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# Student Management System in JAVA



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## **Main Idea**

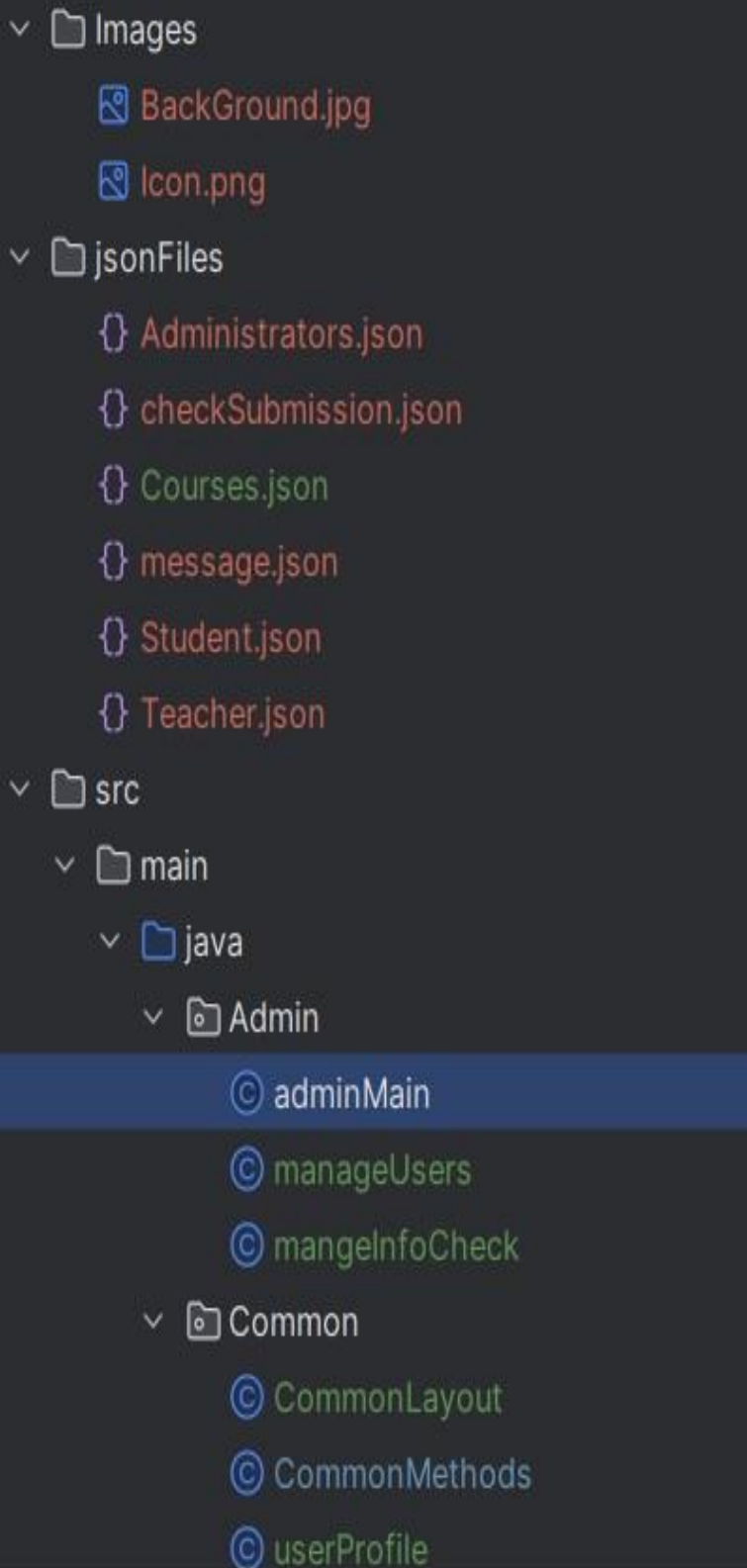
**The project's main goal is to develop a system that facilitates the management of the teacher-student relationship. The system will have features for teachers to view their information, chat with students, provide feedback, and manage lectures and assignments.**

**Students will have access to their information, chat with teachers, view lectures, and participate in discussions.**

**Administrators will serve as a bridge between teachers and students, managing user accounts, overseeing submissions, and maintaining data integrity.**

