

MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN

INTERNATIONAL INFORMATION TECHNOLOGY UNIVERSITY

COMPUTER ENGINEERING AND INFORMATION SECURITY DEPARTMENT

MILESTONE 2

DA6: NoSQL Data Bases

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Group CSSE-1705K

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GRAPHICAL USER INTERFACE DESIGN

I have used Model-View-Controller software design pattern for The Storage of analyses of enrollment for abiturent project. It is commonly used for developing user interfaces which separates program into three parts.

Model – Handles the data logic and connected to my local Mongodb Database by means of mongoose. **mongoose.connect('mongodb://localhost:27017/StudentDB'**. StudentDB is a database created for this project and inside it has a collection called Students which collects all data from web application.

Controller – Handles the request flow, it gets request from user and sent it to Model and View parts and responds with the output.

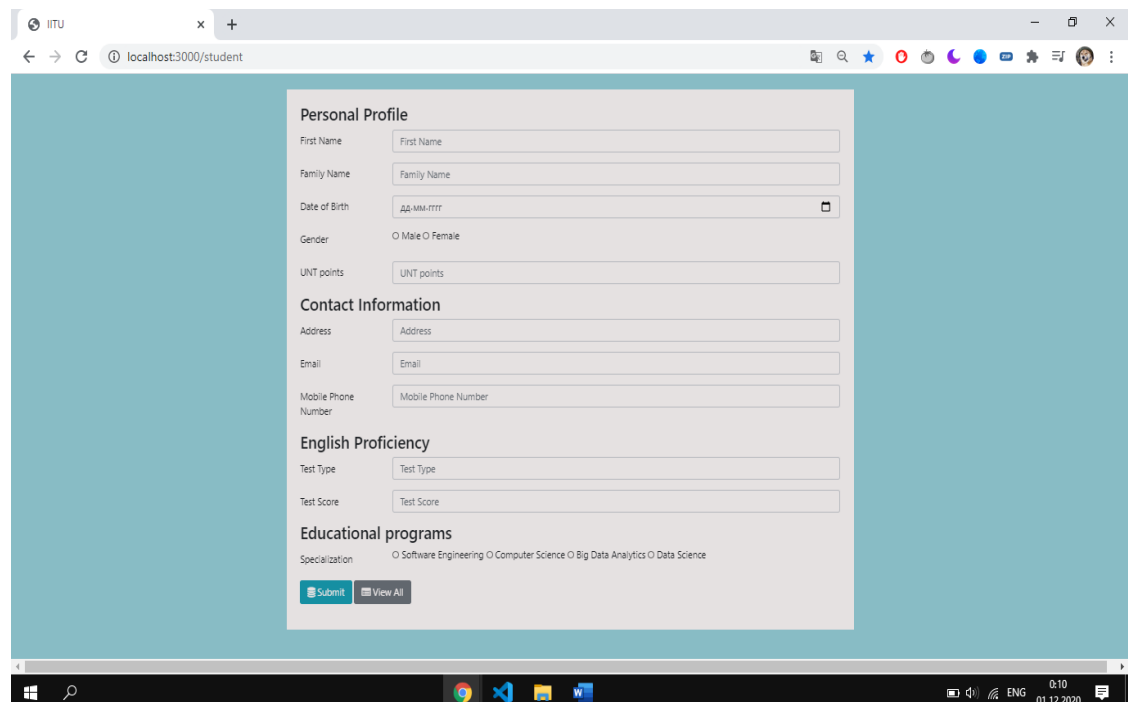
```
router.get('/list', (req, res) => { Student.find((err, docs) =>
    { if (!err) { res.render("student/list", { list: docs }); }
    else { console.log('Error in retrieving student list :' + err); } }); });
```

For instance, this code is used for the showing the list of students. It finds and collects all applicant records from my DB and outputs it in /list page. Otherwise, it shows the error.

View – Handles data presentation and Dynamically rendered. In my case, I used .hbs extension for view part, because of the fact that I am using Express for visualizing interface, and it can not handle .html. At the current moment I have only two files. First is for filling applicant data, second is for showing the data from the Database.

IMPLEMENTATION

This is the creation page, where admin can create a student record and save it into DB.



The screenshot displays a web browser window with the address bar showing 'localhost:3000/student'. The page features a form titled 'Personal Profile' with fields for First Name, Family Name, Date of Birth (with a calendar icon), Gender (radio buttons for Male and Female), and UNT points. Below this is a 'Contact Information' section with fields for Address, Email, and Mobile Phone Number. The 'English Proficiency' section includes fields for Test Type and Test Score. At the bottom, the 'Educational programs' section shows a list of specializations: Software Engineering, Computer Science, Big Data Analytics, and Data Science. The form has a 'Submit' button and a 'View All' button. The browser's taskbar at the bottom shows the Windows logo, search icon, and several application icons, along with the system clock indicating 0:10 on 01.12.2020.

I filled everything with my personal data in order to show how it works.

Personal Profile

First Name:

Family Name:

Date of Birth:

Gender: ☒ Male ☐ Female

UNT points:

Contact Information

Address:

Email:

Mobile Phone Number:

English Proficiency

Test Type:

Test Score:

Educational programs

Specialization: ☐ Software Engineering ☐ Computer Science ☐ Big Data Analytics ☒ Data Science

This is my record saved in MongoDB.

