DOCUMENT MANAGEMENT SYSTEM

OOM PROJECT

Group – C24
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Guided By :
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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.

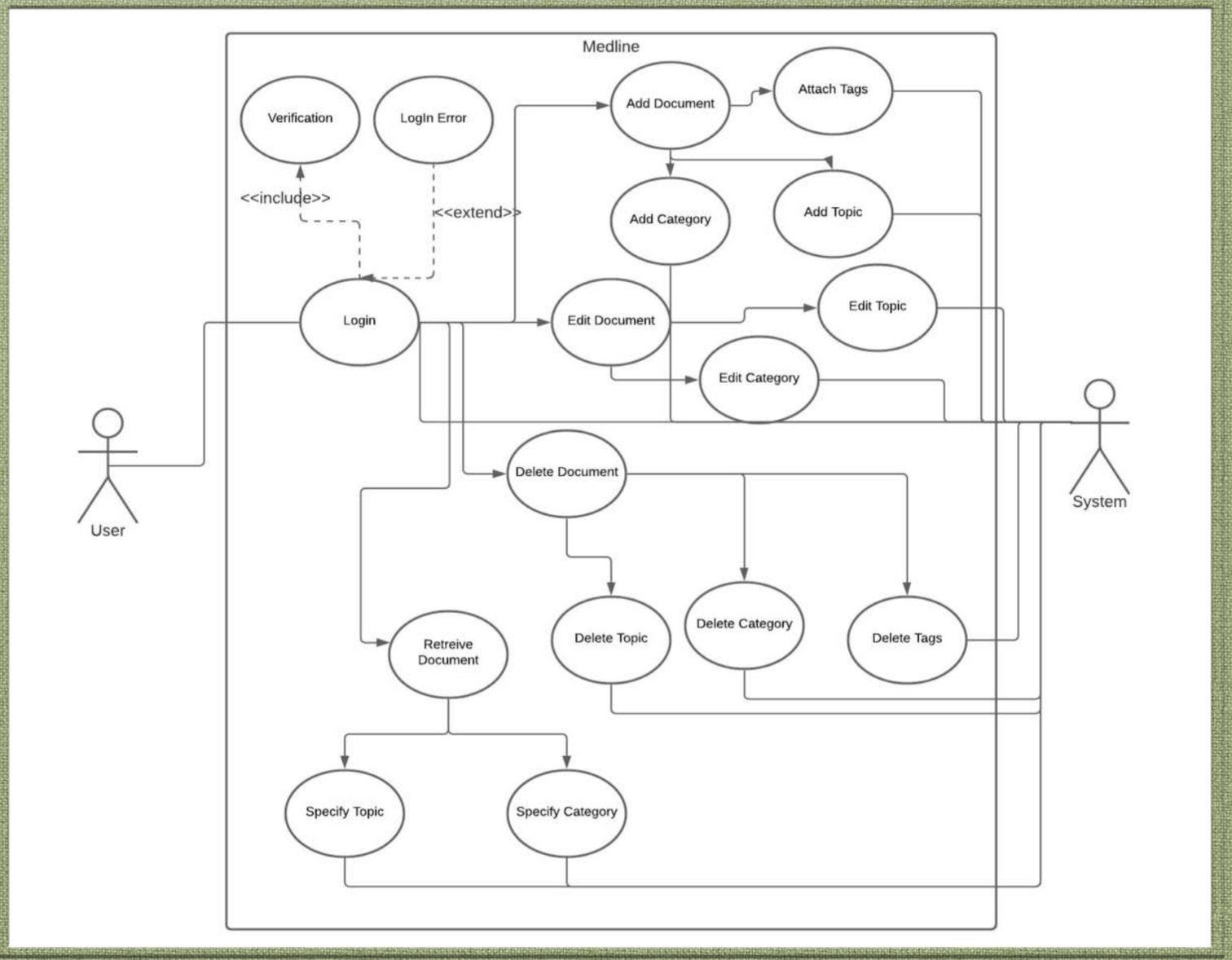
Provides an interface for the user to:

A. Adding/editing/deleting instances belonging to each class,

B. Retrieve document by Category, Topic, Tag.

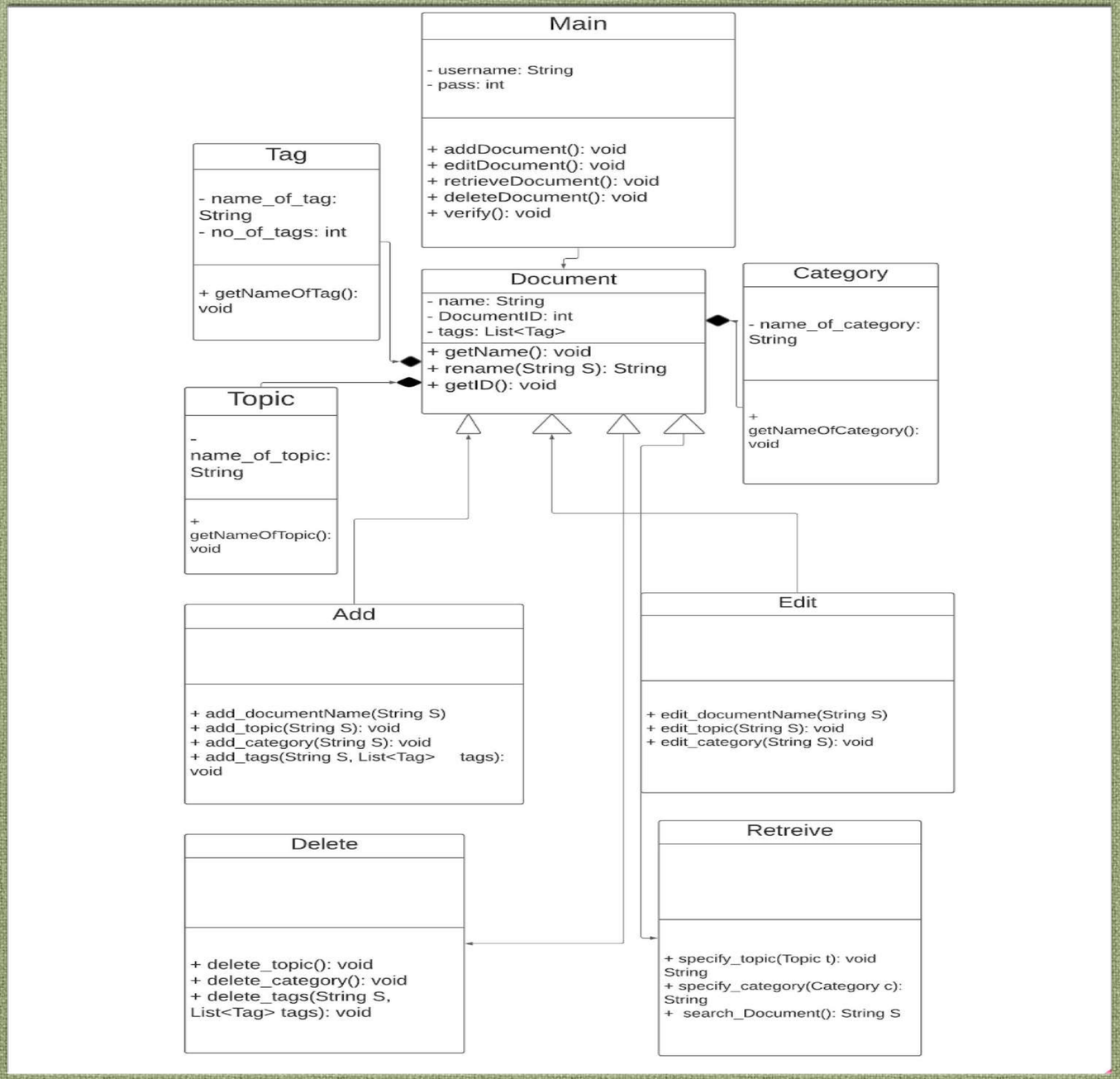
USE CASE DIAGRAM

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.



