MAWLANA BHASHANI SCIENCE & TECHNOLOGY UNIVERSITY
SANTOSH TANGAIL

Project Report On

" Project Management System "

For The Course Of
" **Software Development Project - II** "

Developed by

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Under The Guidance Of

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Declaration

This is to certify that the candidate completed the work described in this project under the supervision of **Dr Md Ahsan Habib** at Department of Information and Communication Technology, Santosh, Tangail, Bangladesh. It is also stated that neither of these projects has been submitted to any other university or college for a degree or diploma. Information obtained from other people's published and unpublished work has been recognized in the text, along with a list of references.

Signature of Supervisor
Dr Md Ahsan Habib
Professor
Dept. of ICT,MBSTU

Acknowledgements

I owe it to Allah, the Almighty, to finish the dissertation. To begin, I'd like to thank my supervisor, Dr Md Ahsan Habib Sir, Professor, MBSTU's Department of Information and Communication Technology, for his help in continuing the Software Development Project-II. I'd also like to thank our supervisor for his invaluable advice and expertise, as well as his encouragement, support, and reliance throughout the project. However, it is impossible to adequately recognize our esteemed teacher's efforts in penning words.

As always, we owe our gratitude to our loved ones. Our parents' love and support continue to form the foundation of our lives.

Contents

Page No.

Cover Page---------- 01
Declaration---------- 02
Acknowledgements---------- 03

Chapter -1---------- 5
Introduction of project
Chapter – 2---------- 6-12
2.1- Java Programming Language
-- Features of Java Language
-- Advantage
-- Disadvantage
2.3 – IDE details

Chapter – 3 ---------- 13
4.1 -- Function Name & Details
Chapter – 4 ---------- 15-30
5.1 – Source Code
Chapter – 5 ---------- 35-40
6.1 – Output console
Chapter – 6 ---------- 41
7.1 – Conclusion
7.2 – Limitation
7.3 – Future Work
REFERENCES ---------- 42

Chapter – 1

Introduction of Project

The Project Management System aims to facilitate the tracking and management of software development projects undertaken by students and supervised by department teachers. It provides a centralized repository for project information, allowing easy access for all stakeholders.

The primary purpose of this system is to keep records and provide accessible information about all projects completed by students and supervised by department teachers. It streamlines project information retrieval and enhances collaboration among project teams.

The objective of this project is :

- Centralize project data for easy access.
- Enhance transparency and awareness of ongoing projects.
- Improve security through a login page.
- Provide search functionality for quick information retrieval.
- Facilitate user-friendly navigation.

Chapter - 2

2.1 - Programming Language

Programming Language :

As we know, to communicate with a person, we need a specific language, similarly to communicate with computers, programmers also need a language called Programming language.
Before learning the programming language, let's understand what language is?

What is Language?
Language is a mode of communication that is used to share ideas and opinions with each other. For example, if we want to teach someone, we need a language that is understandable by both communicators.

What is a Programming Language?
A programming language is a computer language that is used by programmers (developers) to communicate with computers. It is a set of instructions written in any specific language (C, C++, Java, Python) to perform a specific task.

A programming language is mainly used to develop desktop applications, websites, and mobile applications.

2.2 - Java Programming Language

Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. It is a general-purpose programming language intended to let programmers write once, run anywhere (WORA), meaning that compiled Java code can run on all platforms that support Java without the need to recompile

Most Important Features of Java Language:

- Simple
- Object-Oriented
- Portable
- Platform independent
- Secured
- Robust
- Architecture neutral
- Interpreted
- High Performance
- Multithreaded
- Distributed
- Dynamic

Advantages:

Advantages of JAVA :

- **Straightforward Java –**

  It is anything but difficult to program, compose, gather, investigate, and learn than elective programming dialects. Java might be a more modest sum convoluted than C++; therefore, Java utilizes programmed memory portion and trash assortment.

- **Item Oriented –**

  It grants you to make standard projects and reusable code.

- **Stage Independent Java code –**

  It runs on any machine that needn't bother with any unique programming to be introduced, however, the JVM should be available on the machine.

- **Java is a disseminated language –**

  Java is a dispersed language as it gives an instrument for dividing information and projects between numerous PCs that improve the presentation and proficiency of the framework. The RMI(Remote Method Invocation) is something that bolsters the dispersed handling in Java.

- **Secure Java –**

  It has no unequivocal pointer. Besides this, it is a security administrator that characterizes the entrance of classes.

- **Memory distribution –**

  In Java, memory is part into two sections one is stored and another is stack. At whatever point we pronounce a variable JVM gives memory from one or the other stack or pile space. It assists with remaining the information and reestablish it without any problem.

- **Multithreaded –**

  It is the potential for a program to perform numerous assignments simultaneously. at long last time showed up to become familiar with the ideas of Multithreading in Java.

- **Java gives Automatic Garbage Collection –**

  There is programmed memory for the executives in Java that is overseen by the Java Virtual Machine(JVM). At whatever point the articles are not utilized by programs any longer and they don’t allude to anything.

Disadvantages:

- **Execution Java language –**

  It is a more slow language when contrasted with different dialects as it is a memory burning-through language.

- **Look and Feel –**

  The default look of GUI applications written in Java utilizing the Swing toolbox is very not quite the same as local applications.

- **Memory Management –**

  In Java, Memory is overseen through trash pickup, at whatever point the refuse gatherer runs, it influences the exhibition of the apparatus. This is frequently in light of the fact that all different strings inside the require to be halted to allow the junk authority string to figure.

- **Java requires huge memory space –**

  Java requires a critical or significant measure of memory space when contrasted with different dialects like C and C++. During the execution of trash assortment, the memory productivity and the exhibition of the framework might be unfavorably influenced.

- **Verbose and Complex codes –**

  Java codes are verbose, implying that there are numerous words in them and there are numerous long and complex sentences that are hard to peruse and comprehend. This can decrease the meaningfulness of the code.

