Міністерство науки та освіти України

Національний Університет «Львівська Політехніка»

Кафедра інформаційних систем та мереж

Лабораторна робота №6

з дисципліни «Екстремальне програмування»

Виконав:

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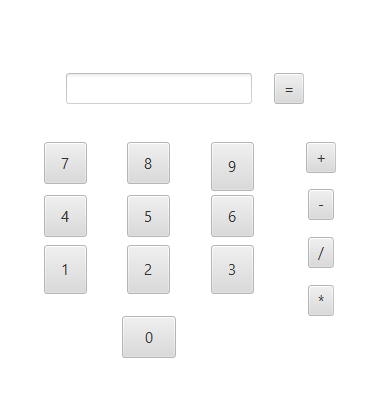
Прийняв:

Щербак С.С.

Львів-2020

**Мета:** створення калькулятора на джава.

Виконання



<?xml version="1.0" encoding="UTF-8"?>  
  
<?import javafx.scene.control.\*?>  
<?import java.lang.\*?>  
<?import javafx.scene.layout.\*?>  
  
<Pane fx:id="pane" maxHeight="-Infinity" maxWidth="-Infinity" minHeight="-Infinity" minWidth="-Infinity" prefHeight="400.0" prefWidth="600.0" xmlns="http://javafx.com/javafx/8" xmlns:fx="http://javafx.com/fxml/1" fx:controller="Main">  
 <children>  
 <Button fx:id="seven" layoutX="47.0" layoutY="147.0" mnemonicParsing="false" onAction="#seven\_click" prefHeight="42.0" prefWidth="43.0" text="7" />  
 <Button fx:id="eight" layoutX="130.0" layoutY="147.0" mnemonicParsing="false" onAction="#eight\_click" prefHeight="42.0" prefWidth="43.0" text="8" />  
 <Button fx:id="nine" layoutX="214.0" layoutY="147.0" mnemonicParsing="false" onAction="#nine\_click" prefHeight="49.0" prefWidth="43.0" text="9" />  
 <Button fx:id="four" layoutX="47.0" layoutY="200.0" mnemonicParsing="false" onAction="#four\_click" prefHeight="42.0" prefWidth="43.0" text="4" />  
 <Button fx:id="five" layoutX="130.0" layoutY="200.0" mnemonicParsing="false" onAction="#five\_click" prefHeight="42.0" prefWidth="43.0" text="5" />  
 <Button fx:id="six" layoutX="214.0" layoutY="200.0" mnemonicParsing="false" onAction="#six\_click" prefHeight="42.0" prefWidth="43.0" text="6" />  
 <Button fx:id="one" layoutX="47.0" layoutY="250.0" mnemonicParsing="false" onAction="#one\_click" prefHeight="49.0" prefWidth="43.0" text="1" />  
 <Button fx:id="two" layoutX="130.0" layoutY="250.0" mnemonicParsing="false" onAction="#two\_click" prefHeight="49.0" prefWidth="43.0" text="2" />  
 <Button fx:id="three" layoutX="214.0" layoutY="250.0" mnemonicParsing="false" onAction="#three\_click" prefHeight="49.0" prefWidth="43.0" text="3" />  
 <TextField fx:id="panel" layoutX="69.0" layoutY="78.0" />  
 <Button fx:id="plus" layoutX="309.0" layoutY="147.0" mnemonicParsing="false" onAction="#plus\_click" text="+" />  
 <Button fx:id="minus" layoutX="311.0" layoutY="194.0" mnemonicParsing="false" onAction="#minus\_click" text="-" />  
 <Button fx:id="divine" layoutX="311.0" layoutY="242.0" mnemonicParsing="false" onAction="#divide\_click" text="/" />  
 <Button fx:id="multiply" layoutX="311.0" layoutY="290.0" mnemonicParsing="false" onAction="#multiply\_click" text="\*" />  
 <Button fx:id="zero" layoutX="125.0" layoutY="321.0" mnemonicParsing="false" onAction="#zero\_click" prefHeight="42.0" prefWidth="54.0" text="0" />  
 <Button fx:id="equals" layoutX="277.0" layoutY="78.0" mnemonicParsing="false" onAction="#equals\_click" text="=" />  
 </children>  
</Pane>

import javafx.fxml.FXML**;**import javafx.fxml.Initializable**;**import javafx.scene.control.Button**;**import java.net.URL**;**import java.util.ResourceBundle**;**public class controller implements Initializable {  
  