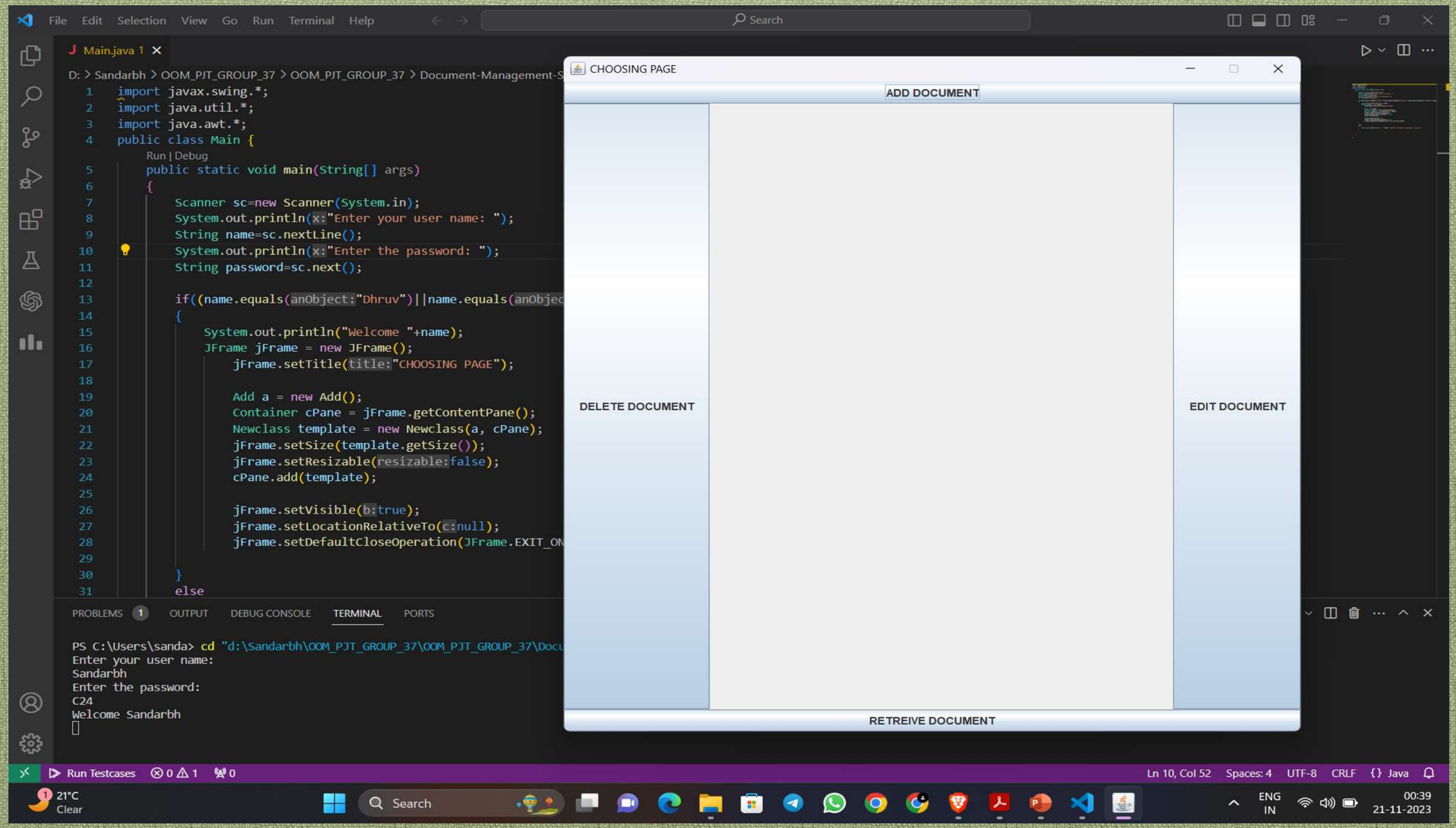
CRC DIAGRAM

Topic	
- Responsible for attaching a topic to each document	- Document
AddDocument	
- Responsible for adding topic,category and tags for each document added	- Document - Topic - Category - Tag
EditDocument	
- Responsible for updating and changing topic, category and tags for each document	- Document - Topic - Category - Tag
DeleteDocument	
- Responsible for deleting all contents of a document	- Document - Topic - Category - Tag
RetreiveDocument	
- Responsible for retrieving a document by specifying it's topic, category and tags	- Document - Topic - Category - Tag

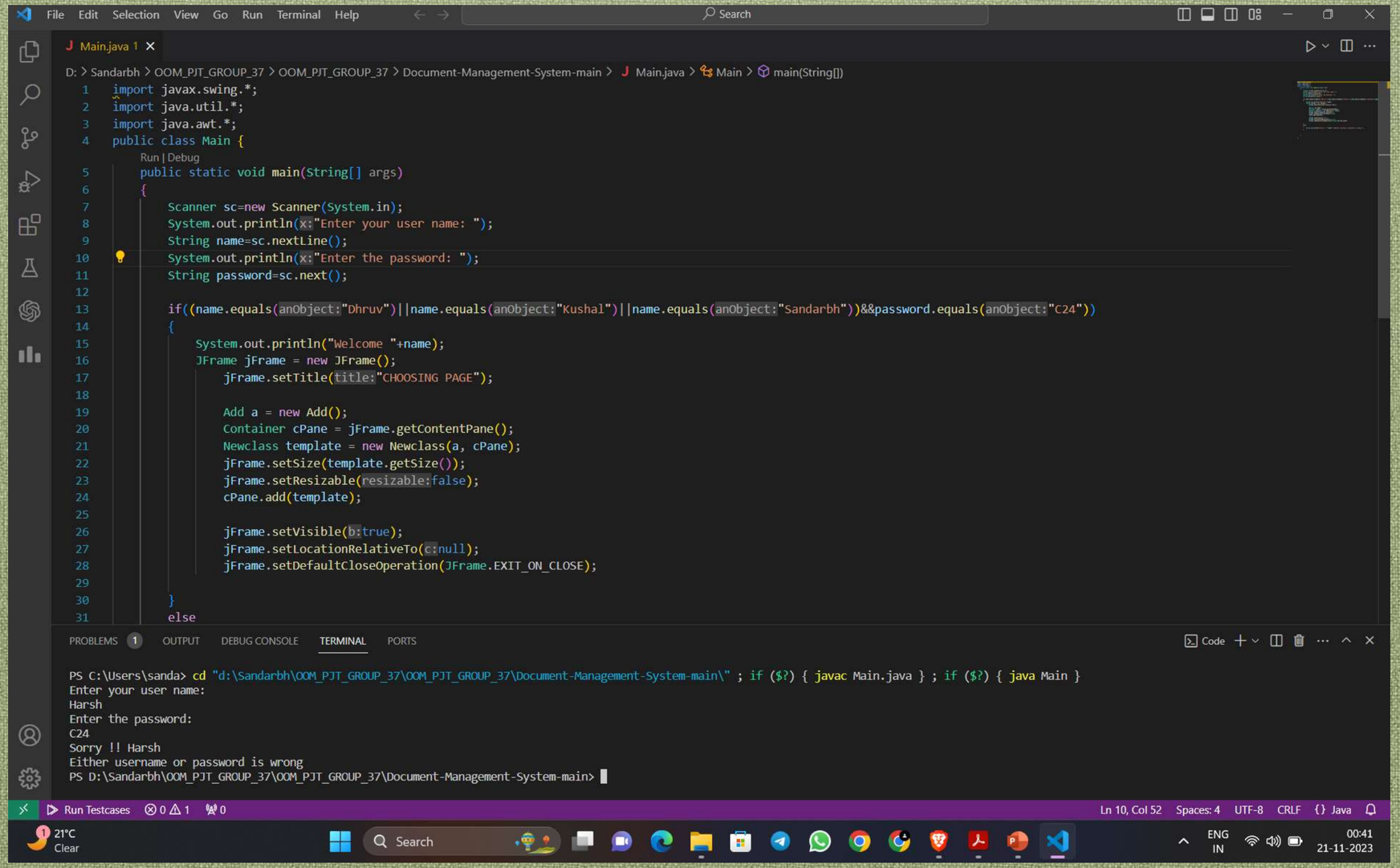
Class-responsibility-collaboration (CRC) cards are a brainstorming tool used in the design of object-oriented software. To create a CRC card, you can begin by writing out a scenario which identifies the major actors and actions which the actors do. Only write out actions and actors specific to that particular 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	
- Responsible for verification of user (login) - Responsible for choosing between options of actions on Document (add/edit/delete)	- Document - AddDocument - Edit Document - DeleteDocument - RetreiveDocument
Document	
- Responsible for holding data - Responsible for having tags, topic and category - Responsible for actions on documents	- Tag - Category - Topic
Tag	
- Responsible for attaching tags to a document - Responsible for holding record of each tag for each document	- Document
Category	
- Responsible for defining the category of each Document	- Document