2.3 IDE details

Eclipse :

Eclipse is an integrated development environment (IDE) used in computer programming. It contains a base workspace and an extensible plug-in system for customizing the environment. It is the second-most-popular IDE for Java development, and, until 2016, was the most popular. Eclipse is written mostly in Java and its primary use is for developing Java applications, but it may also be used to develop applications in other programming languages via plug-ins, including Ada, ABAP, C, C++, C#, Clojure, COBOL, D, Erlang, Fortran, Groovy, Haskell, JavaScript, Julia, Lasso, Lua, NATURAL, Perl, PHP, Prolog, Python, R, Ruby (including Ruby on Rails framework), Rust, Scala, and Scheme. It can also be used to develop documents with LaTeX (via a TeXlipse plug-in) and packages for the software Mathematica. Development environments include the Eclipse Java development tools (JDT) for Java and Scala, Eclipse CDT for C/C++, and Eclipse PDT for PHP, among others.

Features

Eclipse supports multiple programming languages and boasts a rich ecosystem of plugins for customization. With a powerful code editor, integrated debugger, and seamless version control integration, Eclipse enhances productivity and facilitates efficient software development. Its robust refactoring tools, code templates, and debugging capabilities further streamline the coding process. Additionally, Eclipse accommodates web and mobile development, offers modeling and design tools, and supports unit testing frameworks. Its strong community and extensive documentation make it a go-to choice for developers worldwide.

Compilers

Eclipse includes its own built-in Java compiler. This compiler is known as the Eclipse Compiler for Java (ECJ). It is responsible for compiling Java source code into bytecode that can be executed by the Java Virtual Machine (JVM).

Code editor

Eclipse's code editor is a robust tool with features like syntax highlighting, code completion, and code folding, providing a user-friendly interface for writing and managing code. It offers advanced functionalities such as automated refactoring, quick fixes, and code navigation, enhancing productivity. The editor also supports version control integration, task tagging, and debugging capabilities, making it a comprehensive environment for software development. With customizable code formatting and templates, Eclipse streamlines the coding process and ensures consistent coding standards. Additionally, its multi-language support through plugins extends its versatility beyond Java, accommodating various programming needs.

Debugger

The Eclipse editor is a sophisticated Integrated Development Environment (IDE) component designed for writing, editing, and managing code across various programming languages. It offers a range of features including syntax highlighting, code completion, and code folding to enhance readability and ease of coding. The editor also provides tools for refactoring, code navigation, and debugging, streamlining the development process. Additionally, it supports version control integration, task management, and customizable code formatting, contributing to efficient and standardized coding practices. With its extensibility through plugins, the Eclipse editor caters to a wide array of programming languages and development needs.

Chapter – 3

Function Name & Details

`main(String[] args)`:
- This is the entry point of the program. It sets up the GUI for the login system.

`longin_s()` (Constructor):
- Initializes the login system by calling the `initialize()` method.

`initialize()`:
- Sets up the content of the frame (GUI components like labels, text fields, buttons, etc.).
- It defines the look and behavior of the login system.

Methods in `show` Class:

`main(String[] args)`:
- This is the entry point of the program. It sets up the GUI for the project management system.

`show()` (Constructor):
- Initializes the project management system by calling the `initialize()` method.

`initialize()`:
- Sets up the content of the frame for the project management system.
- Defines the look and behavior of the project management system.
- Includes buttons like "Display Data", "Clear", "Update", "Insert", and "Delete".

Action Listeners (Event Handlers):

- `btnshow.addActionListener(new ActionListener() {...})` (in `show` Class):
  - This sets up an action listener for the "Display Data" button.
  - When the button is clicked, it retrieves and displays data from the database.
- `btnNewButton.addActionListener(new ActionListener() {...})` (in `longin_s` Class):
  - This sets up an action listener for the "Login" button.
  - When clicked, it verifies the entered username and password and allows access if they match.
- `btnReset.addActionListener(new ActionListener() {...})` (in `longin_s` Class):
  - This sets up an action listener for the "Reset" button.
  - When clicked, it clears the username and password fields.
- `btnExit.addActionListener(new ActionListener() {...})` (in `longin_s` Class):
  - This sets up an action listener for the "Exit" button.
  - When clicked, it prompts the user for confirmation before exiting the application.
- `textFieldSearch.addActionListener(new ActionListener() {...})` (in `show` Class):
  - This sets up an action listener for the search text field.
  - When the user presses Enter, it triggers a search based on the selected criteria.

Additional Event Listeners:

- `textFieldSearch.addKeyListener(new KeyAdapter() {...})` (in `show` Class):
  - This adds a key listener to the search text field.
  - It allows for additional functionality when keys are pressed, although the code block is empty in this case.

