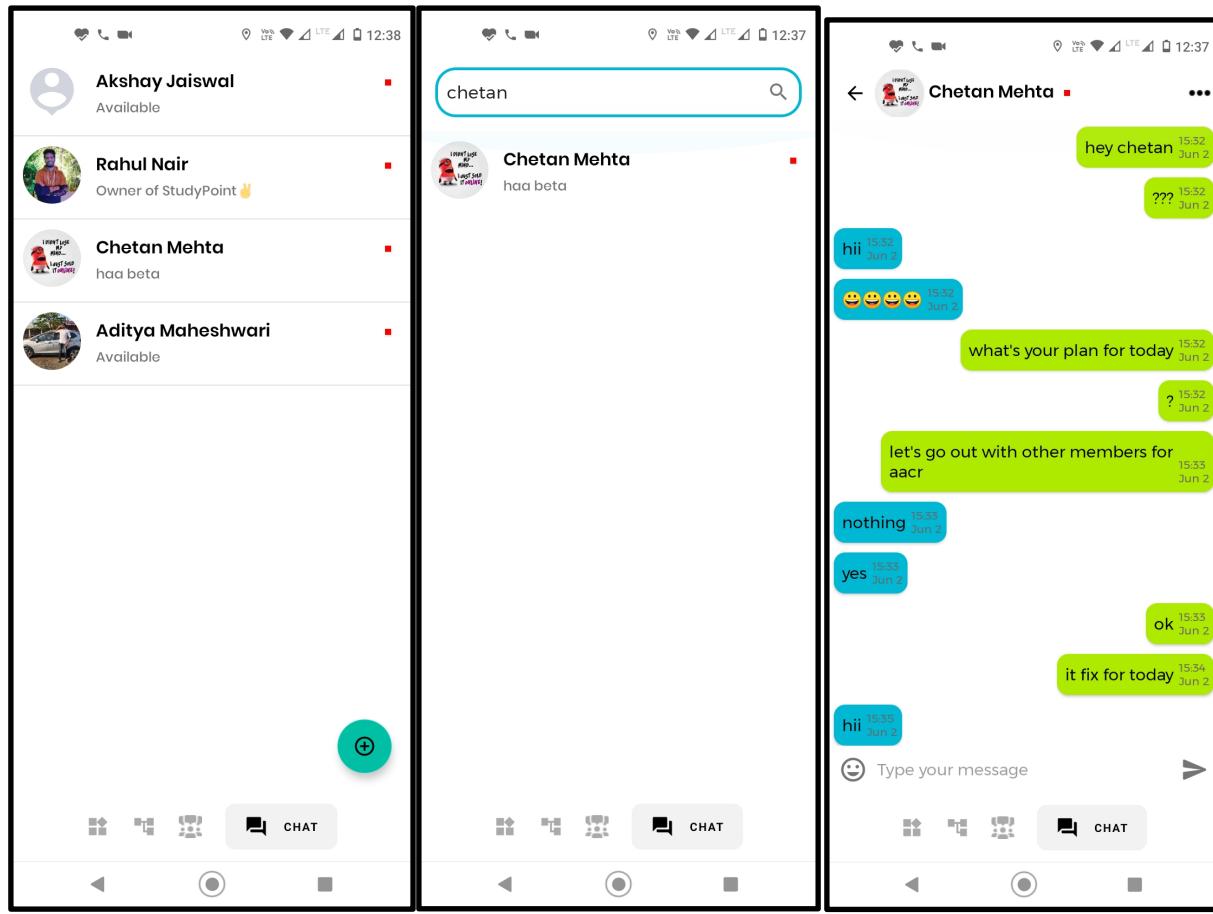
The image displays three sequential screenshots of a mobile application interface for uploading study resources, labeled 7.1, 7.2, and 7.3.

