

Java Enterprise Edition

Fall Semester 2020

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TASK 3

Problem 1

Develop a simple WEB application for admission students into University.

Create table in MySQL or PostgreSQL:

```
students (  
    id – int(11)  
    name – varchar(255)  
    surname – varchar(255)  
    middle_name – varchar(255)  
    birthdate – date  
    iin – varchar(12)  
    is_grant – boolean  
    specialty – varchar(255)  
)
```

Also, create a java class as an Entity of our table:

Student.java

- Long id;
- String name;
- String surname;
- String middleName;
- Date birthdate; // java.util.Date
- String iin;
- boolean isGrant;
- String specialty;

Create constructors, getters, and setters for parameters.

Inside of **DBManager.java** class, connect to your database.

Also, create static methods to manage with students:

```
boolean addStudent(Student student); //this method adds new student into database
```

```
ArrayList<Student> findAllStudentsFilteredPaged(String name, String surname, String iin, boolean isGrant, int fromIndex, int size);
```

```
//this method returns a list of all students from database filtered by criteria and paged (pagination)
```

```
int countStudentsFiltered(String name, String surname, String iin, boolean isGrant, int fromIndex);
```

```
//this counts size of filtered students by criteria
```

```
Student getStudent(Long id); //this method returns a student from database by id (for pagination)
```

```
boolean saveStudent(Student student); //this method updates student from database
```

```
boolean deleteStudent(Student student); //this method deletes student from database
```

In main page, you will have a list of all students shown as in example:

INTERNATIONAL UNIVERSITY

[All Students](#) [Add Student](#)

Name:

Surname:

IIN:

Is Grant:

YES

▼

FILTER

ID	NAME	SURNAME	IIN	BIRTHDATE	IS GRANT	DETAILS
1	Ilyas	Zhuanyshev	890212301245	12.02.1989	YES	<div>DETAILS</div>
2	Serik	Assetov	900111302241	11.01.1990	NO	<div>DETAILS</div>
3	Madina	Armanova	910522401289	22.05.1991	YES	<div>DETAILS</div>
4	Berik	Naimanov	880915301987	15.09.1988	YES	<div>DETAILS</div>
5	Aybek	Yerzhanov	890810303228	10.08.1989	NO	<div>DETAILS</div>

«

1

2

3

»

As you see in main page, you will be able to filter students by their criteria (name, surname, iin, isGrant). Be careful on filtering. Your pagination pages must be correctly generated according to your filter results.

To add new Student, you will complete form (Pay attention to that IIN value must be unique):

ADD STUDENT

NAME :

SURNAME :


MIDDLE NAME :

BIRTHDATE :


 

IIN :

IS GRANT :

SPECIALTY :

ADD

To view details of Student, create details page:

NAME :

Ilyas

SURNAME :

Zhuanyshev

MIDDLE NAME :

Orazgaliyevic

BIRTHDATE :

12.02.1989

IIN :

890212301245

IS GRANT :

YES

SPECIALTY :

INFROMATION TECHNOLOGIES**EDIT**

To edit Student data, create edit student page:

EDIT STUDENT

NAME :

Ilyas

SURNAME :

Zhuanyshev

MIDDLE NAME :

Orazgaliyevic

BIRTHDATE :

02/12/1989



IIN :

890212301245

IS GRANT :

YES



SPECIALTY :

INFORMATION TECHNOLOGIES



SAVE

DELETE