

DOCUMENT MANAGEMENT SYSTEM

OOD PROJECT
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A JAVA BASED Document MANAGEMENT AND RETRIEVAL SYSTEM DESIGN

AIM :

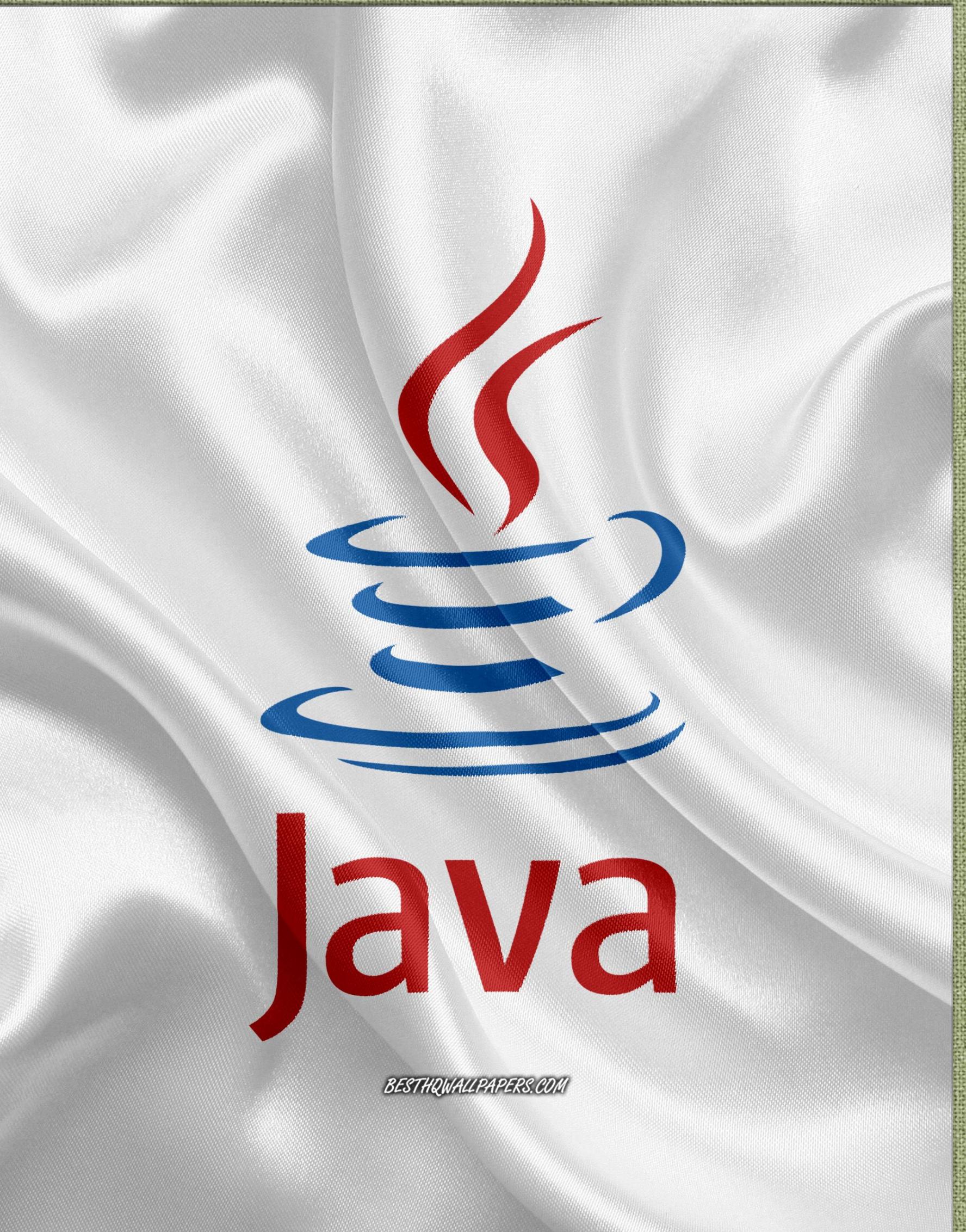
Develop an application to manage document storage and retrieval.