Screenshot 7.1: The initial screen for uploading a book. It features a header with a user profile icon and the name "Hello, Adarsh Gyan Rawat". Below the header is a dropdown menu set to "Book". The form consists of several input fields: "File Name" (with placeholder "Blockchain"), "Semester" (with placeholder "6"), "University" (with placeholder "SVVV"), "Branch" (with placeholder "IT"), "Year of Uploaded document" (with placeholder "2021" highlighted in blue), "Subject Name" (with placeholder "Blockchain"), and a file selection field "Choose file" containing "msf:907". At the bottom is a large blue "UPLOAD" button.

Screenshot 7.2: The second screen in the process. The "Year of Uploaded document" field now contains the value "2021" in a standard black font, indicating it has been selected or confirmed.

Screenshot 7.3: The third screen in the process. The "Year of Uploaded document" field now contains the value "2021" in a light blue font, indicating it is currently being edited or highlighted.

8. Chat Section

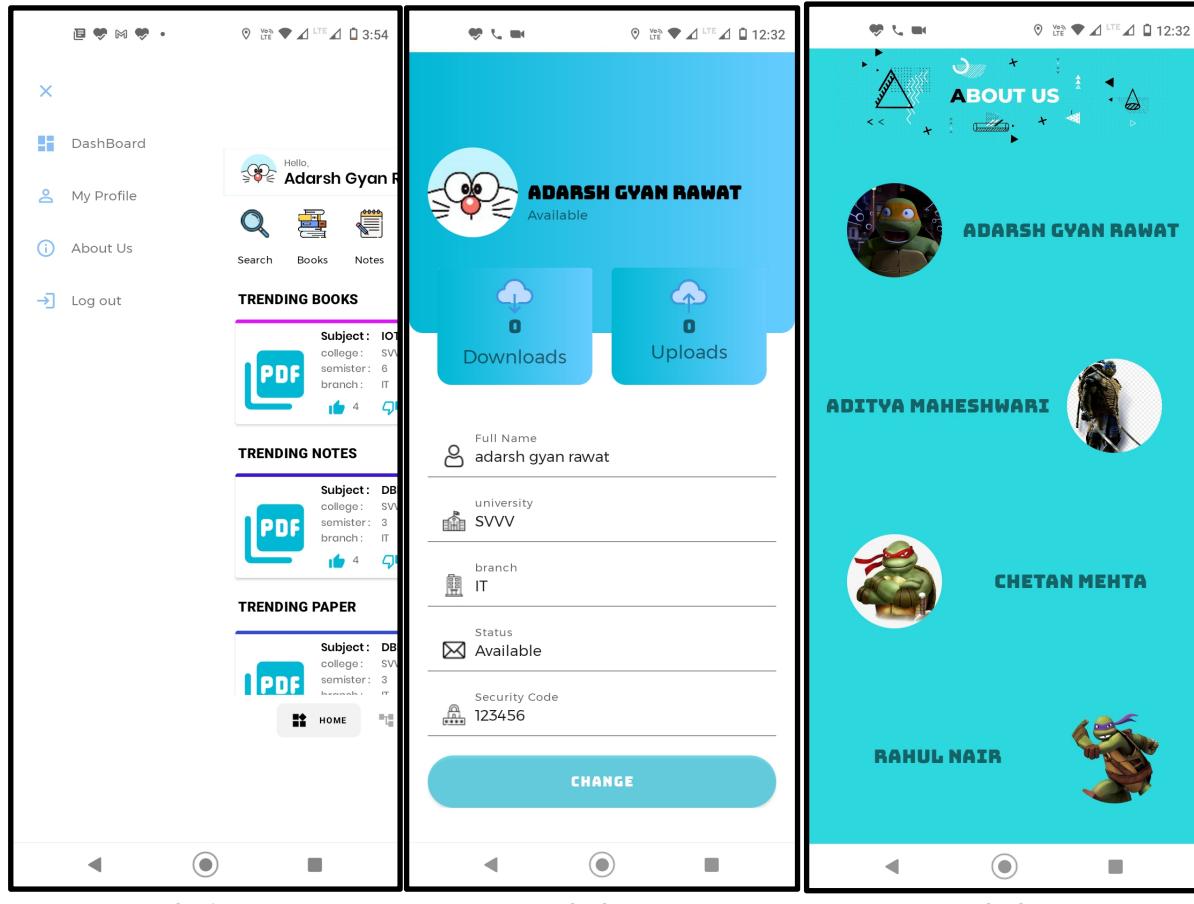


8.1

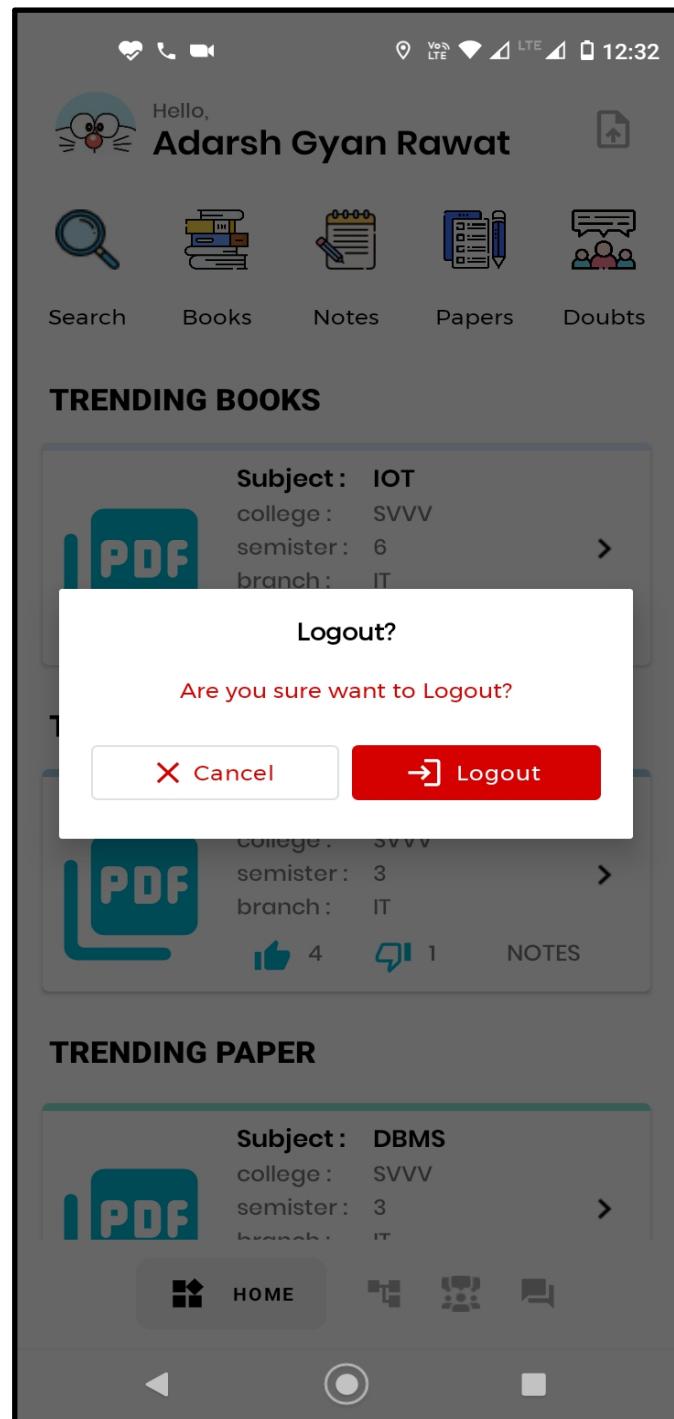
8.2

8.3

9. Side-Bar Icons



10. Logout



10.1