

A
MICRO-PROJECT REPORT ON
‘ADVANCE JAVA PROGRAMMING (AJP - 22517)’

SUBMITTED

BY

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Under Guidance of:

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Diploma Course in Computer Engineering

(As per the directives of I scheme)



**Gramin Technical And Management Campus Vishnupuri,
Nanded (431606).**

ACADEMIC YEAR: 2021 – 2022



Maharashtra State
Board of technical Education
Certificate

This is to certify that **Mr. Lomte Suyash Suhas** with Roll No. **42** of **Fifth Semester of Diploma in Computer Engineering** of Institute **Gramin Technical & Management Campus Vishnupuri, Nanded** (Code : **0069**) has successfully completed the **Micro-Project** in **Advanced Java Programming (22517)** for the academic year 2021-2022.

Place: GPVN, Nanded

Enrollment No: 1800690216

Date:

Mr. Pramod
Maske
Subject Teacher

Mr. Pramod Maske
Head of the Department

Dr. Vijay Pawar
Principal



Maharashtra State
Board of technical Education
Certificate

This is to certify that **Mr. Sharma Kaushal Gopal** with Roll No. **59** of **Fifth Semester of Diploma in Computer Engineering** of Institute **Gramin Technical & Management Campus Vishnupuri, Nanded** (Code : **0069**) has successfully completed the **Micro-Project** in **Advanced Java Programming (22517)** for the academic year 2021-2022.

Place: GPVN, Nanded

Enrollment No: 1800690179

Date:

Mr. Pramod
Maske
Subject Teacher

Mr. Pramod Maske
Head of the Department

Dr. Vijay Pawar
Principal

MICRO-PROJECT NAME: CREATE NOTEPAD

Introduction

A text editor is a program used for editing plain files and often provided with operating system or software development packages, it can be used to change configuration files and programming language source code. If the file contains special formatting or not plaintext files, it will not be able to be read Microsoft Notepad. To access notepad, users should have proper access rights. One of the simplest and most convenient security mechanisms is the use of a password authentication scheme, where each user should have an Username and a password (PW). When a user wants to login to the notepad, he/she has to submit his/her username and Password to the program. If the submitted username and PW match the corresponding pair stored in the database password table, the user will be granted to access the program.

Notepad

Notepad is a text editor included with Windows operating system, which allows users to open and create text files and write several paragraphs of text using line breaks (by pressing the Enter key), the program does not have text formatting options. For example, the user cannot change the font size or make the text bold.

Notepad is a good choice for creating web pages (HTML, JavaScript, PHP documents) and writing scripts or basic computer programs since these types of documents do not require any text formatting. It is also useful for removing formatting from text that you have copied and want to paste somewhere else as plain text. Just paste the text into Notepad, copy it again from Notepad, and you have completely unformatted text.

Features of Notepad

1. Minimal editing features.
2. It has word wrap which prevents text from running over into the margins and automatically moves text to the next line.
3. Used to create/save/open/edit file.
4. Can create time log.
5. Within Notepad – cut, copy, and paste text.
6. Copy data to Notepad from other files.
7. Copy Notepad text to other word processing text or database document.

Password Authentication

To design secure notepad, password authentication was proposed. A password is

a secret word or phrase that gives a user access to computer resources such as programs, files, messages, internet, etc. the password assists in ensuring that unauthorized user do not access a restricted resources. Authentication Methods Based on Password Conventional Password Scheme is an old and most widely used password scheme. In this scheme the user enters or logs in into the system through his username and password. The system first authenticates the user from

the user database and on the basis of authentication of the user and then grants the access to the system is granted.

For notepad system the following options have been implemented:

1. File menu: contain (new, open, save, print, and exit)
2. Edit menu: contain (cut, copy, paste, select all)
3. Help menu: contain some instructions about using notepad.

Login Page

This page is used for the login operation. When the user enters his/her name and password, a checking will make with the members database, if the information is

correct the user is activated and the login will complete successfully.

Conclusions

This paper concerned with the development of a secure text editor, which enable

an administrator to watch log file.

Following tasks are accomplished:-

- ☐ Make the login design form includes Username and Password.
- ☐ Connect this login to spatial notepad system.
- ☐ Open any folder or file selected from any partition in the computer.
- ☐ Save the notepad page in any partition we selected from the computer.
- ☐ Cut, copy, paste, select all text of the notepad program.