TECHNOLOGY USED:

JAVA JAVA GUI

CONTENT :

UML diagrams:-Use Case diagram, Class diagram, CRC diagram(s), illustrating the design of your program.



DESIGN CONCEPT

Use of Object Oriented Methodology concepts to design the system base.

Basic Classes: Category, Document, Topic, Tag, and have the following relationships:

- A. A document belongs to a category such as policy, plan, report, receipt, order, ... etc.
- B. A document belong to a topic such "CS243 Course Files in Fall 2013", "Cluster Graduation Project in 2013", ... etc.
- C. A document can have any number of tags such as: "legal", "medical", "administrative", "technical", "2013", "reporting", ... etc.

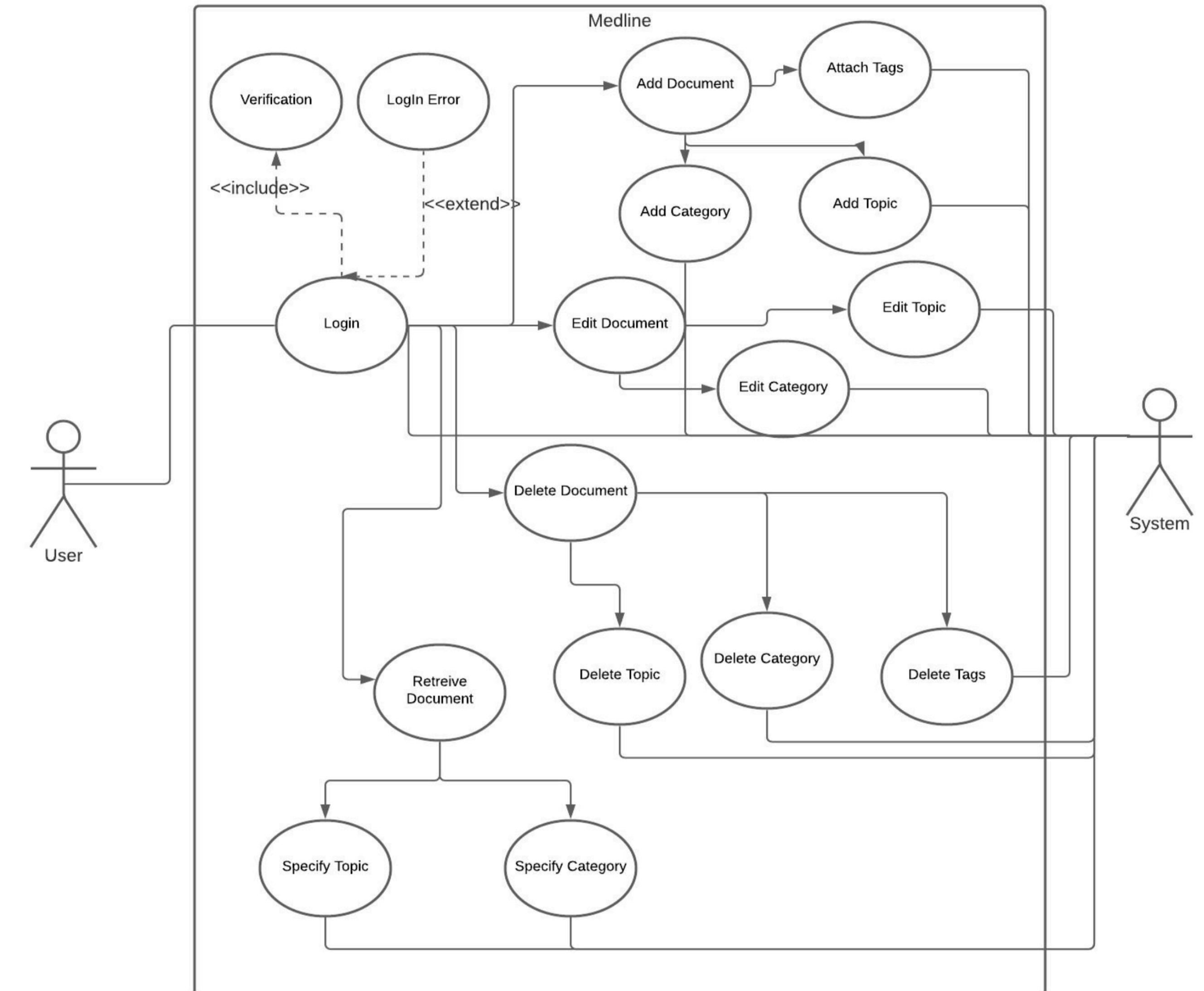
Provides an interface for the user to:

- A. Adding/editing/deleting instances belonging to each class,
- B. Retrieve document by Category, Topic, Tag.

USE CASE DIAGRAM

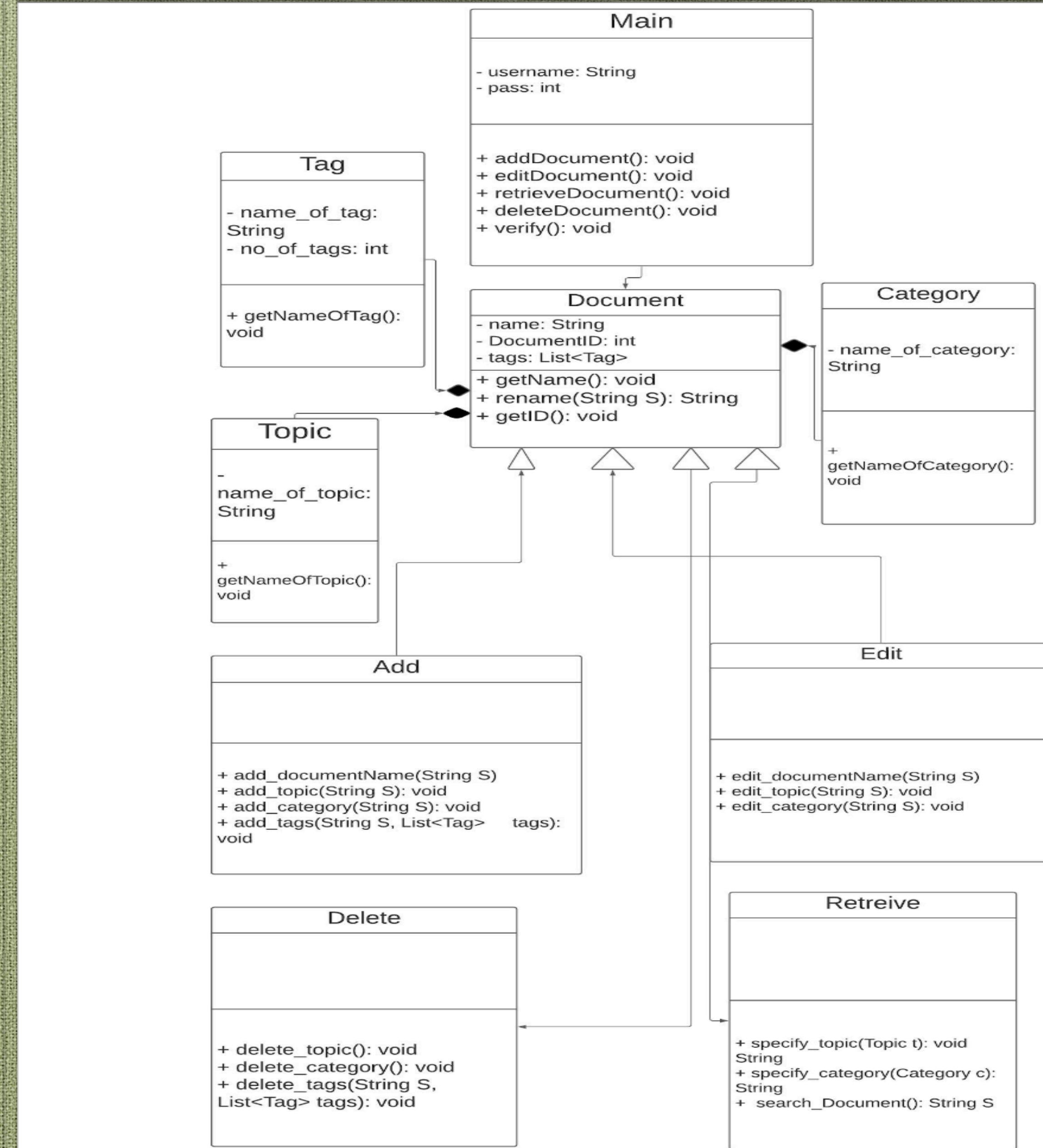
A UML use case diagram is the primary form of system/software requirements for a new software program underdeveloped. A key concept of use case modeling is that it helps us design a system from the end user's perspective.

