***Java Programming***

***Section 2-4 practice***

**MyException.java**

public class MyException extends Exception {

public MyException(String message) {

super(message);

}

}

**JavaBank.java**

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

public class JavaBank extends JFrame {

private JTextField accountNumberField;

private JTextField amountField;

private JButton createButton;

private JButton transactionButton;

public JavaBank() {

setLayout(new FlowLayout());

accountNumberField = new JTextField(10);

amountField = new JTextField(10);

createButton = new JButton("Create Account");

transactionButton = new JButton("Make Transaction");

add(new JLabel("Account Number:"));

add(accountNumberField);

add(new JLabel("Amount:"));

add(amountField);

add(createButton);

add(transactionButton);

createButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) {

try {

createAccount();

} catch (MyException newExc) {

JOptionPane.showMessageDialog(null, newExc.getMessage());

}

}

});

transactionButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) {

try {

makeTransaction();

} catch (MyException newExc) {

JOptionPane.showMessageDialog(null, newExc.getMessage());

}

}

});

}

public static void main(String[] args) {

JavaBank bank = new JavaBank();

bank.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

bank.pack();

bank.setVisible(true);

}

}

**CreateAccount.java**

public class CreateAccount {

public void createAccount() throws MyException {

try {

// create account logic here

System.out.println("Account created successfully!");

} catch (Exception e) {

throw new MyException("An unhandled error occurred!!");

}

}

}

**MakeTransaction.java**

public class MakeTransaction {

public void makeTransaction() throws MyException {

try {

// transaction logic here

System.out.println("Transaction successful!");

} catch (Exception e) {

throw new MyException("An unhandled error occurred!!");

}

}

}

**BankOperations.java**

public class BankOperations {

private CreateAccount createAccount;

private MakeTransaction makeTransaction;

public BankOperations() {

createAccount = new CreateAccount();

makeTransaction = new MakeTransaction();

}

public void performCreateAccountOperation() {

try {

createAccount.createAccount();

} catch (MyException newExc) {

JOptionPane.showMessageDialog(null, newExc.getMessage());

}

}

public void performMakeTransactionOperation() {

try {

makeTransaction.makeTransaction();

} catch (MyException newExc) {

JOptionPane.showMessageDialog(null, newExc.getMessage());

}

}

}