Chapter – 4

4.1 – Source Code

Login Page :

```
package login_Sys;

import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JTextField;


import javax.swing.JPasswordField;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import java.awt.Font;
import javax.swing.ImageIcon;
import java.awt.Color;

public class longin_s {

	private JFrame frame;
	private JTextField txtUsername;
	private JPasswordField txtPassword;

	/**
	 * Launch the application.
	 */
	public static void main(String[] args) {
		EventQueue.invokeLater(new Runnable() {
			public void run() {
				try {
```

```
                                longin_s window = new longin_s();
                                window.frame.setVisible(true);
                            } catch (Exception e) {
                                e.printStackTrace();
                            }
                        }
                    });
        }

        /**
         * Create the application.
         */
        public longin_s() {
                initialize();
        }

        /**
         * Initialize the contents of the frame.
         */
        private void initialize() {
                frame = new JFrame();
                frame.setBounds(200, 200, 973, 717);
                frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                frame.getContentPane().setLayout(null);

                JLabel lblNewLabel = new JLabel("WELLCOME TO SOFTWARE
DEVELOPMENT PROJECT MANAGEMENT SYSTEM  ");
                lblNewLabel.setBounds(100, -16, 739, 90);
                lblNewLabel.setBackground(Color.WHITE);
                lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 18));
                frame.getContentPane().add(lblNewLabel);

                JLabel lblUsername = new JLabel("Username");
                lblUsername.setBounds(159, 101, 122, 13);
                lblUsername.setFont(new Font("Tahoma", Font.BOLD, 14));
                frame.getContentPane().add(lblUsername);

                JLabel lblPassword = new JLabel("Password");
                lblPassword.setBounds(159, 140, 122, 19);
                lblPassword.setFont(new Font("Tahoma", Font.BOLD, 14));
```

```
		frame.getContentPane().add(lblPassword);

		txtUsername = new JTextField();
		txtUsername.setBounds(272, 101, 195, 19);
		txtUsername.setFont(new Font("Tahoma", Font.BOLD, 14));
		frame.getContentPane().add(txtUsername);
		txtUsername.setColumns(10);

		txtPassword = new JPasswordField();
		txtPassword.setBounds(272, 140, 195, 19);
		txtPassword.setFont(new Font("Tahoma", Font.BOLD, 14));
		frame.getContentPane().add(txtPassword);

		JButton btnLogin = new JButton("Login");
		btnLogin.setBounds(182, 187, 99, 21);
		btnLogin.setBackground(Color.WHITE);
		btnLogin.setFont(new Font("Tahoma", Font.BOLD, 14));
		btnLogin.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {

				String password=txtPassword.getText();
				String username=txtUsername.getText();
				if(password.contains("12345")&&username.contains("ict")) {
					txtPassword.setText(null);
					txtUsername.setText(null);

					//new page;
					//show info=new show();
					show.main(null);

				}else {
					JOptionPane.showMessageDialog(null, "Invalid Login
Details","Login Error",JOptionPane.ERROR_MESSAGE);

					txtPassword.setText(null);
					txtUsername.setText(null);
				}


			}
```

```
		});
		frame.getContentPane().add(btnLogin);

		JButton btnReset = new JButton("Reset");
		btnReset.setBounds(301, 186, 85, 23);
		btnReset.setBackground(Color.WHITE);
		btnReset.setFont(new Font("Tahoma", Font.BOLD, 14));
		btnReset.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {

				txtUsername.setText(null);
				txtPassword.setText(null);
			}
		});
		frame.getContentPane().add(btnReset);

		JButton btnExit = new JButton("Exit");
		btnExit.setBounds(411, 187, 85, 21);
		btnExit.setBackground(Color.WHITE);
		btnExit.setFont(new Font("Tahoma", Font.BOLD, 14));
		btnExit.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {
				frame=new JFrame("Exit");
				if(JOptionPane.showConfirmDialog(frame, "confirm if you
want to exit","Login
System",JOptionPane.YES_NO_OPTION)==JOptionPane.YES_NO_OPTION) {
					System.exit(0);
				}
			}
		});
		frame.getContentPane().add(btnExit);

		JLabel lblNewLabel_1 = new JLabel("Supervised By Dr.Md.Ahsan
Habib");
		lblNewLabel_1.setBounds(10, 641, 215, 13);
		frame.getContentPane().add(lblNewLabel_1);

		JLabel lblNewLabel_2 = new JLabel("Developed By Anik
Sarker(IT20013),Nazir Hossain(IT20055)");
		lblNewLabel_2.setBounds(610, 641, 339, 13);
```

```
                frame.getContentPane().add(lblNewLabel_2);

                JLabel lblNewLabel_3 = new JLabel("");
                lblNewLabel_3.setIcon(new
ImageIcon("C:\\Users\\Lenovo\\Downloads\\nazir1.jpg"));
                lblNewLabel_3.setBounds(0, 0, 949, 668);
                frame.getContentPane().add(lblNewLabel_3);
        }
}
```