It is an effective technique for communicating system behavior in the user's terms by specifying all externally visible system behavior.



CLASS DIAGRAM

The class diagrams are widely used in the modeling of object oriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages. Class diagram shows a collection of classes, interfaces, associations, collaborations, and constraints. It is also known as a structural diagram.



CRC DIAGRAM

Topic	<ul style="list-style-type: none"> - Responsible for attaching a topic to each document 	<ul style="list-style-type: none"> - Document
AddDocument		
<ul style="list-style-type: none"> - Responsible for adding topic,category and tags for each document added 	<ul style="list-style-type: none"> - Document - Topic - Category - Tag 	
EditDocument		
<ul style="list-style-type: none"> - Responsible for updating and changing topic, category and tags for each document 	<ul style="list-style-type: none"> - Document - Topic - Category - Tag 	
DeleteDocument		
<ul style="list-style-type: none"> - Responsible for deleting all contents of a document 	<ul style="list-style-type: none"> - Document - Topic - Category - Tag 	
RetriveDocument		
<ul style="list-style-type: none"> - Responsible for retrieving a document by specifying it's topic, category and tags 	<ul style="list-style-type: none"> - Document - Topic - Category - Tag 	

Class-responsibility-collaboration (CRC) cards are a brainstorming tool used in the design of object-oriented software. To create a CRC card, you can begin by writing out a scenario which identifies the major actors and actions which the actors do. Only write out actions and actors specific to that particular scenario. Nouns should turn into the classes of the card, verbs typically turn into the responsibilities of the card, and collaborators are the other cards with which the card will be interacting.

Main	<ul style="list-style-type: none"> - Responsible for verification of user (login) - Responsible for choosing between options of actions on Document (add/edit/delete) 	<ul style="list-style-type: none"> - Document - AddDocument - Edit Document - DeleteDocument - RetriveDocument
Document		
<ul style="list-style-type: none"> - Responsible for holding data - Responsible for having tags, topic and category - Responsible for actions on documents 		<ul style="list-style-type: none"> - Tag - Category - Topic
Tag		
<ul style="list-style-type: none"> - Responsible for attaching tags to a document - Responsible for holding record of each tag for each document 		<ul style="list-style-type: none"> - Document
Category		
<ul style="list-style-type: none"> - Responsible for defining the category of each Document 		<ul style="list-style-type: none"> - Document

LOGIN PAGE

The screenshot shows a Java development environment with two open editors. The left editor displays the `Main.java` file, which contains code for a login system. The right editor displays a terminal window titled "CHOOSING PAGE".

