

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
НАЦІОНАЛЬНОМУ УНІВЕРСИТЕТІ “ЛЬВІВСЬКА ПОЛІТЕХНІКА”**

**Кафедра систем штучного інтелекту**

**Лабораторна робота №15**  
з дисципліни  
«Об’єктно-орієнтоване програмування»

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## Код програми:

1)

```
package week15;
```

```
import javafx.application.Application; import
javafx.beans.property.SimpleStringProperty;
import javafx.collections.FXCollections; import
javafx.collections.ObservableList; import
javafx.event.ActionEvent; import
javafx.geometry.Insets; import javafx.scene.Group;
import javafx.scene.Scene; import
javafx.scene.control.Button; import
javafx.scene.control.Label; import
javafx.scene.control.TableColumn; import
javafx.scene.control.TableView; import
javafx.scene.control.TextField;
import javafx.scene.control.cell.PropertyValueFactory;
import javafx.scene.layout.HBox; import
javafx.scene.layout.VBox; import
javafx.scene.text.Font;
import javafx.stage.Stage;
```

```
public class Controller extends Application {
```

```
    private final TableView<TradePoint> table = new TableView<>();
    private final ObservableList<TradePoint> data =
FXCollections.observableArrayList(
        new TradePoint( "Bruce", "1SalmanelaStreet","vdsvsdv", "Rich",
"Tuesday", "17:00"),          new TradePoint( "Jason",
"2SalmanelaStreet","iyx553535", "Cook",
"Tuesday", "11:00"),
        new TradePoint( "Steve", "3SalmanelaStreet","d880553535",
"Soldier", "Tuesday", "16:00"),
        new TradePoint( "Thor", "4SalmanelaStreet","fg880553535",
"Superhero", "Tuesday", "14:00"),
        new TradePoint( "Joe", "5SalmanelaStreet","qwadfggfghn", "Cook",
"Tuesday", "17:00"));
    final HBox hb = new HBox();

    public static void main(String[] args) {
        launch(args);
```

```
}
```

```
@Override
```

```
public void start(Stage stage) {  
    Scene scene = new Scene(new Group());  
    stage.setTitle("Trade Points");  
stage.setWidth(650);  
    stage.setHeight(550);  
  
    final Label label = new Label("Trade Point");  
label.setFont(new Font("Arial", 20));  
  
    table.setEditable(true);  
  
    TableColumn nameCol = new TableColumn("Name");  
    nameCol.setMinWidth(100);  
nameCol.setCellValueFactory(  
        new PropertyValueFactory<>("name"));  
  
    TableColumn adressCol = new TableColumn("Adress");  
    adressCol.setMinWidth(100);  
adressCol.setCellValueFactory(  
        new PropertyValueFactory<>("adress"));  
  
    TableColumn numberCol = new TableColumn("Number");  
    numberCol.setMinWidth(100);  
numberCol.setCellValueFactory(  
        new PropertyValueFactory<>("number"));  
  
    TableColumn specializationCol = new TableColumn("Specialization");  
specializationCol.setMinWidth(100);    specializationCol.setCellValueFactory(  
        new PropertyValueFactory<>("specialization"));  
  
    TableColumn dayCol = new TableColumn("Day");  
    dayCol.setMinWidth(100);  
dayCol.setCellValueFactory(  
        new PropertyValueFactory<>("day"));  
  
    TableColumn timeCol = new TableColumn("Time");  
    timeCol.setMinWidth(100);  
timeCol.setCellValueFactory(  
        new PropertyValueFactory<>("time"));
```

```
table.setItems(data);
table.getColumns().addAll(nameCol, adressCol, numberCol,
specializationCol, dayCol, timeCol);
```

```
final TextField addName = new TextField();
addName.setPromptText("Name");
addName.setMaxWidth(nameCol.getPrefWidth());
```

```
final TextField addAddress = new TextField();
addAddress.setMaxWidth(adressCol.getPrefWidth());
addAddress.setPromptText("Adress");
```

```
final TextField addNumbers = new TextField();
addNumbers.setMaxWidth(numberCol.getPrefWidth());
addNumbers.setPromptText("Number");
```

```
final TextField addSpecialization = new TextField();
addSpecialization.setMaxWidth(specializationCol.getPrefWidth());
addSpecialization.setPromptText("Specialization");
```

```
final TextField addDay = new TextField();
addDay.setMaxWidth(dayCol.getPrefWidth());
addDay.setPromptText("Day");
```

```
final TextField addTime = new TextField();
addTime.setMaxWidth(timeCol.getPrefWidth());
addTime.setPromptText("Time");
```

```
final Button addButton = new Button("Add");
addButton.setOnAction((ActionEvent e) -> {
    data.add(new TradePoint(
addName.getText(),
addAddress.getText(),
addNumbers.getText(),
addSpecialization.getText(),
addDay.getText(),
addTime.getText()));
addName.clear();      addAddress.clear();
addNumbers.clear();
addSpecialization.clear();
addDay.clear();
```

```
        addTime.clear();
    });
```

```
        hb.getChildren().addAll(addName, addAddress, addNumbers,
addSpecialization, addDay, addTime, addButton);
hb.setSpacing(10);
```

```
        final VBox vbox = new VBox();
        vbox.setSpacing(10);
        vbox.setPadding(new Insets(10, 0, 0, 10));
        vbox.getChildren().addAll(label, table, hb);
```

```
        ((Group) scene.getRoot()).getChildren().addAll(vbox);
```

```
        stage.setScene(scene);
        stage.show();
    }
```

```
    public static class TradePoint{        private final
SimpleStringProperty name;        private final
SimpleStringProperty adress;        private final
SimpleStringProperty number;        private final
SimpleStringProperty specialization;        private final
SimpleStringProperty day;        private final
SimpleStringProperty time;
        private TradePoint(String name1, String adress1, String number1, String
specialization1, String day1, String time1){        this.name = new
SimpleStringProperty(name1);        this.adress = new
SimpleStringProperty(adress1);        this.number = new
SimpleStringProperty(number1);        this.specialization = new
SimpleStringProperty(specialization1);        this.day = new
SimpleStringProperty(day1);
        this.time = new SimpleStringProperty(time1);
        }

    public String getName() {
        return name.get();
    }

    public void setName(String fName) {
        name.set(fName);
    }
}
```

```
        public String getAddress() {
return address.get();
        }

        public void setAddress(String fName) {
        address.set(fName);
        }

        public String getNumber() {
        return number.get();
        }

        public void setNumber(String fName) {
        number.set(fName);
        }

        public String getSpecialization() {
        return specialization.get();
        }

        public void setSpecialization(String fName) {
        specialization.set(fName);
        }

        public String getDay() {
return day.get();
        }

        public void setDay(String fName) {
        day.set(fName);
        }

        public String getTime() {
return time.get();
        }

        public void setTime(String fName) {
        time.set(fName);
        }
    }
}
```