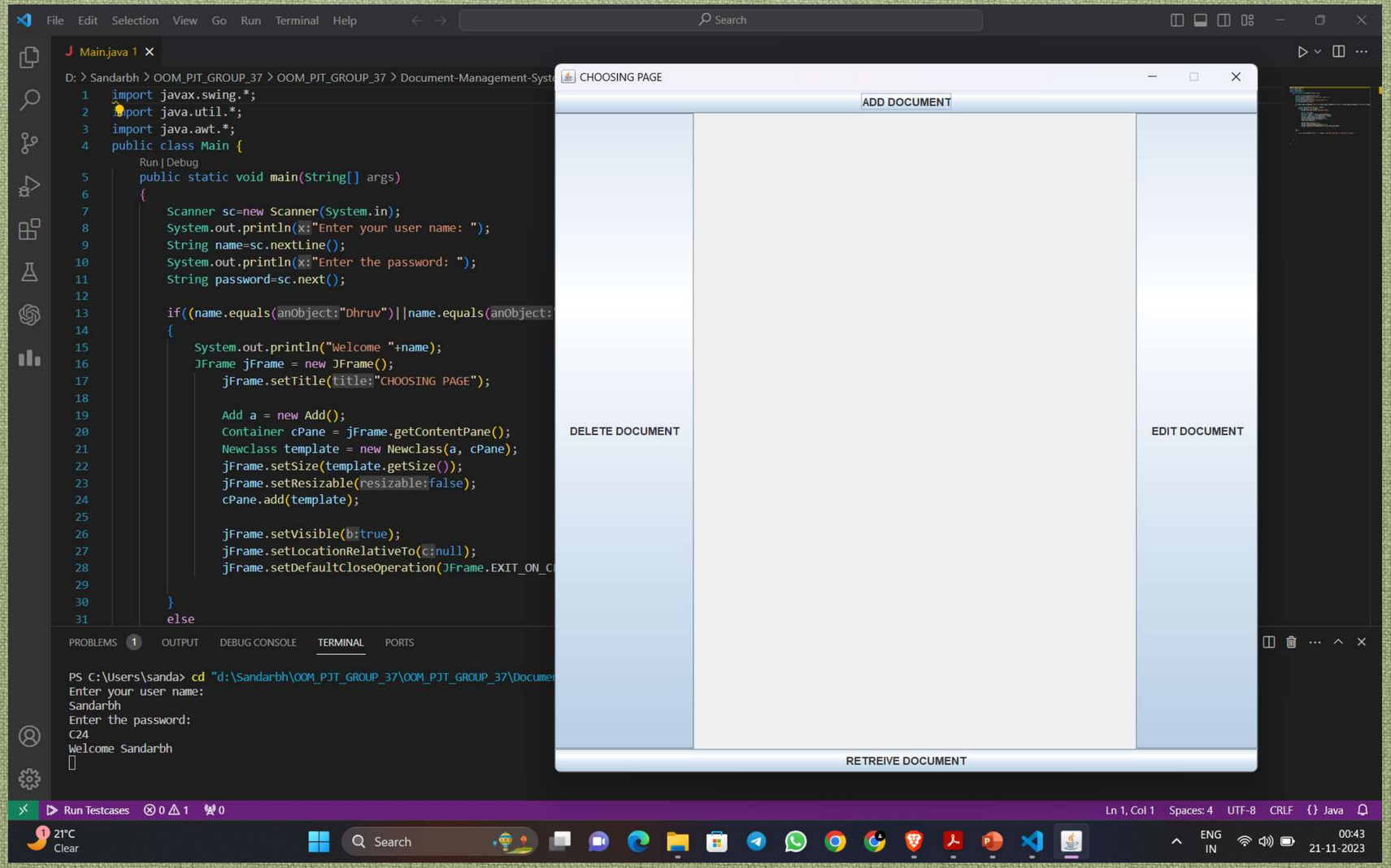
LOGIN PAGE


File Edit Selection View Go Run Terminal Help
Search
Main.java 1
D: > Sandarbh > OOM_PJT_GROUP_37 > OOM_PJT_GROUP_37 > Document-Management-S
import javax.swing.*;
import java.util.*;
import java.awt.*;
public class Main {
Run | Debug
public static void main(String[] args)
{
Scanner sc=new Scanner(System.in);
System.out.println(x:"Enter your user name: ");
String name=sc.nextLine();
System.out.println(x:"Enter the password: ");
String password=sc.next();
if((name.equals(anObject:"Dhruv")||name.equals(anObjec
{
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(a, cPane);
jFrame.setSize(template.getSize());
jFrame.setResizable(resizable:false);
cPane.add(template);
jFrame.setVisible(b:true);
jFrame.setLocationRelativeTo(c:null);
jFrame.setDefaultCloseOperation(JFrame.EXIT_ON
}
else
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\sanda> cd "d:\Sandarbh\OOM_PJT_GROUP_37\OOM_PJT_GROUP_37\Docu
Enter your user name:
Sandarbh
Enter the password:
C24
Welcome Sandarbh
CHOOSING PAGE
ADD DOCUMENT
DELETE DOCUMENT
EDIT DOCUMENT
RETREIVE DOCUMENT
Run Testcases
Ln 10, Col 52 Spaces: 4 UTF-8 CRLF Java
21°C Clear
Search
ENG IN
00:39 21-11-2023