Main Body Code :

```
package jtbledm;

import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JButton;
import java.awt.Font;
import javax.swing.JTable;
import javax.swing.table.DefaultTableModel;
import javax.swing.JScrollPane;
import java.awt.event.ActionListener;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.ResultSetMetaData;
import java.sql.SQLException;
import java.sql.Statement;
import java.awt.event.ActionEvent;
import javax.swing.JTextField;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import javax.swing.JComboBox;
import javax.swing.DefaultComboBoxModel;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import java.awt.Color;
```

```
import javax.swing.ImageIcon;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;

public class show {

	private JFrame frame;
	private JTable table;
	private JTextField textFieldSearch;
private JComboBox comboBoxSelection;
private JTextField Sl_no;
private JTextField Student_ID;
private JTextField Student_Name;
private JTextField Supervisor_Name;
private JTextField Group_;
private JTextField Project_Name;


	/**
	 * Launch the application.
	 */
	public static void main(String[] args) {
		EventQueue.invokeLater(new Runnable() {
			public void run() {
				try {
					show window = new show();
					window.frame.setVisible(true);
				} catch (Exception e) {
					e.printStackTrace();
				}
			}
		});
	}

	/**
	 * Create the application.
	 */
	public show() {
		initialize();
	}
```

```
	/**
	 * Initialize the contents of the frame.
	 */
	private void initialize() {
		frame = new JFrame();
		frame.setBounds(100, 100, 1362, 704);
		frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

		JButton btnshow = new JButton("Display Data");
		btnshow.setBounds(63, 452, 157, 36);
		btnshow.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {
				try {
					Class.forName("com.mysql.cj.jdbc.Driver");
					try {
						Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/finalproject","root","123
45");
						Statement st=con.createStatement();
						String query="select * from student";
					ResultSet rs=st.executeQuery(query);
					ResultSetMetaData rsmd=rs.getMetaData();

					DefaultTableModel model=(DefaultTableModel)
table.getModel();

					int cols=rsmd.getColumnCount();
					String[] colName=new String[cols];
					for(int i=0;i<cols;i++)
						colName[i]=rsmd.getColumnName(i+1);
					model.setColumnIdentifiers(colName);
					String sid,gr,stid,stn,prna,sn;
					while(rs.next()) {
						sid=rs.getString(1);
						gr=rs.getString(2);
						stid=rs.getString(3);
						stn=rs.getString(4);
						prna=rs.getString(5);
						sn=rs.getString(6);
```

```
                        String[] row= {sid,gr,stid,stn,prna,sn};
                        model.addRow(row);
                    }
                    st.close();
                    con.close();


                    } catch (SQLException e1) {
                        // TODO Auto-generated catch block
                        e1.printStackTrace();
                    }

                } catch (ClassNotFoundException e1) {
                    // TODO Auto-generated catch block
                    e1.printStackTrace();
                }


        }
});
frame.getContentPane().setLayout(null);
btnshow.setFont(new Font("Tahoma", Font.BOLD, 18));
frame.getContentPane().add(btnshow);

JScrollPane scrollPane = new JScrollPane();
scrollPane.setBounds(412, 98, 926, 467);
frame.getContentPane().add(scrollPane);

table = new JTable();
scrollPane.setViewportView(table);

JButton btnNewButton = new JButton("Clear");
btnNewButton.setBounds(63, 515, 105, 36);
btnNewButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        table.setModel(new DefaultTableModel());
    }
});
btnNewButton.setFont(new Font("Tahoma", Font.BOLD, 18));
frame.getContentPane().add(btnNewButton);
```

```
		textFieldSearch = new JTextField();
		textFieldSearch.addActionListener(new ActionListener() {
			public void actionPerformed(ActionEvent e) {

				try {
					Class.forName("com.mysql.cj.jdbc.Driver");
					try {
						String
selection=(String)comboBoxSelection.getSelectedItem();
						Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/finalproject","root","123
45");
						Statement st=con.createStatement();
						String query="select * from student where
"+selection+"=?";
						PreparedStatement
pst=con.prepareStatement(query);
						pst.setString(1,textFieldSearch.getText());
					ResultSet rs=pst.executeQuery();
					ResultSetMetaData rsmd=rs.getMetaData();

					DefaultTableModel model=(DefaultTableModel)
table.getModel();

					int cols=rsmd.getColumnCount();
					String[] colName=new String[cols];
					for(int i=0;i<cols;i++)
						colName[i]=rsmd.getColumnName(i+1);
					model.setColumnIdentifiers(colName);
					String sid,gr,stid,stn,prna,sn;
					while(rs.next()) {
						sid=rs.getString(1);
						gr=rs.getString(2);
						stid=rs.getString(3);
						stn=rs.getString(4);
						prna=rs.getString(5);
						sn=rs.getString(6);
						String[] row= {sid,gr,stid,stn,prna,sn};
						model.addRow(row);
```

```
                                }
                                st.close();
                                con.close();


                                } catch (SQLException e1) {
                                        // TODO Auto-generated catch block
                                        e1.printStackTrace();
                                }

                        } catch (ClassNotFoundException e1) {
                                // TODO Auto-generated catch block
                                e1.printStackTrace();
                        }

                }

        });

        textFieldSearch.setBounds(936, 26, 206, 42);
        textFieldSearch.addKeyListener(new KeyAdapter() {



        });
        frame.getContentPane().add(textFieldSearch);
        textFieldSearch.setColumns(10);

         comboBoxSelection = new JComboBox();
         comboBoxSelection.setBounds(743, 26, 168, 42);
         comboBoxSelection.setFont(new Font("Tahoma", Font.BOLD, 14));
        comboBoxSelection.setModel(new DefaultComboBoxModel(new String[]
{"SID_No", "Group_", "Student_ID"}));
        frame.getContentPane().add(comboBoxSelection);

        JLabel lblNewLabel = new JLabel("SID_No");
        lblNewLabel.setBounds(74, 117, 85, 21);
        lblNewLabel.setFont(new Font("Tahoma", Font.BOLD, 19));
        frame.getContentPane().add(lblNewLabel);
```

```
JLabel lblNewLabel_1 = new JLabel("Student_ID");
lblNewLabel_1.setBounds(25, 204, 116, 24);
lblNewLabel_1.setFont(new Font("Tahoma", Font.BOLD, 19));
frame.getContentPane().add(lblNewLabel_1);

JLabel lblNewLabel_2 = new JLabel("Student_Name");
lblNewLabel_2.setBounds(25, 249, 152, 24);
lblNewLabel_2.setFont(new Font("Tahoma", Font.BOLD, 19));
frame.getContentPane().add(lblNewLabel_2);

JLabel lblNewLabel_3 = new JLabel("Supervisor_Name");
lblNewLabel_3.setBounds(10, 328, 179, 36);
lblNewLabel_3.setFont(new Font("Tahoma", Font.BOLD, 19));
frame.getContentPane().add(lblNewLabel_3);

Sl_no = new JTextField();
Sl_no.setBounds(187, 113, 173, 29);
Sl_no.setFont(new Font("Tahoma", Font.BOLD, 19));
frame.getContentPane().add(Sl_no);
Sl_no.setColumns(10);

Student_ID = new JTextField();
Student_ID.setBounds(187, 199, 173, 36);
Student_ID.setFont(new Font("Tahoma", Font.BOLD, 19));
frame.getContentPane().add(Student_ID);
Student_ID.setColumns(10);

Student_Name = new JTextField();
Student_Name.setBounds(187, 244, 173, 36);
Student_Name.setFont(new Font("Tahoma", Font.BOLD, 19));
frame.getContentPane().add(Student_Name);
Student_Name.setColumns(10);

Supervisor_Name = new JTextField();
Supervisor_Name.setBounds(187, 332, 173, 29);
Supervisor_Name.setFont(new Font("Tahoma", Font.BOLD, 19));
frame.getContentPane().add(Supervisor_Name);
Supervisor_Name.setColumns(10);

JButton btnNewButton_1 = new JButton("Update ");
```

```
btnNewButton_1.setBounds(148, 390, 116, 21);
btnNewButton_1.setFont(new Font("Tahoma", Font.BOLD, 18));
btnNewButton_1.addActionListener(new ActionListener() {
	public void actionPerformed(ActionEvent e) {
		try {
			Class.forName("com.mysql.cj.jdbc.Driver");
			try {

				Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/finalproject","root","123
45");
				//Statement st=con.createStatement();
				String query="update student set
SID_No='"+SI_no.getText()+"',Group_='"+Group_.getText()
+"',Student_ID='"+Student_ID.getText()+"',Student_Name='"+Student_Name.getText()+"
',Project_Name='"+Project_Name.getText()+"',Supervisor_Name='"+Supervisor_Name.g
etText()+"' where Student_ID='"+Student_ID.getText()+"' ";
				PreparedStatement
pst=con.prepareStatement(query);

				pst.executeUpdate();
				JOptionPane.showMessageDialog( null, "Data
Update Successfully","Message",JOptionPane.NO_OPTION);

				pst.close();


			} catch (SQLException e1) {
				// TODO Auto-generated catch block
				e1.printStackTrace();
				JOptionPane.showInputDialog(null, "Data NOT
Update","Message",JOptionPane.ERROR_MESSAGE);
			}

		} catch (ClassNotFoundException e1) {
			// TODO Auto-generated catch block
			e1.printStackTrace();
			JOptionPane.showInputDialog(null, "Data NOT
Update","Message",JOptionPane.ERROR_MESSAGE);
		}
```

```
		}


	});
	frame.getContentPane().add(btnNewButton_1);

	JButton btnNewButton_2 = new JButton("Insert");
	btnNewButton_2.setBounds(25, 390, 116, 21);
	btnNewButton_2.addActionListener(new ActionListener() {
		public void actionPerformed(ActionEvent e) {
			try {
				Class.forName("com.mysql.cj.jdbc.Driver");
				try {

					Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/finalproject","root","123
45");

					String query="insert into student
values(?,?,?,?,?,?)";
					PreparedStatement
pst=con.prepareStatement(query);
					pst.setString(1,Sl_no.getText());
					pst.setString(2,Group_.getText());
					pst.setString(3, Student_ID.getText());
					pst.setString(4, Student_Name.getText());
					pst.setString(5, Project_Name.getText());
					pst.setString(6, Supervisor_Name.getText());
					pst.executeUpdate();
					JOptionPane.showMessageDialog( null, "Data
Stored Successfully","Message",JOptionPane.NO_OPTION);

					con.close();


				} catch (SQLException e1) {
					// TODO Auto-generated catch block
					e1.printStackTrace();
```

```
                                        JOptionPane.showInputDialog(null, "Data NOT
Stored","Message",JOptionPane.ERROR_MESSAGE);
                                }

                        } catch (ClassNotFoundException e1) {
                                // TODO Auto-generated catch block
                                e1.printStackTrace();
                                JOptionPane.showInputDialog(null, "Data NOT
Stored","Message",JOptionPane.ERROR_MESSAGE);
                        }


                }



        });
        btnNewButton_2.setFont(new Font("Tahoma", Font.BOLD, 18));
        frame.getContentPane().add(btnNewButton_2);

        JButton btnNewButton_3 = new JButton("Delete");
        btnNewButton_3.setBounds(273, 390, 129, 21);
        btnNewButton_3.addActionListener(new ActionListener() {
                public void actionPerformed(ActionEvent e) {


                        try {
                                Class.forName("com.mysql.cj.jdbc.Driver");
                                try {

                                        Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/finalproject","root","123
45");

                                        //String query="delete from student where
Group_='"+Group_.getText()+"'";
                                        String query="delete from student where
Student_ID='"+Student_ID.getText()+"'";
```