**The system aims to enhance communication and streamline academic processes for a better teacher-student experience.**

## Imports & Packages



```
import MainPackage.LoginApp;
import javafx.scene.Scene;
import javafx.stage.Stage;
import javafx.scene.layout.*;
import javafx.scene.control.*;
import org.json.JSONObject;

import static Admin.mangeInfoCheck.managInfoCheckPane;
import static Common.CommonLayout.createButtonStyle;
import static Common.CommonLayout.createVBoxStyle;
import static Common.userProfile.profilePane;
```

```
package Common;
```

```
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.control.Alert;
import javafx.scene.control.Button;
import javafx.scene.control.TextField;
import javafx.scene.layout.ColumnConstraints;
import javafx.scene.layout.GridPane;
import javafx.scene.layout.HBox;
import javafx.scene.layout.VBox;
```

```
1 package Common;
2
3 import javafx.scene.text.Font;
4 import javafx.scene.text.FontWeight;
5 import javafx.scene.text.Text;
6 import javafx.scene.layout.*;
7 import javafx.scene.control.*;
8 import org.json.JSONObject;
9
10 import static Common.CommonLayout.createGridPane;
11 import static Common.CommonLayout.createText;
```

```
package Common;

import javafx.scene.Scene;
import javafx.stage.Stage;
import org.json.JSONArray;
import org.json.JSONObject;
import org.json.JSONTokener;
import java.io.FileNotFoundException;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
```



```
package Admin;
```

Minimize

```
import javafx.geometry.Insets;  
import javafx.collections.FXCollections;  
import javafx.scene.control.*;  
import javafx.scene.layout.*;  
import org.json.JSONArray;  
import org.json.JSONObject;  
import java.io.FileWriter;  
import java.io.IOException;  
import java.util.Objects;  
import static Admin.adminMain.adminInfo;  
import static Common.CommonMethods.*;  
new *
```

```
1 package Admin;
```

```
2  
3 import javafx.collections.FXCollections;  
4 import javafx.collections.ObservableList;  
5 import javafx.geometry.Insets;  
6 import javafx.geometry.Pos;  
7 import javafx.scene.control.Button;  
8 import javafx.scene.control.ListView;  
9 import javafx.scene.layout.BorderPane;  
0 import javafx.scene.layout.HBox;  
1 import org.json.JSONArray;  
2 import org.json.JSONObject;  
3  
4 import static Common.CommonMethods.printInGoodWay;  
5 import static Common.CommonMethods.readFile;  
6
```

```
package StudentTeacher;
import javafx.beans.property.IntegerProperty;
import javafx.beans.property.SimpleIntegerProperty;
import javafx.beans.property.SimpleStringProperty;
import javafx.beans.property.StringProperty;
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.control.*;
import javafx.scene.layout.BorderPane;
import javafx.scene.layout.HBox;
import javafx.scene.layout.VBox;
import javafx.scene.text.Font;
import javafx.scene.text.Text;
import org.json.JSONArray;
import org.json.JSONObject;

import java.io.FileWriter;
import java.io.IOException;

import static Common.CommonMethods.readFile;
```

```
package StudentTeacher;
import MainPackage.LoginApp;
import javafx.scene.Scene;
import javafx.stage.Stage;
import javafx.scene.layout.*;
import javafx.scene.control.*;
import org.json.JSONObject;
import static Common.CommonLayout.*;
import static Common.CommonLayout.createButtonStyle;
import static Common.userProfile.profilePane;
import static StudentTeacher.Attendance.Attendance;
import static StudentTeacher.chatProgram.chatMain;

new *
```

```
1 package StudentTeacher;
2 import javafx.collections.FXCollections;
3 import javafx.collections.ObservableList;
4 import javafx.scene.control.*;
5 import javafx.scene.layout.BorderPane;
6 import javafx.scene.layout.HBox;
7 import javafx.scene.layout.VBox;
8 import javafx.scene.text.Font;
9 import javafx.scene.text.Text;
10 import org.json.JSONArray;
11 import org.json.JSONObject;
12 import java.io.FileWriter;
13 import java.io.IOException;
14 import java.time.LocalDateTime;
15 import java.time.format.DateTimeFormatter;
16 import java.util.ArrayList;
17 import static Common.CommonLayout.*;
18 import static Common.CommonMethods.printInGoodWay;
19 import static Common.CommonMethods.readFile;
20
```

**An inside look at our project**





Login



Username:

Password:

Type:

Login

mainStage.setTitle("Administrtor"):

## Administrators Profile

Username: Abdulrhman  
ID: 20812020565175  
Email: 20812020565175@eng.zu.edu

admin Info Page

Manage users

Manage Informations

check submission

Logout

admin Info Page

Manage users

Manage Informations

check submission

Logout

add users

remove user

Administrators

admin Info Page

Manage users

Manage Informations

check submission

Logout

User Type: Student

Username:

Password:

ID:

Level:

add User

Administrators

admin Info Page

Manage users

Manage Informations

check submission

Logout

User Name:

Password:

type

Remove user

Administrators

admin Info Page

Manage users

Manage Informations

check submission

Logout

Sender: Dr Sara reciver: Ahmed mohammed Content:test user time:2023-05-27 18:20:08