Login page Code:

```
import java.awt.*;
import javax.swing.*;
import org.w3c.dom.Text;
import java.awt.event.*;
import java.sql.*;
public class loginpage implements ActionListener
{
    JTextField txun;
    JTextField txps;
    loginpage()
    {
        JFrame f= new JFrame();
        JLabel un= new JLabel("Username");
        un.setBounds(100,100,80,20);
        f.add(un);
        JLabel ps= new JLabel("Password");
        ps.setBounds(100,150,80,20);
        f.add(ps);
        txun= new JTextField();
        txun.setBounds(200,100,100,30);
        f.add(txun);
        txps= new JTextField();
        txps.setBounds(200,150,100,30);
        f.add(txps);
        JButton log= new JButton("Login");
        log.setBounds(150,200,80,30);
        f.add(log);
        log.addActionListener(this);
        JButton cancel= new JButton("Cancel");
        cancel.setBounds(250,200,80,30);
        f.add(cancel);
        cancel.addActionListener(this);
        f.setSize(400,400);
        f.setLayout(null);
        f.setVisible(true);
    }
    public void actionPerformed(ActionEvent e)
    {
        if(e.getActionCommand().equals("Cancel"))
        {
            System.exit(0);
        }
    }
    String url="jdbc:sqlite:C:/sqlite3/db/logininfo.db";
    try
```

```

{
Connection conn= DriverManager.getConnection(url);
Statement stmt=conn.createStatement();
String sql="Select * from information where
username='"+txun.getText()+"' and password='"+txps.getText()+"'";
ResultSet rs= stmt.executeQuery(sql);
if(rs.next())
{
new Notepad().setVisible(true);
}
else
{
JOptionPane.showMessageDialog(null,"Incorrect username and password..");
}
conn.close();
}
catch(Exception ex)
{
System.out.println(ex.getMessage());
}
}
public static void main(String[] args) {
new loginpage();
}
}

```

Notepad Code:

```

import javax.swing.*;
import java.awt.*;
import java.io.*;
import java.awt.event.*;
import javax.swing.filechooser.*;
public class Notepad extends JFrame implements ActionListener
{
JTextArea area;
JScrollPane pane;
String text;
Notepad()
{
setBounds(0,0,1950,1050);
JMenuBar menubar= new JMenuBar();
JMenu file= new JMenu("File");
JMenu edit= new JMenu("Edit");
JMenu help= new JMenu("Help");
menubar.add(file);

```

```
menubar.add(edit); menubar.add(help);
setJMenuBar(menubar);
area=new JTextArea();
area.setFont(new Font("SAN_SERIF",Font.PLAIN,20));
area.setLineWrap(true);
area.setWrapStyleWord(true); pane= new JScrollPane(area);
pane.setBorder(BorderFactory.createEmptyBorder());
add(pane,BorderLayout.CENTER);
JMenuItem New= new JMenuItem("New");
New.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_N,
ActionEvent.CTRL_MASK));
New.addActionListener(this);
JMenuItem open= new JMenuItem("Open");
open.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_O,
ActionEvent.CTRL_MASK));
open.addActionListener(this);
JMenuItem save=new JMenuItem("Save");
save.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_S,
ActionEvent.CTRL_MASK));
save.addActionListener(this);
JMenuItem print=new JMenuItem("Print");
print.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_P,
ActionEvent.CTRL_MASK));
print.addActionListener(this);
JMenuItem exit=new JMenuItem("Exit");
exit.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_W,
ActionEvent.CTRL_MASK));
exit.addActionListener(this);
file.add(New); file.add(open);
file.add(save); file.add(print);
file.add(exit);
JMenuItem cut=new JMenuItem("Cut");
cut.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_X,
ActionEvent.CTRL_MASK));
cut.addActionListener(this);
JMenuItem copy=new JMenuItem("Copy");
copy.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_C,
ActionEvent.CTRL_MASK));
copy.addActionListener(this);
JMenuItem paste=new JMenuItem("Paste");
paste.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_V,
ActionEvent.CTRL_MASK));
paste.addActionListener(this);
JMenuItem selectAll=new JMenuItem("SelectAll");
selectAll.setAccelerator(KeyStroke.getKeyStroke(KeyEvent.VK_A,
ActionEvent.CTRL_MASK));
```



```

selectAll.addActionListener(this);
edit.add(cut);
edit.add(copy); edit.add(paste);
edit.add(selectAll);
JMenuItem about= new JMenuItem("About NotePad");
help.add(about);
about.addActionListener(this);
}
public void actionPerformed(ActionEvent ae)
{
if(ae.getActionCommand().equals("New"))
{
area.setText("");
}
else if(ae.getActionCommand().equals("Open"))
{
JFileChooser chooser =new JFileChooser();
chooser.setAcceptAllFileFilterUsed(false);
FileNameExtensionFilter restrict= new FileNameExtensionFilter("only .txt
file", "txt");
chooser.addChoosableFileFilter(restrict);
int action= chooser.showOpenDialog(this);
if(action != JFileChooser.APPROVE_OPTION)
{
return;
}
File file= chooser.getSelectedFile();
try {
BufferedReader reader= new BufferedReader(new FileReader(file));
area.read(reader, null);
}
catch(Exception e){ }
}
else if(ae.getActionCommand().equals("Save"))
{
JFileChooser saveas= new JFileChooser();
saveas.setApproveButtonText("Save");
int action= saveas.showOpenDialog(this);
if(action !=JFileChooser.APPROVE_OPTION)
{
return;
}
File filename= new File(saveas.getSelectedFile()+".txt");
BufferedWriter outfile=null;
try{
outfile= new BufferedWriter(new FileWriter(filename));