Main.java - Document-Management

```
14     String password=sc.next();
15
16     if(name.equals(anObject) || name
17     {
18         System.out.println("Welcome "+name);
19         JFrame jFrame = new JFrame();
20         jFrame.setTitle(title: "CHOOSING PAGE");
21
22         Add a = new Add();
23         Container cPane = jFrame.getContentPane();
24         Newclass template = new Newclass();
25         jFrame.setSize(template.getSize());
26         jFrame.setResizable(resizable: true);
27         cPane.add(template);
28
29         jFrame.setVisible(b: true);
30         jFrame.setLocationRelativeTo(null);
```

PROBLEMS 100 **OUTPUT** **DEBUG CONSOLE** **TERMINAL**

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements.

PS C:\Users\Mohd Zia\Desktop\OOD\Document-Management-System-Management-System-main\Document-Management-System-main>
Enter your user name:
Zia
Enter the password:
1234
Welcome Zia
```

CHOOSE PAGE

ADD DOCUMENT

DELETE DOCUMENT

EDIT DOCUMENT

RETRIEVE DOCUMENT

Ln 18, Col 34 Spaces: 4 UTF-8 CRLF {} Java ⚡ Go Live ⚡ Prettier ⚡ 🔍 🔔

24°C Haze

18:29 15-11-2022

LOGIN FAILED

The screenshot shows a Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Main.java - Document-Management-System-main - Visual Studio Code.
- Explorer:** Shows open files: Main.java 1, Calculator.java 2, Add.java 9+.
- Open Editors:** Shows Main.java (1), Calculator.java (2), and Add.java (9+).
- Code Editor:** Displays Java code for Main.java. The code handles user input for name and password, checks against predefined values ("Zia", "Sahil", "Arnik"), and prints a welcome message or displays an error message.
- Terminal:** Displays the following interaction:

```
t-Management-System-main\Document-Management-System-main\" ; if ($?) { javac Main.java } ; if (?) { java Main }
Enter your user name:
Bhagesh Sir
Enter the password:
1234
Sorry !! Bhagesh Sir
Either username or password is wrong
PS C:\Users\Mohd Zia\Desktop\OOD\Document-Management-System-main\Document-Management-System-main>
```
- Bottom Status Bar:** Shows file statistics (Ln 18, Col 34, Spaces: 4, CRLF, Java), Go Live, Prettier, and system icons (weather, battery, signal, volume, network, clock).

MAIN PAGE

The screenshot shows a Java development environment with the following details:

- File Menu:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Title Bar:** Main.java - Document-Management
- Explorer:** Shows files and packages:
 - OPEN EDITORS: J Main.java 1 (selected), J Document.class, J Edit.class, J Edit.java 9+, J Edit\$1.class, J Edit\$2.class, J Edit\$3.class, J Edit\$4.class, J Edit\$5.class, J Edit\$6.class, J Main.class.
 - DOCUMENT-MANAGEMENT: J Document.java 9+, J Newclass.class, J Newclass.java 6, J Newclass\$1.class, J Newclass\$2.class, J Newclass\$3.class, J Newclass\$4.class, README.md, J Retrive.class, J Retrivejava 9+.
- Editor:** Displays Java code for a document management system:

```
Scanner sc=new Scanner(System.in);
System.out.println("Enter your user name:");
String name=sc.nextLine();
System.out.println("Enter the password:");
String password=sc.next();