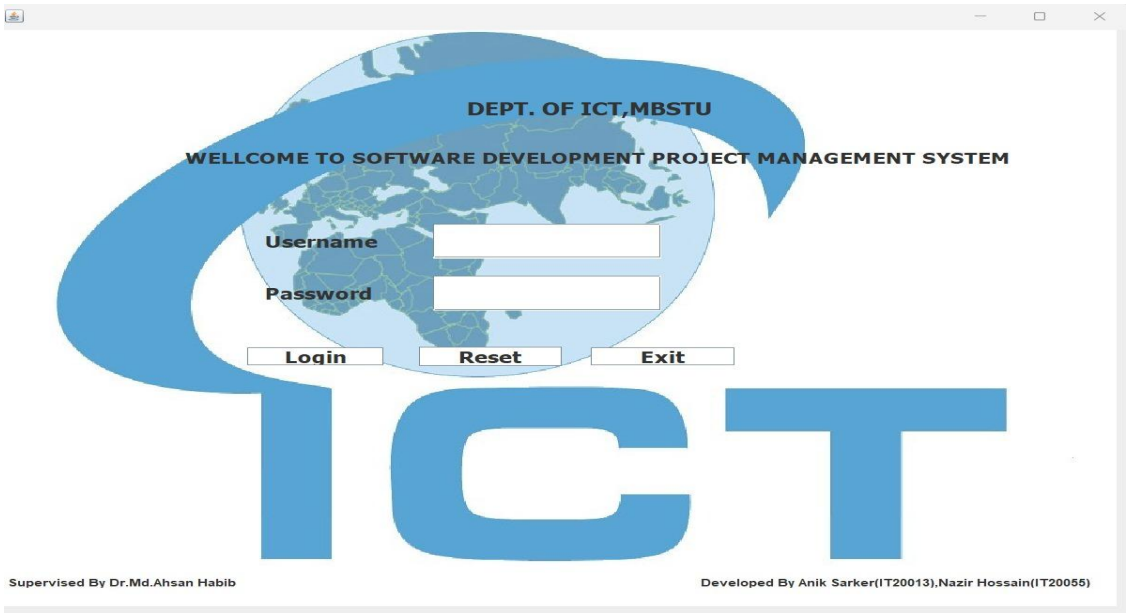
```
                                        PreparedStatement
pst=con.prepareStatement(query);

                                        pst.executeUpdate();
                                        JOptionPane.showMessageDialog( null, "Data
Delete Successfully","Message",JOptionPane.NO_OPTION);

                                        pst.close();


                                } catch (SQLException e1) {
                                        // TODO Auto-generated catch block
                                        e1.printStackTrace();
                                        JOptionPane.showInputDialog(null, "Data NOT
Delete","Message",JOptionPane.ERROR_MESSAGE);
                                }

                        } catch (ClassNotFoundException e1) {
                                // TODO Auto-generated catch block
                                e1.printStackTrace();
                                JOptionPane.showInputDialog(null, "Data NOT
Delete","Message",JOptionPane.ERROR_MESSAGE);
                        }



                }
        });
        btnNewButton_3.setFont(new Font("Tahoma", Font.BOLD, 18));
        frame.getContentPane().add(btnNewButton_3);

        JLabel lblNewLabel_4 = new JLabel("STUDENT INFORMATION");
        lblNewLabel_4.setBounds(409, 10, 282, 42);
        lblNewLabel_4.setFont(new Font("Tahoma", Font.BOLD, 20));
        frame.getContentPane().add(lblNewLabel_4);

        JLabel lblNewLabel_5 = new JLabel("Group");
        lblNewLabel_5.setBounds(74, 162, 67, 23);
        lblNewLabel_5.setFont(new Font("Tahoma", Font.BOLD, 19));
        frame.getContentPane().add(lblNewLabel_5);
```

```
        Group_ = new JTextField();
        Group_.setBounds(187, 158, 173, 31);
        Group_.setFont(new Font("Tahoma", Font.BOLD, 19));
        frame.getContentPane().add(Group_);
        Group_.setColumns(10);

        JLabel lblNewLabel_6 = new JLabel("Project Name");
        lblNewLabel_6.setBounds(25, 294, 134, 24);
        lblNewLabel_6.setFont(new Font("Tahoma", Font.BOLD, 19));
        frame.getContentPane().add(lblNewLabel_6);

        Project_Name = new JTextField();
        Project_Name.setBounds(187, 289, 173, 33);
        Project_Name.setFont(new Font("Tahoma", Font.BOLD, 19));
        frame.getContentPane().add(Project_Name);
        Project_Name.setColumns(10);

        //refreshtable();
}}
```