The screenshot shows an IDE with two main windows. The 'Trade Point' window displays a table with the following data:

Name	Address	Number	Specialization	Day	Time
Bruce	1SalmanelaStreet	vdsvsdv	Rich	Tuesday	17:00
Jason	2SalmanelaStreet	iy553535	Cook	Tuesday	11:00
Steve	3SalmanelaStreet	d880553535	Soldier	Tuesday	16:00
Thor	4SalmanelaStreet	fg880553535	Superhero	Tuesday	14:00
Joe	5SalmanelaStreet	qwadfgfghn	Cook	Tuesday	17:00

Below the table are input fields for Name, Address, Number, Specialization, Day, and Time, along with an 'Add' button. The Outline view on the right shows the following structure:

```

+ day : SimpleStringProperty
+ time : SimpleStringProperty
+ TradePoint(String, String, String, St
+ getName() : String
+ setName(String) : void
+ getAddress() : String
+ setAddress(String) : void
+ getNumber() : String
+ setNumber(String) : void
+ getSpecialization() : String
+ setSpecialization(String) : void
+ getDay() : String
+ setDay(String) : void
+ getTime() : String

```

The bottom status bar shows the file path: D:\Program Files\Java\bin\javaw.exe (31 tpaas, 2018 p., 22:08:48).

Рис.1 Результат роботи програми