if(name.equals("Zia") || name.equals("AnObject"))
{
    System.out.println("Welcome "+name);
    JFrame jFrame = new JFrame();
    jFrame.setTitle(title: "CHOOSING PAGE");
    Add a = new Add();
    Container cPane = jFrame.getContentPane();
    Newclass template = new Newclass();
    jFrame.setSize(template.getSize());
    jFrame.setResizable(resizable: true);
    cPane.add(template);
}
```
- Status Bar:** PROBLEMS 98, OUTPUT, DEBUG CONSOLE, TERMINAL, Copyright (C) Microsoft Corporation. All rights reserved, Install the latest PowerShell for new features and improvements, PS C:\Users\Mohd Zia\Desktop\OOD\Document-Management-System-Management-System-main\", if (?) { javac Main.java; java Main }, Enter your user name: Zia, Enter the password: 1234, Welcome Zia.
- Floating Window:** CHOOSING PAGE (ADD DOCUMENT)
- Bottom Bar:** Ln 1, Col 1, Spaces: 4, UTF-8, CRLF, {} Java, Go Live, Prettier, ENG IN, 28°C Haze, 11:26, 16-11-2022.

ADD DOCUMENT

CHOOSING PAGE

ENTER DOCUMENT NAME	PROCEED	DOCUMENT NAME: NONE
ENTER TOPIC	PROCEED	TOPIC: NONE
ENTER CATEGORY	PROCEED	CATEGORY: NONE
ENTER TAGS (IF ANY ELSE TYPE NIL)	PROCEED	TAGS: NONE

CHOOSING PAGE

.TXT	PROCEED	DOCUMENT NAME: A.TXT
FINANCE	PROCEED	TOPIC: FINANCE
BUSINESS	PROCEED	CATEGORY: BUSINESS
MONEY, CURRENCY	PROCEED	TAGS: MONEY, CURRENCY

EDIT DOCUMENT

CHOOSING PAGE