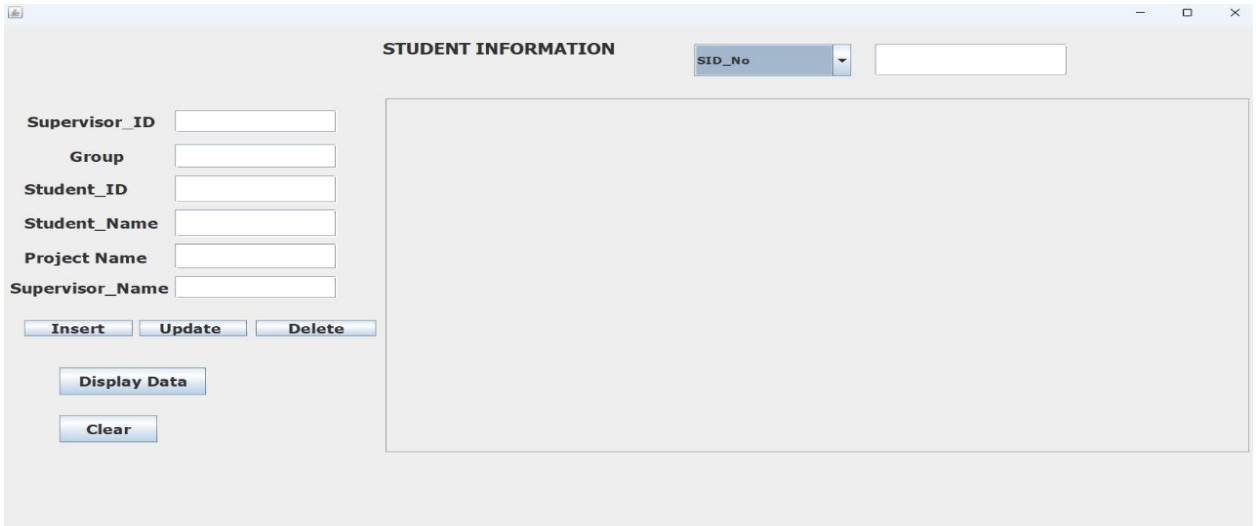
Chapter – 5

Output

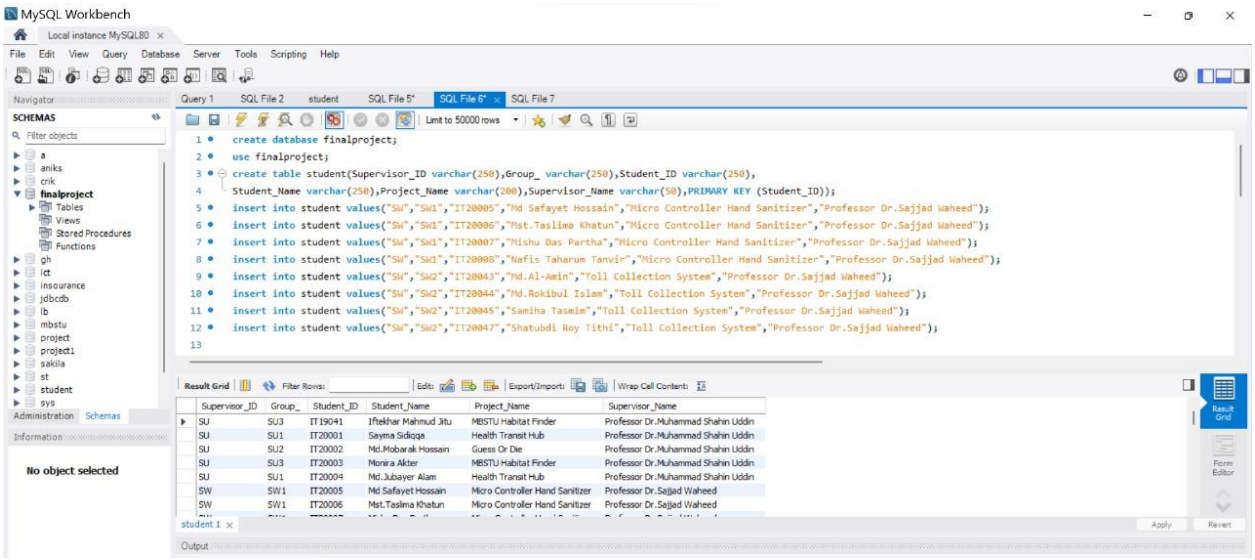
Login Page :



