

**DIRE-DAWA UNIVERSITY**

**DEPARTMENT OF SOFTWARE ENGINEERING**

**File Management System for DDU 3rd-Year Software Students Documentation**

**NAME ID**

1. MUBARAK ALMAKEL 1501483
2. AWOL IBRAHIM 1500909
3. RUHAMA KASSAHUN 1501589
4. ETSUBDINK AREGA 1501106
5. ZUBEYR

Submitted to:Teacher Mulugeta

Submission date:30//2017 EC

**File Management System - Documentation**

**Project Title**

File Management System for DDU 3rd Year Software Engineering Students

**Objective**

This project is a console-based File Management System developed in Java. It helps students manage files securely based on user roles (Admin or Client). It implements Object-Oriented Programming (OOP) concepts.

**Core Features**

* Login system with role-based access (admin/client)
* File operations (Create, Read, Update, Delete)
* View all files
* About Us page
* Exception handling with custom exceptions
* Modular package structure

**OOP Concepts Implemented**

* Encapsulation
* Abstraction
* Extendable for Inheritance
* Exception Handling
* Modular Services

**Folder & File Structure**

src/

Main.java

ui/

LoginPage.java   
 AdminPage.java   
 ClientPage.java

AboutPage.java

model/   
 User.java   
 service/   
 FileService.java   
 utils/   
 AuthService.java   
 IncorrectPasswordException.java   
 UserNotFoundException.java

**File Management System - Documentation**

**User Roles & Access**

Admin:

* Create, Read, Update, Delete, View files Client:
* Read, View files

**Hardcoded Users**

users[0] = new User("jaffer", "jaffer123", "admin"); users[1] = new User("ruhama", "ruhama123", "admin"); users[2] = new User("awol", "awol123", "client");

**How the System Works**

1. Main.java runs and calls LoginPage.
2. LoginPage prompts user and verifies via AuthService.
3. If admin: goes to AdminPage (placeholder).
4. If client: goes to ClientPage with menu to View, Read, Update files.
5. AboutPage shows project details.
6. FileService handles file logic.

**Client Menu Sample Output**

==== CLIENT PAGE ====

1. View Files
2. About Us
3. Logout

4. Read File   
5. Update File Enter choice:

**File Management System - Documentation**

**About Us**

**Code Example - Read File**

public static void readFile() {   
Scanner scanner = new Scanner(System.in); System.out.print("Enter file name to read: "); String fileName = scanner.nextLine();

File file = new File(FILES\_DIR + fileName);

if (file.exists()) {   
 try {   
 BufferedReader reader = new BufferedReader(new FileReader(file));   
 String line;   
 System.out.println("--- File Content ---");   
 while ((line = reader.readLine()) != null) {   
 System.out.println(line);   
 }   
 reader.close();   
 } catch (IOException e) {   
 System.out.println("Error reading file.");   
 }   
 } else {   
 System.out.println("File not found.");   
 }   
}

**Technologies Used**

* Java SE
* IntelliJ
* java.io (File I/O)
* java.util.Scanner (User Input)

**File Management System - Documentation**

========== About Us ==========

File Management System for DDU 3rd Year Software Engineering Students Developed by: Mubarek, Awol, Etub, Ruhama, and Zubeyr from Group 1

Admin: Handles file operations   
Clients: Access and view shared files University: Dire Dawa University   
==============================

**Project Github link: <https://github.com/kevenmuba/java-File-managment-system.git>**