DOCUMENT LIST:	PROCEED	
ENTER DOCUMENT ID:	EDIT	DOCUMENT TO BE EDITED:
ENTER NEW DOCUMENT NAME	UPDATE	UPDATED DOCUMENT NAME:
ENTER NEW TOPIC	UPDATE	UPDATED TOPIC:
ENTER NEW CATEGORY	UPDATE	UPDATED CATEGORY:
CLICK TO GO TO MAIN PAGE	MAIN PAGE	CLICK TO GO TO MAIN PAGE

CHOOSING PAGE

DOCUMENT LIST:	PROCEED	id: 1 Document Name: A.TXT
1	EDIT	DOCUMENT TO BE EDITED: A.TXT
B.TXT	UPDATE	NEW DOCUMENT NAME: B.TXT
TRADE	UPDATE	NEW TOPIC NAME: TRADE
TRAVEL	UPDATE	NEW CATEGORY NAME: TRAVEL
CLICK TO GO TO MAIN PAGE	MAIN PAGE	CLICK TO GO TO MAIN PAGE

RETRIEVE DOCUMENT

CHOOSING PAGE		
DOCUMENT LIST:	PROCEED	
ENTER TOPIC	SPECIFY	TOPIC:
ENTER CATEGORY	SPECIFY	CATEGORY:
CLICK TO RETRIEVE	RETRIEVE	RETRIEVED DOCUMENT:
CLICK TO GO TO MAIN PAGE	MAIN PAGE	CLICK TO GO TO MAIN PAGE

CHOOSING PAGE		
DOCUMENT LIST:	PROCEED	id: 1 Document Name: B.TXT
TRADE	SPECIFY	TOPIC: TRADE
TRAVEL	SPECIFY	CATEGORY: TRAVEL
CLICK TO RETRIEVE	RETRIEVE	RETRIEVED DOCUMENT: ID: 1 Document Name: B.TXT
CLICK TO GO TO MAIN PAGE	MAIN PAGE	CLICK TO GO TO MAIN PAGE

DELETE DOCUMENT



CONTRIBUTION

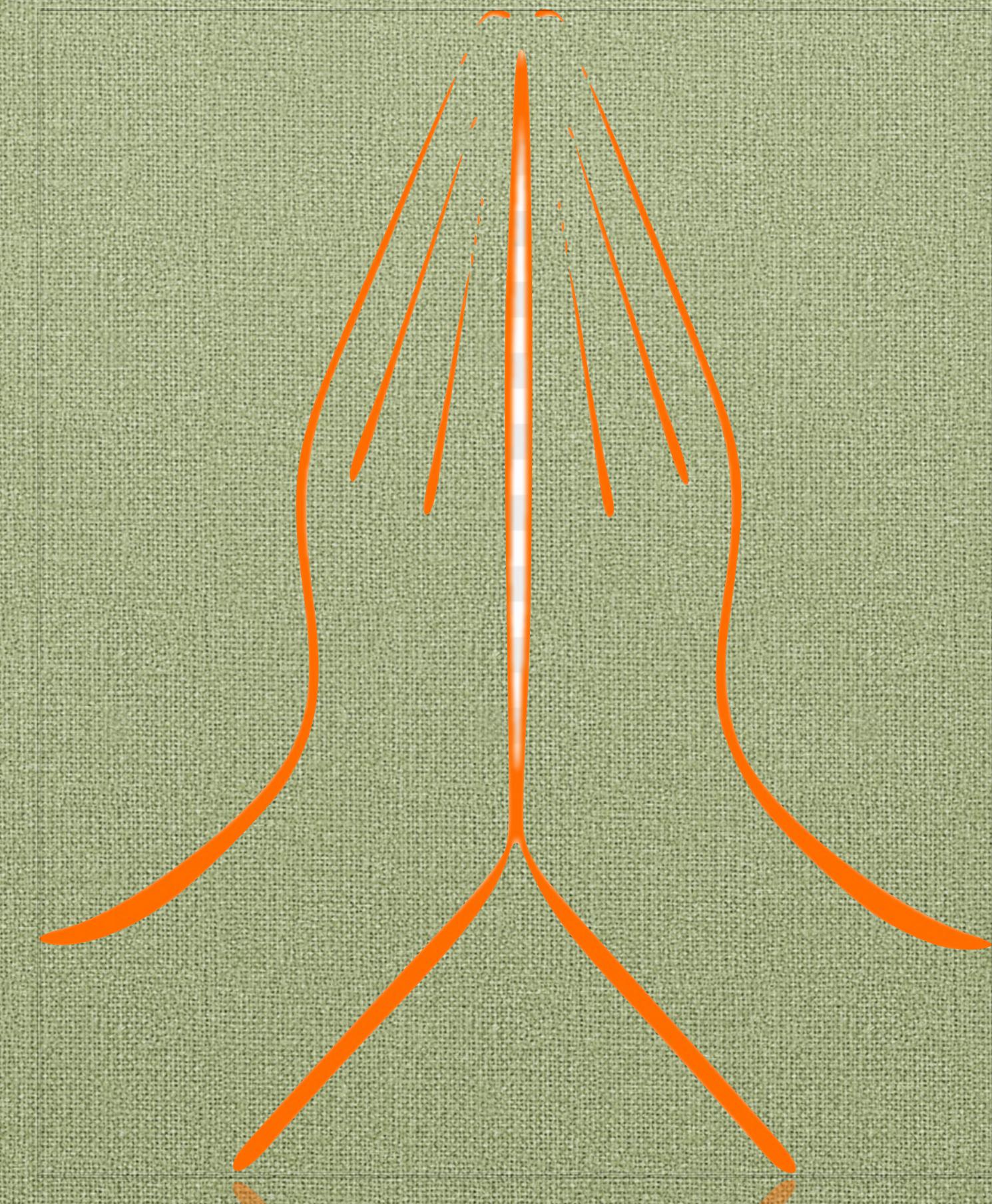
There were mainly four features which were worked upon and taken up by each one of us.

SK SAHIL PARVEZ - ADD DOCUMENT

MOHD ZIA - EDIT DOCUMENT

ARNIK ROY - RETREIVE DOCUMENT

ARJUN YADAV - DELETE DOCUMENT



THANK YOU