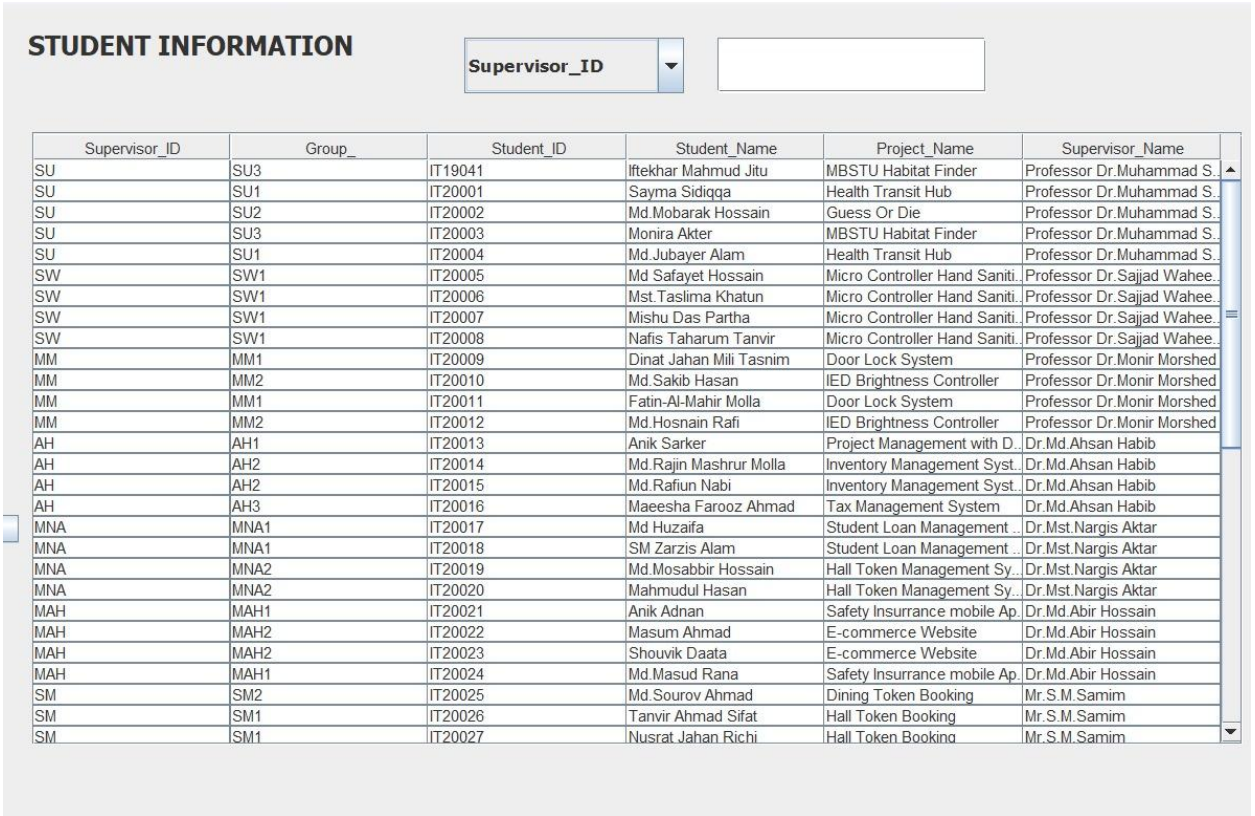
Main Page :



Sql :



Entire Database :

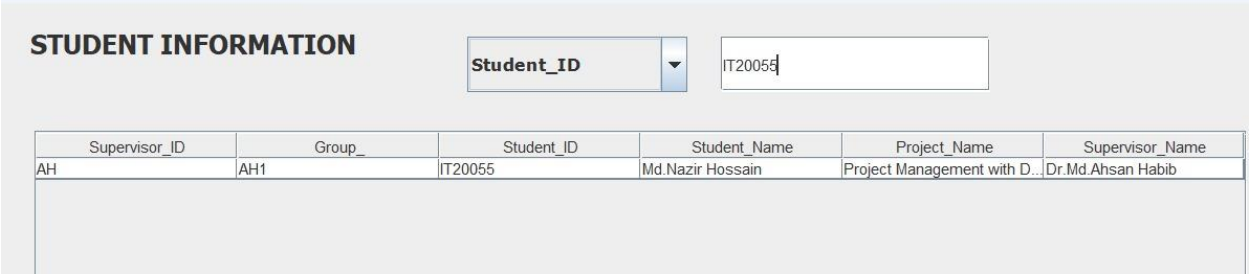


STUDENT INFORMATION

Supervisor_ID

Supervisor_ID	Group_	Student_ID	Student_Name	Project_Name	Supervisor_Name
SU	SU3	IT19041	Iftekhar Mahmud Jitu	MBSTU Habitat Finder	Professor Dr.Muhammad S..
SU	SU1	IT20001	Sayma Sidiqqa	Health Transit Hub	Professor Dr.Muhammad S..
SU	SU2	IT20002	Md.Mobarak Hossain	Guess Or Die	Professor Dr.Muhammad S..
SU	SU3	IT20003	Monira Akter	MBSTU Habitat Finder	Professor Dr.Muhammad S..
SU	SU1	IT20004	Md.Jubayer Alam	Health Transit Hub	Professor Dr.Muhammad S..
SW	SW1	IT20005	Md Safayet Hossain	Micro Controller Hand Saniti..	Professor Dr.Sajjad Wahee..
SW	SW1	IT20006	Mst.Taslima Khatun	Micro Controller Hand Saniti..	Professor Dr.Sajjad Wahee..
SW	SW1	IT20007	Mishu Das Partha	Micro Controller Hand Saniti..	Professor Dr.Sajjad Wahee..
SW	SW1	IT20008	Nafis Taharum Tanvir	Micro Controller Hand Saniti..	Professor Dr.Sajjad Wahee..
MM	MM1	IT20009	Dinat Jahan Mili Tasnim	Door Lock System	Professor Dr.Monir Morshed
MM	MM2	IT20010	Md.Sakib Hasan	IED Brightness Controller	Professor Dr.Monir Morshed
MM	MM1	IT20011	Fatin-Al-Mahir Molla	Door Lock System	Professor Dr.Monir Morshed
MM	MM2	IT20012	Md.Hosnain Rafi	IED Brightness Controller	Professor Dr.Monir Morshed
AH	AH1	IT20013	Anik Sarker	Project Management with D..	Dr.Md.Ahsan Habib
AH	AH2	IT20014	Md.Rajin Mashrur Molla	Inventory Management Syst..	Dr.Md.Ahsan Habib
AH	AH2	IT20015	Md.Rafiun Nabi	Inventory Management Syst..	Dr.Md.Ahsan Habib
AH	AH3	IT20016	Maeesha Farooz Ahmad	Tax Management System	Dr.Md.Ahsan Habib
MNA	MNA1	IT20017	Md Huzaifa	Student Loan Management ..	Dr.Mst.Nargis Aktar
MNA	MNA1	IT20018	SM Zarzis Alam	Student Loan Management ..	Dr.Mst.Nargis Aktar
MNA	MNA2	IT20019	Md.Mosabbir Hossain	Hall Token Management Sy..	Dr.Mst.Nargis Aktar
MNA	MNA2	IT20020	Mahmudul Hasan	Hall Token Management Sy..	Dr.Mst.Nargis Aktar
MAH	MAH1	IT20021	Anik Adnan	Safety Insurrance mobile Ap..	Dr.Md.Abir Hossain
MAH	MAH2	IT20022	Masum Ahmad	E-commerce Website	Dr.Md.Abir Hossain
MAH	MAH2	IT20023	Shouvik Daata	E-commerce Website	Dr.Md.Abir Hossain
MAH	MAH1	IT20024	Md.Masud Rana	Safety Insurrance mobile Ap..	Dr.Md.Abir Hossain
SM	SM2	IT20025	Md.Sourov Ahmad	Dining Token Booking	Mr.S.M.Samim
SM	SM1	IT20026	Tanvir Ahmad Sifat	Hall Token Booking	Mr.S.M.Samim
SM	SM1	IT20027	Nusrat Jahan Richi	Hall Token Booking	Mr.S.M.Samim