  
  
  
  
 @Override  
 public void initialize(URL url**,** ResourceBundle resourceBundle) {  
  
  
  
 }  
  
  
}

import javafx.application.Application**;**import javafx.fxml.FXML**;**import javafx.fxml.FXMLLoader**;**import javafx.fxml.Initializable**;**import javafx.scene.Parent**;**import javafx.scene.Scene**;**import javafx.scene.control.Button**;**import javafx.scene.control.TextField**;**import javafx.stage.Stage**;**import java.io.IOException**;**import java.net.URL**;**import java.util.ResourceBundle**;**public class Main extends Application implements Initializable {  
  
 public Button seven**;** public Button eight**;** public Button nine**;** public Button four**;** public Button five**;** public Button six**;** public Button one**;** public Button two**;** public Button three**;** public TextField panel**;** public Button plus**;** public Button minus**;** public Button divine**;** public Button multiply**;** public Button zero**;** public Button equals**;** String operation=""**;** long s\_1**;** long s\_2**;** String operrator**;** @FXML  
 void zero\_click(){  
  
panel.setText(panel.getText() + "0")**;** }  
  
 @FXML  
 void one\_click(){  
 panel.setText(panel.getText() + "1")**;** }  
  
 @FXML  
 void two\_click(){  
 panel.setText(panel.getText() + "2")**;** }  
 @FXML  
 void three\_click(){  
 panel.setText(panel.getText() + "3")**;** }  
 @FXML  
 void four\_click(){  
 panel.setText(panel.getText() + "4")**;** }  
 @FXML  
 void five\_click(){  
 panel.setText(panel.getText() + "5")**;** }  
 @FXML  
 void six\_click(){  
 panel.setText(panel.getText() + "6")**;** }  
 @FXML  
 void seven\_click(){  
 panel.setText(panel.getText() + "7")**;** }  
 @FXML  
 void eight\_click(){  
 panel.setText(panel.getText() + "8")**;** }  
 @FXML  
 void nine\_click(){  
 panel.setText(panel.getText() + "9")**;** }  
 @FXML  
 void plus\_click(){  
String value = panel.getText()**;** this.s\_1= Integer.*parseInt*(value)**;**panel.setText("")**;**operrator="+"**;** }  
 @FXML  
 void minus\_click(){  
 String value = panel.getText()**;** this.s\_1= Integer.*parseInt*(value)**;** panel.setText("")**;** operrator="-"**;** }  
 @FXML  
 void divide\_click(){  
 String value = panel.getText()**;** this.s\_1= Integer.*parseInt*(value)**;** panel.setText("")**;** operrator="/"**;** }  
 @FXML  
 void multiply\_click(){  
 String value = panel.getText()**;** this.s\_1= Integer.*parseInt*(value)**;** panel.setText("")**;** operrator="\*"**;** }  
 @FXML  
 void equals\_click(){  
 switch( operrator){  
 case "+" :  
String value = panel.getText()**;**s\_2=Integer.*parseInt*(value)**;**long chislo = (s\_1 +s\_2)**;**panel.setText(String.*valueOf*(chislo))**;** break**;** case "-":  
 String value1 = panel.getText()**;** s\_2=Integer.*parseInt*(value1)**;** long chislo1 = (s\_1 -s\_2)**;** panel.setText(String.*valueOf*(chislo1))**;** break**;** case "/":  
  
 String value2 = panel.getText()**;** s\_2=Integer.*parseInt*(value2)**;** long chislo2 = (s\_1 /s\_2)**;** panel.setText(String.*valueOf*(chislo2))**;** break**;** case "\*":  
 String value3 = panel.getText()**;** s\_2=Integer.*parseInt*(value3)**;** long chislo3 = (s\_1 \*s\_2)**;** panel.setText(String.*valueOf*(chislo3))**;** break**;** }  
 }  
  
  
  
  
  
 public static void main(String[] args) throws IOException {  
  
 *launch*(args)**;** }  
  
  
 @Override  
 public void start(Stage stage) throws Exception {  
 Parent wrong = FXMLLoader.*load*(getClass().getResource("calculator\_2.fxml"))**;** Scene scene = new Scene(wrong)**;** stage.setScene(scene)**;** stage.show()**;** }  
  
 @Override  
 public void initialize(URL url**,** ResourceBundle resourceBundle) {  
  
 }  
}

Висновок: було створено калькулятор за допоиогою FXML.