LOGIN FAILED



MAIN PAGE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Main.java 1
D: > Sandarbh > OOM_PJT_GROUP_37 > OOM_PJT_GROUP_37 > Document-Management-Syst
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import java.util.*;
import java.awt.*;
public class Main {
Run | Debug
public static void main(String[] args)
{
Scanner sc=new Scanner(System.in);
System.out.println(x:"Enter your user name: ");
String name=sc.nextLine();
System.out.println(x:"Enter the password: ");
String password=sc.next();
if((name.equals(anObject:"Dhruv")||name.equals(anObject:
{
System.out.println("Welcome "+name);
JFrame jFrame = new JFrame();
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Add a = new Add();
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Newclass template = new Newclass(a, cPane);
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jFrame.setResizable(resizable:false);
cPane.add(template);
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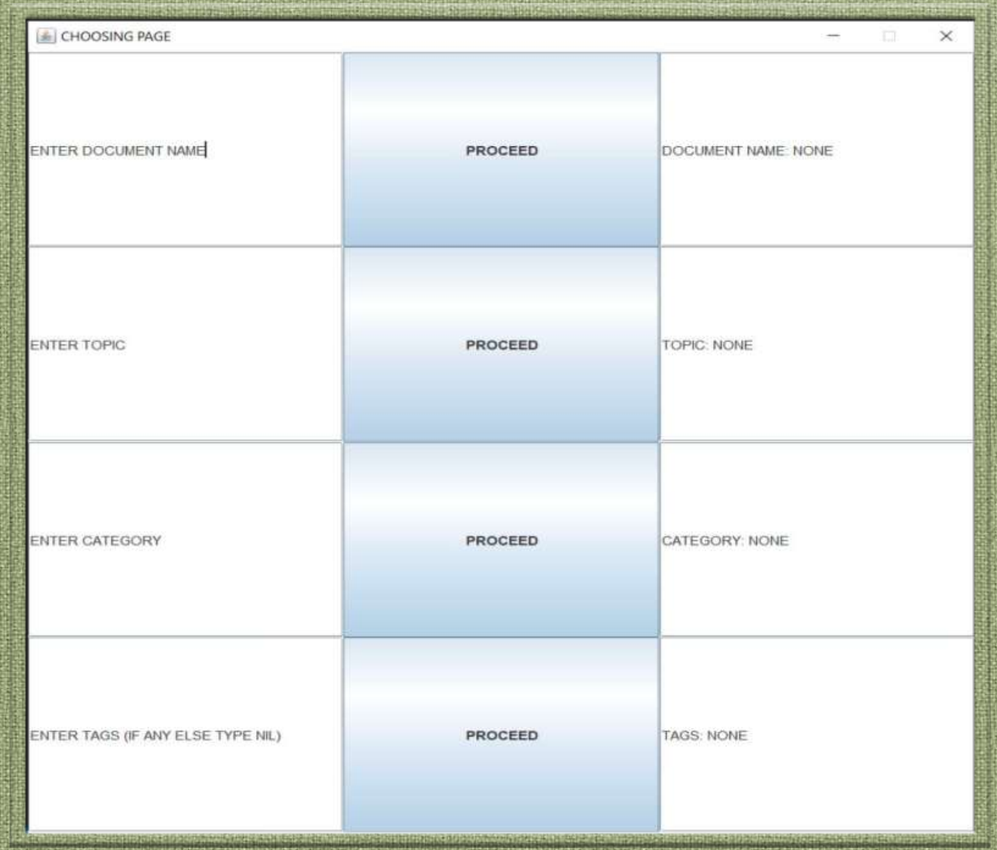
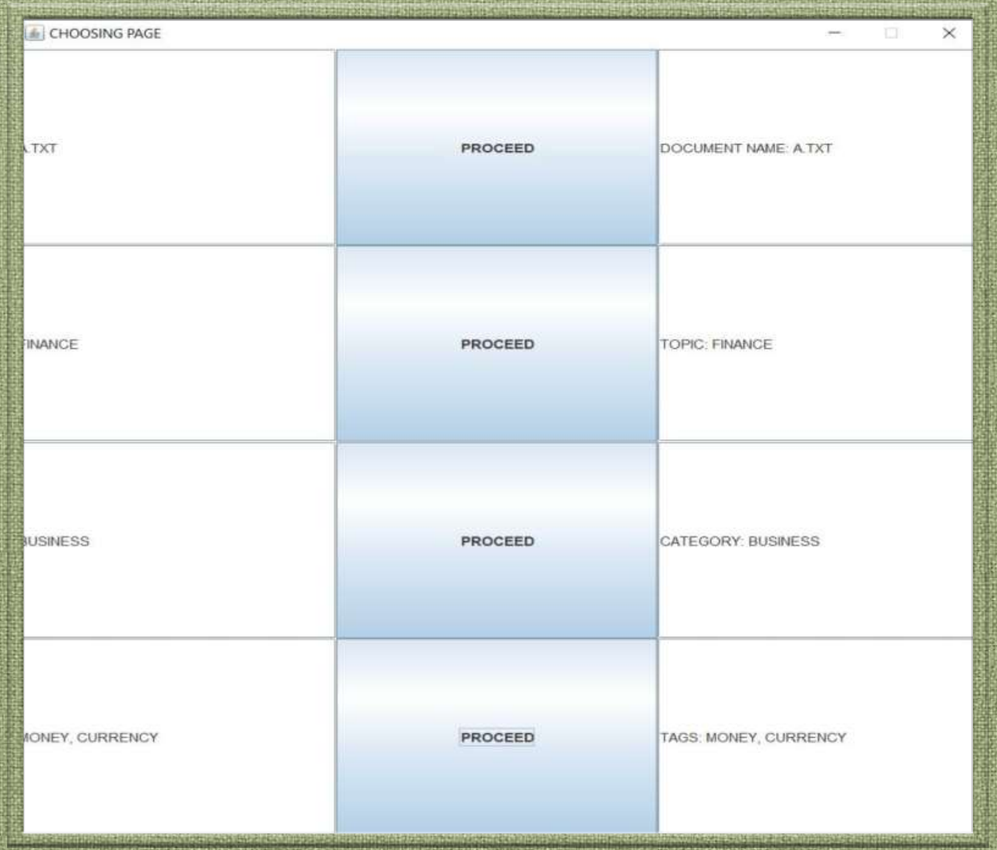
jFrame.setLocationRelativeTo(c:null);
jFrame.setDefaultCloseOperation(JFrame.EXIT_ON_C
}
else
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\sanda> cd "d:\Sandarbh\OOM_PJT_GROUP_37\OOM_PJT_GROUP_37\Docume
Enter your user name:
Sandarbh
Enter the password:
C24
Welcome Sandarbh
CHOOSING PAGE
ADD DOCUMENT
DELETE DOCUMENT
EDIT DOCUMENT
RETREIVE DOCUMENT
Run Testcases
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Java
21°C Clear
Search
ENG IN
00:43 21-11-2023