Search By Student Id :

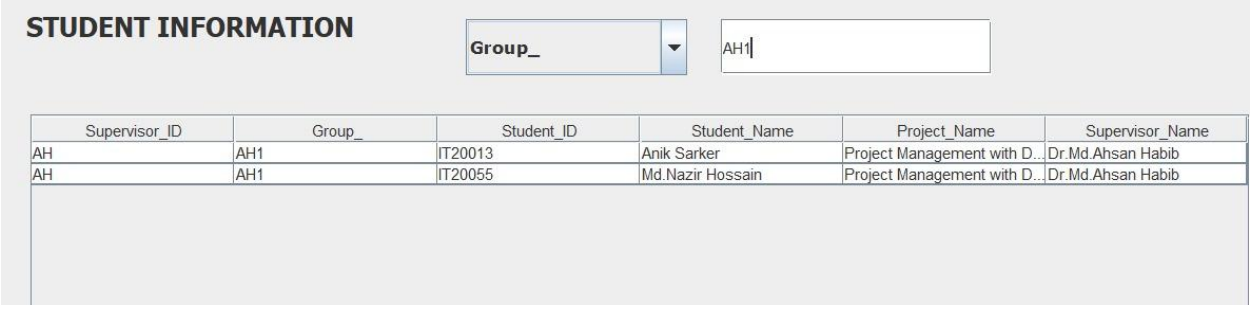


Supervisor_ID	Group_	Student_ID	Student_Name	Project_Name	Supervisor_Name
AH	AH1	IT20055	Md.Nazir Hossain	Project Management with D...	Dr.Md.Ahsan Habib

Search By Supervisor :

Supervisor_ID	Group_	Student_ID	Student_Name	Project_Name	Supervisor_Name
AH	AH1	IT20013	Anik Sarker	Project Management with D...	Dr.Md.Ahsan Habib
AH	AH2	IT20014	Md.Rajin Mashrur Molla	Inventory Management Syst...	Dr.Md.Ahsan Habib
AH	AH2	IT20015	Md.Rafiun Nabi	Inventory Management Syst...	Dr.Md.Ahsan Habib
AH	AH3	IT20016	Maeesha Farooz Ahmad	Tax Management System	Dr.Md.Ahsan Habib
AH	AH3	IT20052	Tanvir Mahfuz Apurbo	Tax Management System	Dr.Md.Ahsan Habib
AH	AH4	IT20053	Shafiul Islam	Food Nutrition System	Dr.Md.Ahsan Habib
AH	AH4	IT20054	Sifat Ullah	Food Nutrition System	Dr.Md.Ahsan Habib
AH	AH1	IT20055	Md.Nazir Hossain	Project Management with D...	Dr.Md.Ahsan Habib

Search By Group :



Supervisor_ID	Group_	Student_ID	Student_Name	Project_Name	Supervisor_Name
AH	AH1	IT20013	Anik Sarker	Project Management with D...	Dr.Md.Ahsan Habib
AH	AH1	IT20055	Md.Nazir Hossain	Project Management with D...	Dr.Md.Ahsan Habib

Chapter – 6

6.1 – Conclusion

The Project Management System successfully achieves its objectives by centralizing project information and providing a secure, user-friendly platform for accessing and managing project records. With future enhancements, it will further enhance the project management experience for all stakeholders.

6.2 – Limitation

The system's extensive feature set and capabilities may lead to increased resource utilization, potentially causing slower performance on less powerful hardware, particularly when handling larger datasets or complex queries.For novice users or those unfamiliar with the system, there may be a steep learning curve to fully grasp all of its functionalities.While the system is designed to be versatile, its primary strength lies in Java development. Support for other programming languages may not be as extensive, potentially limiting its effectiveness for projects in non-Java environments.

6.3 – Future work

- **Additional Project Information**: Include more detailed information about each project, such as project description, milestones, and progress updates.
- **Enhanced Graphics**: Incorporate more visuals and details about individual projects to provide a richer user experience.
- **User-Friendly Interface**: Continue to refine the system for ease of use, making it accessible to individuals without prior technical knowledge.

Reference

1.About Programming Language

Available Link: https://www.javatpoint.com/programming-language

2.About Java Programming Language

Available Link: https://www.w3schools.com/java/java_intro.asp

3. About Java Swing

Available Link : https://www.javatpoint.com/java-swing

4. Project Idea

Available Link :
https://youtu.be/DLJCxmW1M4s?si=iXucixYrvOCgd2kG
https://youtu.be/1xF_PFJLs4g?si=MbhO7z6SUQ0r_cO9