```

```

area.write(outfile);
}
catch(Exception e){ }
}
else if(ae.getActionCommand().equals("Print"))
{
try{ area.print();
}
catch(Exception e){ }
}
else if(ae.getActionCommand().equals("Exit"))
{
System.exit(0);
}
else if(ae.getActionCommand().equals("Cut"))
{
area.cut();
}
else if(ae.getActionCommand().equals("Copy"))
{
area.copy();
}
else if(ae.getActionCommand().equals("Paste"))
{
area.paste();
}
else if(ae.getActionCommand().equals("SelectAll"))
{
area.selectAll();
}
else if(ae.getActionCommand().equals("About Notepad")) new
about().setVisible(true);
}
public static void main(String[] args)
{
new Notepad().setVisible(true);
}
}

```

About Notepad code:

```

import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
public class about extends JFrame implements ActionListener {
    about()
{

```

```

setBounds(300,100,700,600);
setLayout(null);
JLabel L1= new JLabel("<html>Notepad is the word proccesing
program<br>which allows changing of text in computer file<br>Notepad is
simple text editor for basic text editing program<br>which enable
computer used to create documents<br> Developed by-<br>1) Suyash
Lomte
<br> 2) Kaushal Sharma<br><br>
</html>");
L1.setBounds(100,30,500,300);
L1.setFont(new Font("SAN_SERIF",Font.PLAIN,20));
add(L1);
JButton b1= new JButton("OK");

b1.setBounds(200,350,80,40);
add(b1);

b1.addActionListener(this);
}
public void actionPerformed(ActionEvent e)
{
if(e.getActionCommand().equals("OK"))
{
return;
}
}
public static void main(String[] args)

{

new about().setVisible(true);

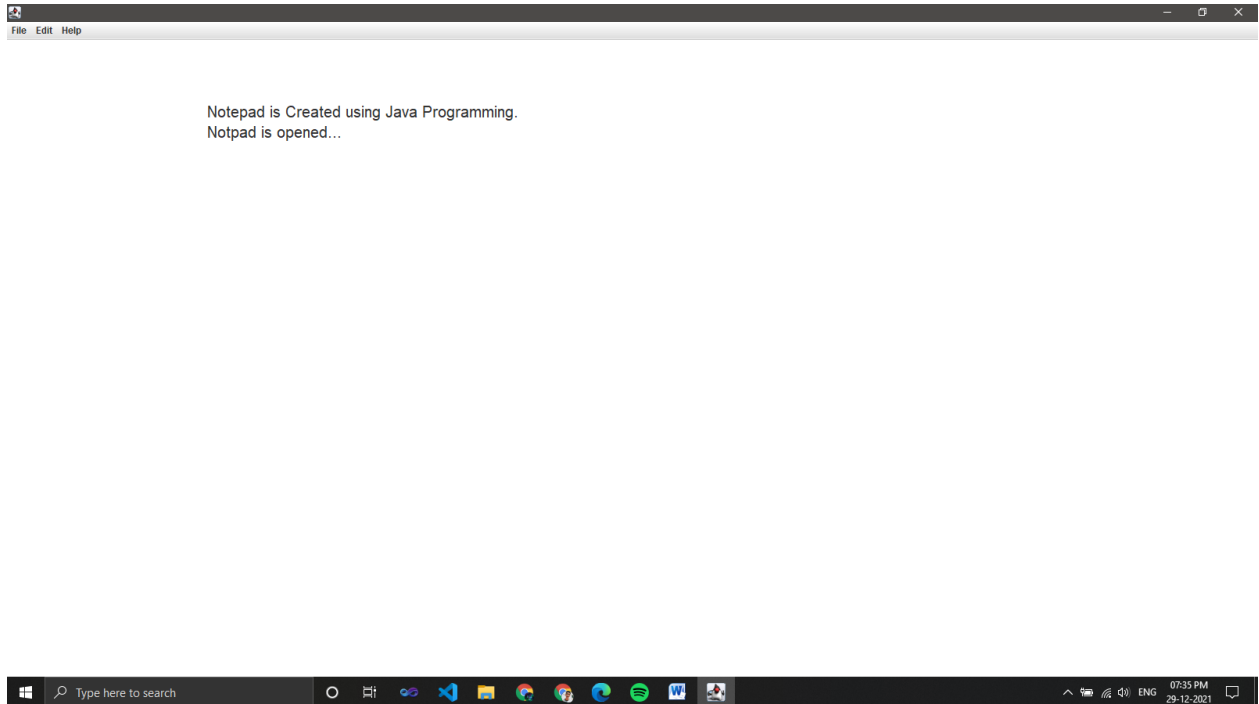
}

}

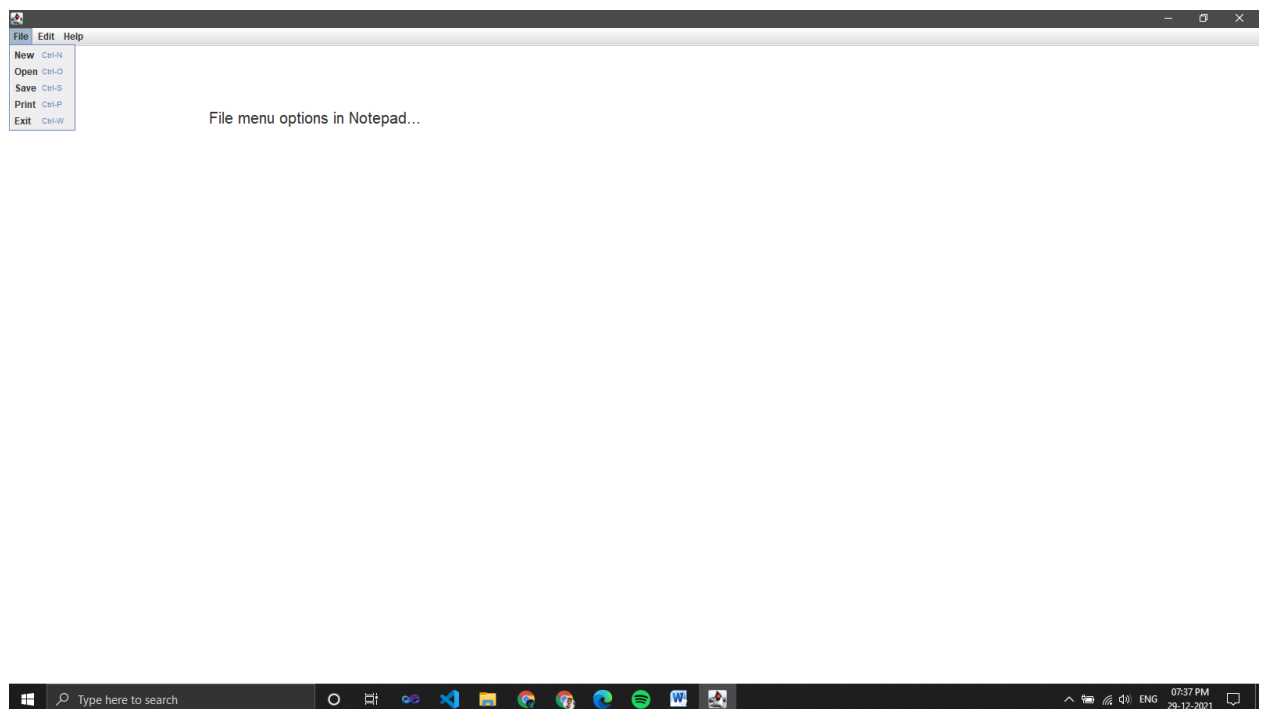
```

Outputs:

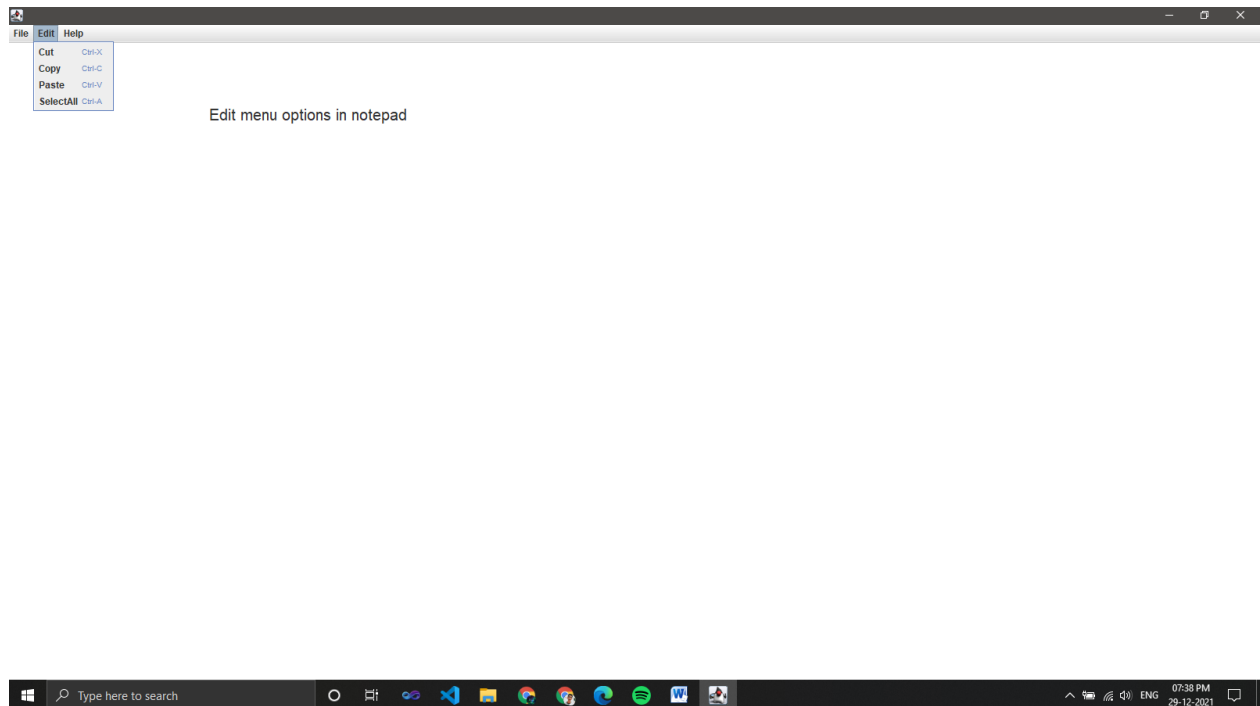
1. Notepad is created and opened :



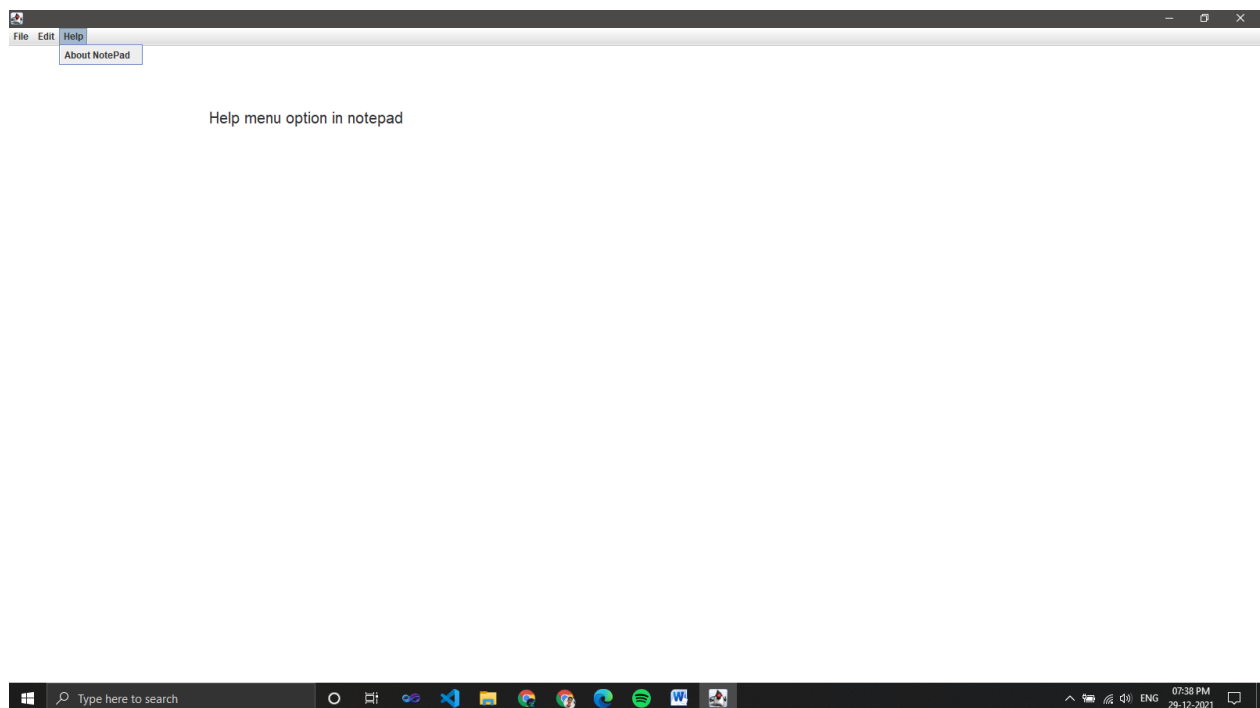
2. File menu options in notepad :