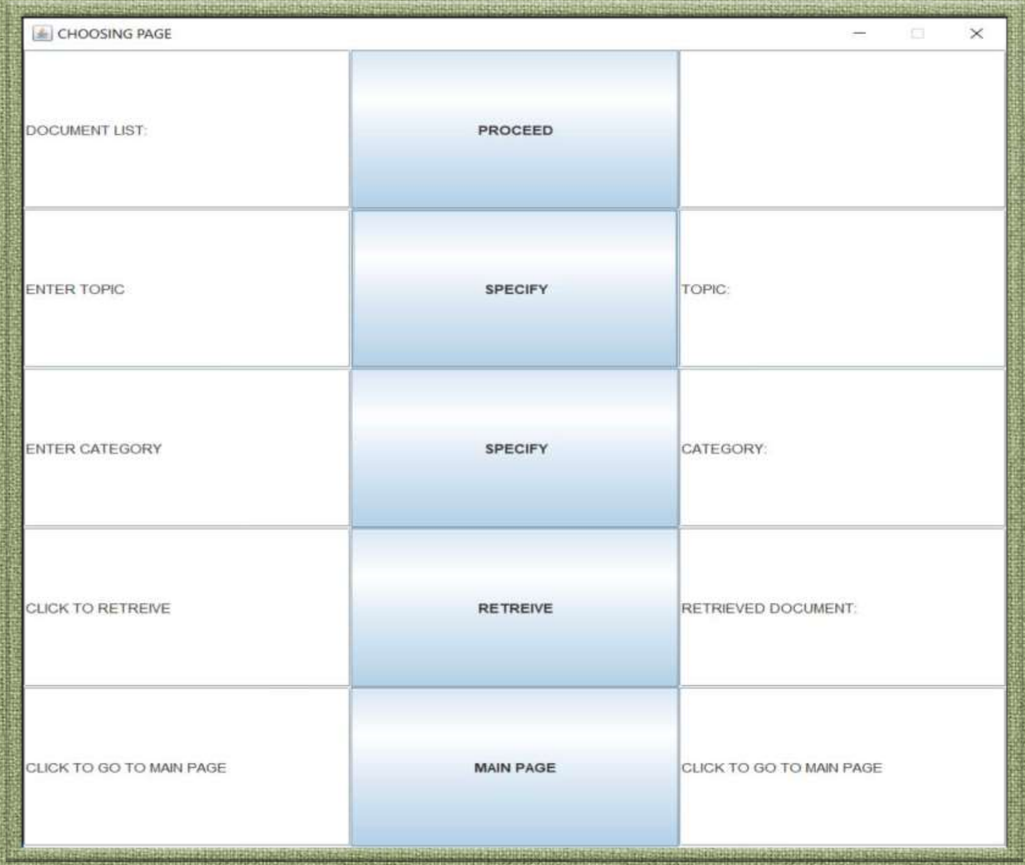
ADD DOCUMENT

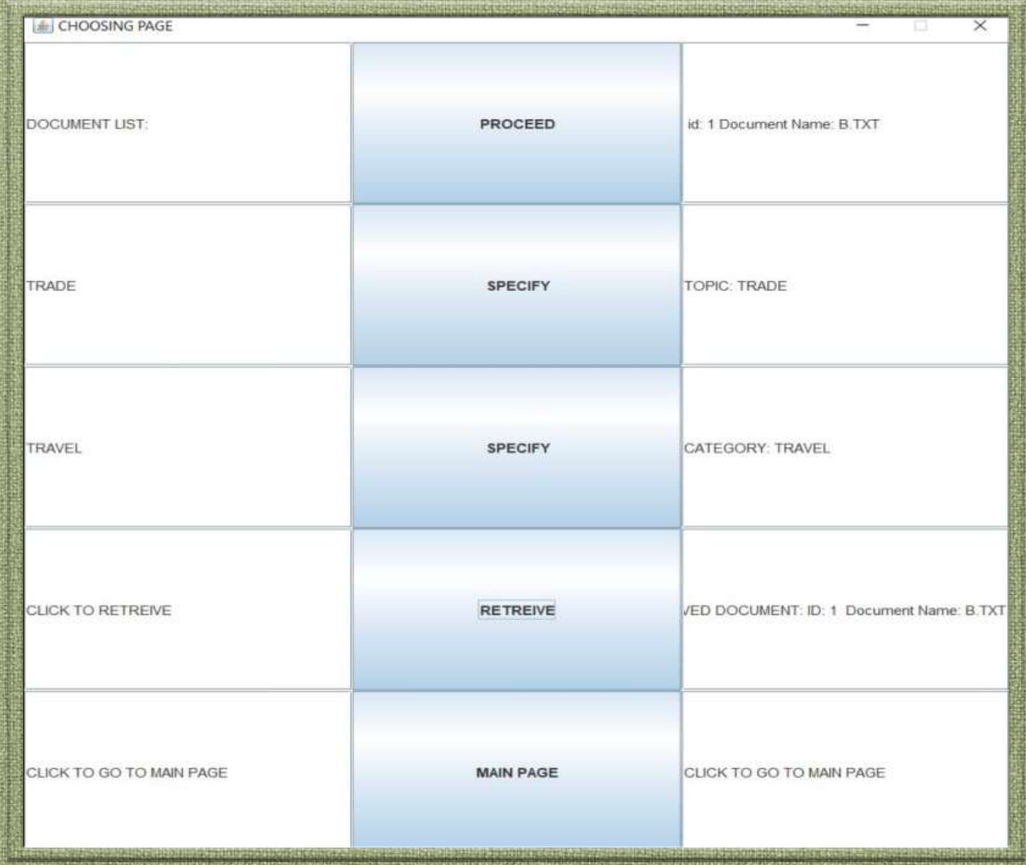




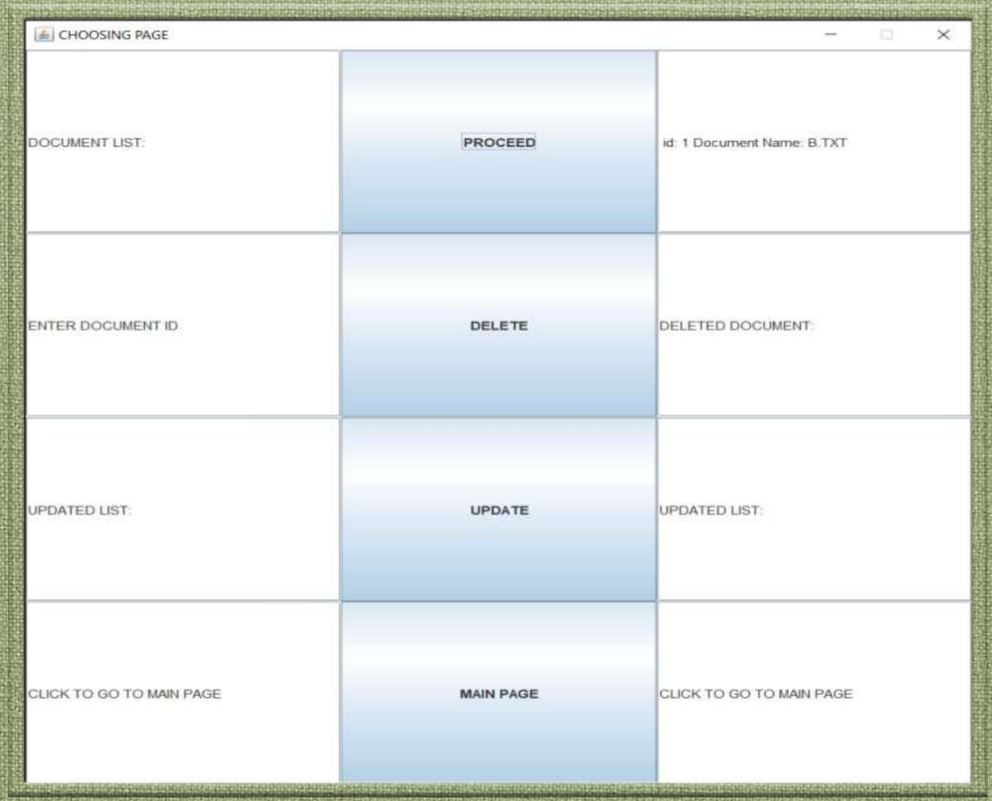
EDIT DOCUMENT

RETREIVE DOCUMENT





DELETE DOCUMENT



ADVANTAGES

1. DOCUMENT INPUT :

When it comes to document input, most of the businesses combine paper and digital files. The ideal Document Management System should allow inputting files trough the following sources:

- Email
- Bulk Upload
- Automated Process for Mass Uploading
- Web Services

2. DOCUMENT INDEXING :

Document indexing is the process of associating or tagging documents with different “search” terms. Indexing is a path to the documents. That path is based upon your business processes and your staff. An ideal Document Management System should provide:

- Indexing of all documents
- Custom Automatic Document Numbering
- Content recognition and indexing

3.DOCUMENT SEARCH,DIT,DELETE,RETREVE:

No matter what indices we use, the power of document indexing is revealed when we do a search later on. The document process engine should provide:

- Safe and Powerful
- Document content

4. DOCUMENT SECURITY :

Security is one of the most critical aspects of a document management system. The ideal software will provide a high level of documents encryption and role based access, as well as:

- Audit Trail
- User and Roles
- Advanced Access rights
- Encrypted Documents on file system

DISADVANTAGES

1. REDUCED STORAGE SPACE

Commercial property costs are increasing and so is the expense to store paper documents. A software-based DMS that can reduce the need for file cabinets, boxes, and storage bins is a valuable asset to any enterprise, freeing up precious office space. Documents that have to be kept as hard copies can often be stored in less expensive locations, such as an offsite warehouse or vault.

2. EASIER DOCUMENT RETRIEVAL

Searching for and retrieving documents can be very time-consuming - and we all know time is money. The typical office worker spends an estimated 30% to 40% of their day searching for printed documents while organizations on average spend $20 in labor to file a document, $120 in labor to find a misfiled document, and $220 in labor to reproduce a lost document. These unnecessary document management costs restrict an organization's budget, hamper productivity, and limit growth potential.

3. BETTER COLLABORATION

The ability to quickly access content and collaborate is greatly simplified with an advanced document management system. Documents captured from different sources can be accessed from multiple locations. Electronic imaging makes sharing documents over a network via email or the Internet possible. DMS provides greater visibility to business processes and can allow for better workflow monitoring. Authorized access by external users can be allowed and monitored.

4. BETTER BACKUP AND DISASTER RECOVERY

Any document management solution should include a data backup and disaster recovery plan. With digital archiving as a backup, paper documents are protected from fire and flood, and other disasters. With a DMS, documents are highly traceable and can be tracked using a range of criteria. Document tracking capabilities reduce the likelihood for documents to be lost or misfiled after viewing.

5. INCREASED PRODUCTIVITY

Time is valuable, and time saved is a definite benefit of DMS that often translates directly into increased productivity. Faster and more efficient document retrieval can boost staff morale and increase client satisfaction. Also, document management solutions are scalable to meet the changing needs of any enterprise. A comprehensive electronic document management system offers businesses a few intangible advantages including:

Flexibility Competitiveness Improved client relations Peace of mind

DISADVANTAGES

1. Dependency On Technology :
Digital era means relying heavily on technology. But what if one day,technology becomes a liability? With this in mind, organizations should also consider not having to depend too much on technology in case it becomes a problem in the future. Through our project we are increasing our dependencies on technology.

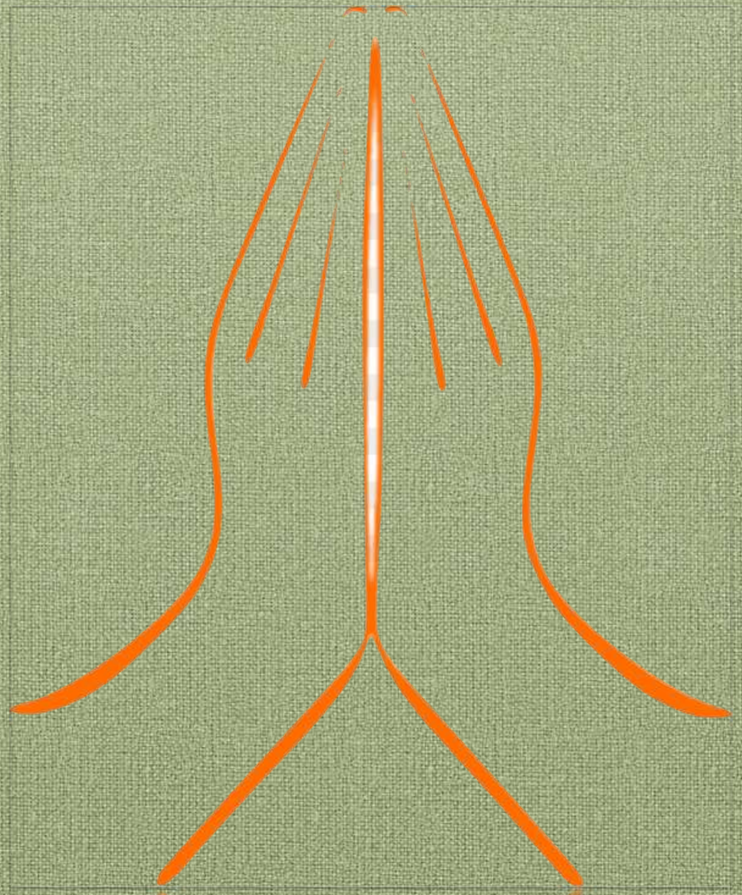
2. Security :
With information sharing as one of the project's features, there's always a possibility that the information handed might end up in the wrong hands. We have set up user login and password for security but it is enough.

3. Equipment Cost :
Whenever an organization decided to go paperless, a huge volume of data must be scanned. The hardware needed for this type of scanning service would need a substantial amount of money.

CONTRIBUTION

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

Sandarbh -ADD DOCUMENT
Dhruv- EDIT DOCUMENT,MAIN.java
Kushal - RETREIVE DOCUMENT &
DELETE DOCUMENT



THANK YOU