

Project: Students information System.

Hamad Ibrahim Allaaboun
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Group 2

Assumptions and Implementation.

We took an approach that focused on code maintainability and making the application easy to use with clear and understandable error messages in the case of an input error.

Implementation

We made four classes to make the code readable and maintainable , The first class contains JavaFX code, The second class has Data preprocessing before it gets sent to the Database, The third class, has the SQL commands, this class will receive the data formatted, to parse it immediately to the Database, the forth class is the Student object class.

We used MySQL to create the database and a new user with limited privileges, since we only want the application to insert and select data from the database. therefore we created one called hamad_saif and gave it some privileges to insert and select from the database.

Directory:

Name	Date modified	Type	Size
APProject2	11/7/2022 8:50 PM	Java Source File	18 KB
DataBaseCommands	11/7/2022 8:43 PM	Java Source File	5 KB
DataBaseWorkStation	11/7/2022 2:14 PM	Java Source File	1 KB
Student	11/7/2022 2:14 PM	Java Source File	2 KB

Name	Date modified	Type	Size
.git	11/7/2022 1:03 PM	File folder	
.idea	11/5/2022 9:17 PM	File folder	
build	11/7/2022 9:28 PM	File folder	
dist	11/7/2022 12:30 AM	File folder	
images	11/7/2022 9:23 PM	File folder	
nbproject	11/5/2022 9:47 PM	File folder	
out	11/5/2022 9:14 PM	File folder	
src	11/5/2022 9:06 PM	File folder	
test	11/5/2022 9:19 PM	File folder	
.gitignore	11/7/2022 9:24 PM	مستند نص	1 KB
build	11/5/2022 9:06 PM	XML Document	4 KB
manifest.mf	11/5/2022 9:06 PM	MF File	1 KB

Add student tab:

Student Information Program


Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Exit

Fill out the students information

Full name

Birthdate 

GPA

Save

All inputs empty:

The screenshot shows a window titled "Student Information Program" with standard window controls (minimize, maximize, close). The window content is as follows:

- Header:** A light gray bar containing the text "Hamad Ibrahim AL-laaboun 441001902", "Saif Hassan Alharbi 439009961", and "Group 2" in red.
- Navigation:** Below the header is a bar with two buttons: "Add students" and "Search for students".
- Exit:** An "Exit" button is located in the top right corner of the main content area.
- Form Section:**
 - Title:** "Fill out the students information"
 - Full name:** A text input field.
 - Birthdate:** A date picker input field.
 - GPA:** A range input field with a slider and a "0.0" label.
 - Save:** A button below the GPA field.
- Instructions:** Below the "Save" button, three red lines of text read: "Enter the correct name", "Choose a date", and "Choose the GPA".

Name correct rest empty:

Student Information Program


Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Exit

Fill out the students information

Full name

Birthdate 

0.0

GPA

Save

Choose a date
Choose the GPA

Date correct rest empty:

Student Information Program


Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Exit

Fill out the students information

Full name

Birthdate 

0.0

GPA

Save

Enter the correct name
Choose the GPA

GPA correct rest empty:

Student Information Program


Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Exit

Fill out the students information

Full name

Birthdate 

GPA 0.6

Save

Enter the correct name
Choose a date

name and gpa correct date empty:

Student Information Program


Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Exit

Fill out the students information

Full name

Birthdate 

GPA 1.5

Save

Choose a date

name and date correct gpa empty:

Student Information Program


Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Exit

Fill out the students information

Full name

Birthdate 

GPA

Choose the GPA

Date and gpa correct name empty:

Student Information Program


Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Exit

Fill out the students information

Full name

Birthdate 

GPA

Save

Enter the correct name

Successful add:

The screenshot shows a window titled "Student Information Program" with standard Windows window controls (minimize, maximize, close). The main content area displays the following text in red:

Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Below this text is a horizontal bar containing two buttons: "Add students" and "Search for students". In the top right corner of the window is an "Exit" button.

The main section is titled "Fill out the students information" and contains the following form elements:

- A text input field labeled "Full name".
- A date input field labeled "Birthdate" with a calendar icon.
- A GPA input field with a slider control, currently set to 0.0.
- A "Save" button.

At the bottom of the form, the text "add student Successfully" is displayed in green.

Search student tab:

Student Information Program

Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Enter name Search

Refresh	ID	Full name	Birthdate	GPA	Exit
	1	hamad ibrahim laabo...	2001-06-19	3.69	
	2	saif hassan alharbi	2001-04-17	4.0	
	3	ali hossam alhamy	2006-11-10	2.06	
	4	sarah ali ahmed	2015-04-15	0.7	
	5	hmdah suliman saleh	2010-05-05	2.5	
	6	jawad khalid ahmed	2011-08-26	1.2	
	7	saleh	2009-11-25	2.7	

Search with no results:

Student Information Program

Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Enter name

Refresh	ID	Full name	Birthdate	GPA	Exit
No content in table					

no records available for this search criteri

Wrong search name:

Student Information Program

Hamad Ibrahim AL-laaboun 441001902
Saif Hassan Alharbi 439009961
Group 2

Add students Search for students

Enter name

Refresh	ID	Full name	Birthdate	GPA	Exit
	1	hamad ibrahim laabo...	2001-06-19	3.69	
	2	saif hassan alharbi	2001-04-17	4.0	
	3	ali hossam alhamy	2006-11-10	2.06	
	4	sarah ali ahmed	2015-04-15	0.7	
	5	hmdah suliman saleh	2010-05-05	2.5	
	6	jawad khalid ahmed	2011-08-26	1.2	
	7	saleh	2009-11-25	2.7	

Enter the correct name

On exit , Disc:

```
connection has been successful
connection has been closed
BUILD SUCCESSFUL (total time: 2 minutes 59 seconds)
```