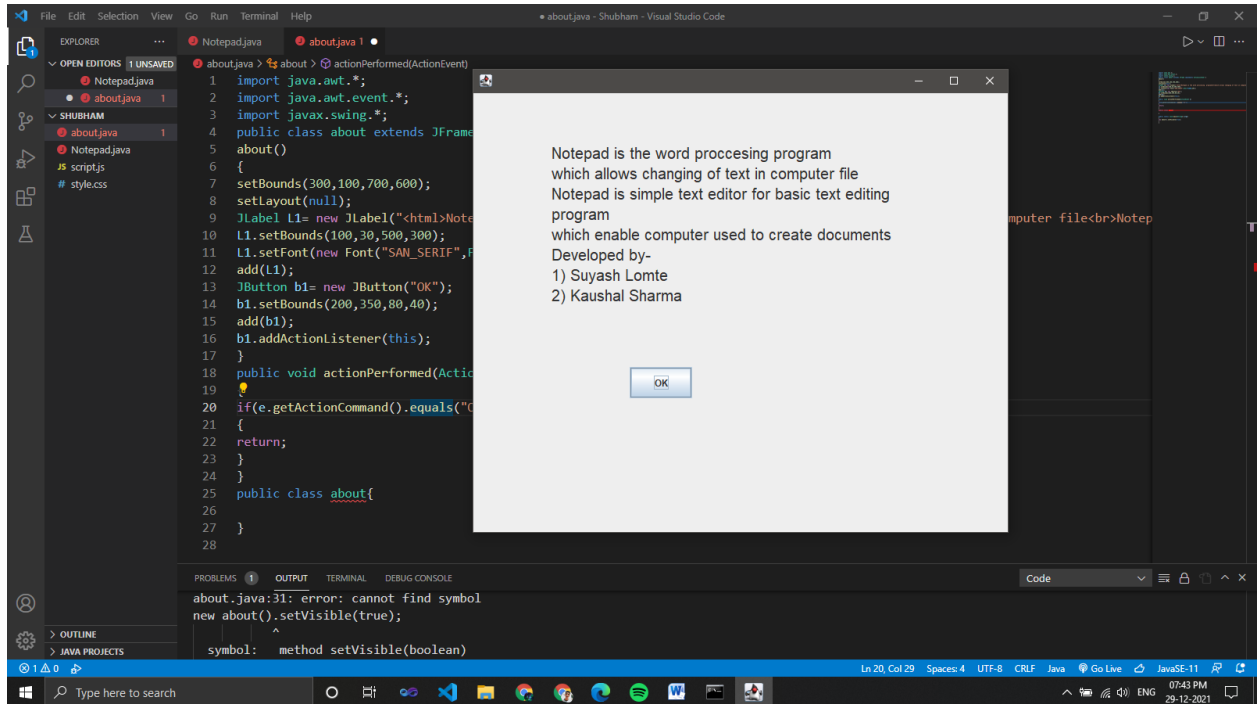
3. Edit menu options in notepad :



4. Help menu options in notepad :



5. About menu information in notepad :



...Thank You