Sender: aa reciver: Hoda Amir Content:vv time:2023-05-27 18:08:27

Sender: aa reciver: Hoda Amir Content:vvv time:2023-05-27 18:08:25

Sender: aa reciver: Hoda Amir Content:vv time:2023-05-27 18:08:23

Sender: aa reciver: Hoda Amir Content: time:2023-05-27 18:08:22

Sender: aa reciver: Hoda Amir Content:vvv time:2023-05-27 18:08:21

Sender: Khaled Abdullah reciver: Hoda Amir Content: time:2023-05-27 18:00:58

Sender: Khaled Abdullah reciver: Hoda Amir Content: time:2023-05-27 18:00:57

Sender: aaa reciver: Khaled Abdullah Content:ddd time:2023-05-27 17:59:49

Sender: aa reciver: Hoda Amir Content:aaa time:2023-05-27 17:58:57

Sender: Hoda Amir reciver: Amara Zaid Content:I love you time:2023-05-26 10:30:01

Sender: Hoda Amir reciver: Amara Zaid Content:rgg time:2023-05-26 10:25:18

Sender: Amara Zaid reciver: Hoda Amir Content:I love you very much miss time:2023-05-26 10:22:02

Sender: Hoda Amir reciver: Amara Zaid Content:ghg time:2023-05-26 10:20:47

Sender: Amara Zaid reciver: Hoda Amir Content:I love you miiss time:2023-05-26 10:13:18

Sender: Amara Zaid reciver: Hoda Amir Content:bbb time:2023-05-26 09:52:08

Sender: Amara Zaid reciver: Hoda Amir Content: time:2023-05-26 09:40:36

Refresh List

Clear List

Restore List

Administrators

admin Info Page

Manage users

Manage Informations

check submission

Logout

name: Hoda Amirsubject: DSA Content:test time:12AM

name: Hoda Amirsubject: DSA Content:test time:12AM

name: Hoda Amirsubject: DSA Content:eee time:12AM

name: Dr Sarasubject: Alog Content:lec2 time:12AM

name: Hoda Amirsubject: DSA Content:ss time:12AM


name: Hodasubject: Math Content:lec1 time:12AM

Refresh List

Clear List

Restore List



 Login

Username:

Password:

Type:

Teacher ▼

Login

[illegible]

Teacher

profile

courses

chat

Take Attendance

log Out

Choose the person

Amera Zaid

Sender: Hoda Amir    reciver: Amera Zaid    Content:rgg    time:2023-05-26 10:25:18

Sender: Hoda Amir    reciver: Amera Zaid    Content:ghg    time:2023-05-26 10:20:47

Sender: Amera Zaid    reciver: Hoda Amir    Content:bbb    time:2023-05-26 09:52:08

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:26

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:26

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:25

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:25

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:25

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:24

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:19

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:19

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:19

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:19

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:18

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:18

Sender: Amera Zaid    reciver: Hoda Amir    Content:    time:2023-05-26 09:49:18

write

Send

Refresh

clearMessages

Student

profile

courses

chat

log Out

Student Profile

Username:

Khaled Abdullah

ID:

2081202056532

Email:

2081202056532@eng.zu.edu

level

1st

Student

profile

courses

chat

log Out

Name	Choice
Math	Show
DSP	Show

Student

profile

courses

chat

log Out

Name	Choice
lec1	Show

Student

profile

courses

chat

log Out

Choose the person

Hoda Amir

Sender: Khaled Abdullah reciver: Hoda Amir Content: time:2023-05-27 18:00:58

Sender: Khaled Abdullah reciver: Hoda Amir Content: time:2023-05-27 18:00:57

Sender: Khaled Abdullah reciver: Hoda Amir Content:test time:2023-05-22 00:18:14

Sender: Khaled Abdullah reciver: Hoda Amir Content:test time:2023-05-21 23:38:31

Sender: Khaled Abdullah reciver: Hoda Amir Content:ffffff time:2023-05-21 23:28:43

Sender: Khaled Abdullah reciver: Hoda Amir Content:test time:2023-05-21 23:28:36

Sender: Khaled Abdullah reciver: Hoda Amir Content:test time:2023-05-21 23:27:44

write

Send

Refresh

clearMessages

25 "Teacher": "Hoda Amir",  
26 "Name": "DSA"

Student

profile

courses

chat

Take Attendance

log Out

Name	Choice
DSA	Show
Math	Show

Add delete



# UML

## **problems**

### **1-How to store data?**

By using json files.

### **2-How to make chat between student and teacher ?**

By using json file to store messages and access the needed message using search about user messages in the file.

## **Points doesn't complete ?**

1-when add user we didn't make admin choose course to be added and student added to teacher student list as well as when add teacher also things.

2-to improve the GUI Use dataBase instead Json files.

3-connect the project to the server.

4-Make the admin choose level and term based on courses is added.

5-improve fake data code

## **External Resources**

<https://poe.com/ChatGPT>

**"We used ChatGPT to understand some of the basic points in the project that were not covered in the curriculum of the college."**