Robo 3T - 1.4

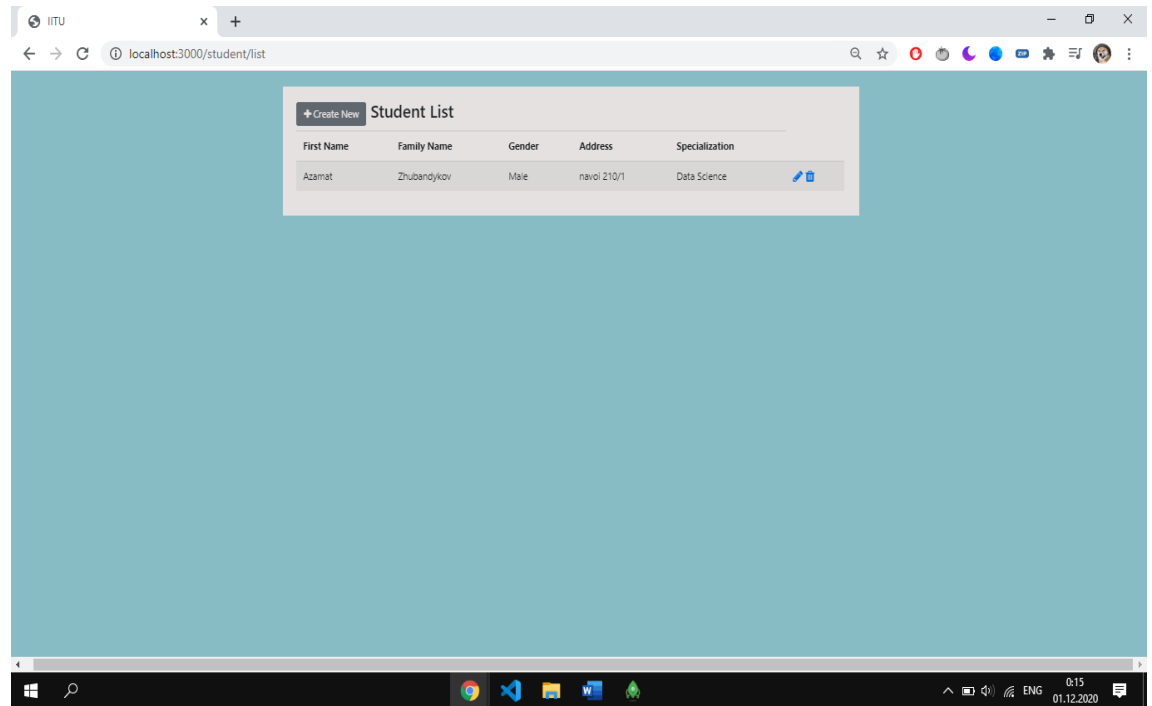
File View Options Window Help

db.getCollection('students').find()

students 0.002 sec.

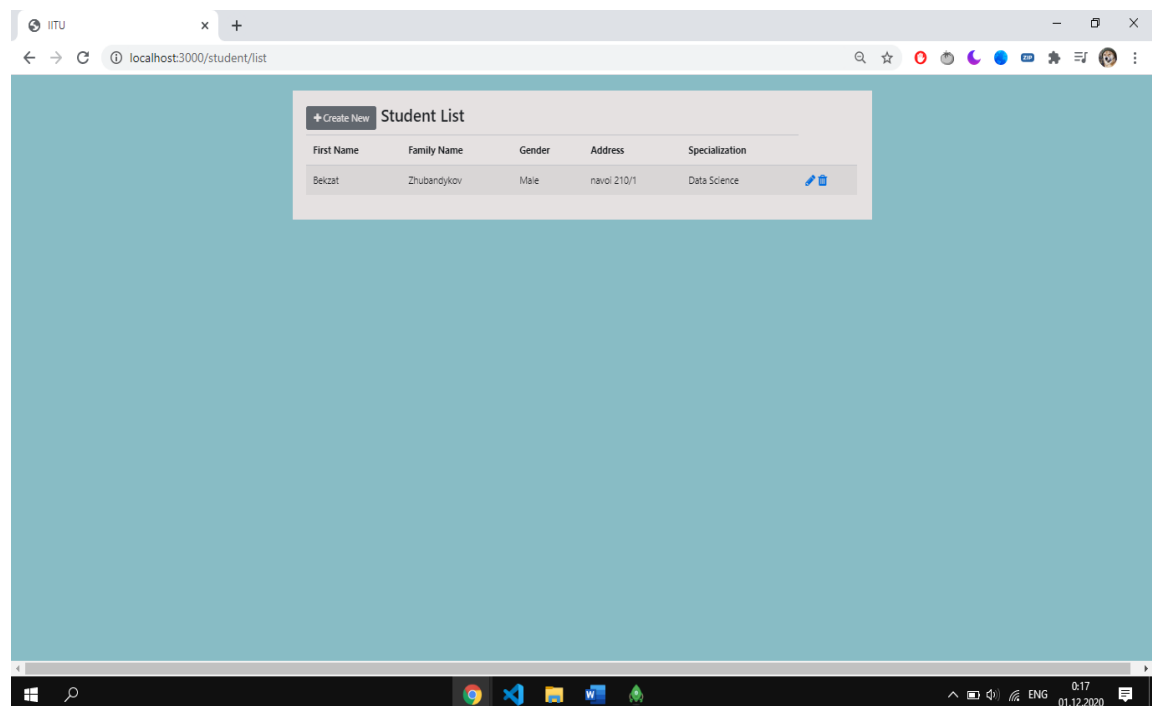
Key	Value	Type
(1) ObjectId("5fc543cbc4a9032e80f5d95d")	{ 13 fields }	Object
_id	ObjectId("5fc543cbc4a9032e80f5d95d")	ObjectId
FirstName	Azamat	String
FamilyName	Zhubandikov	String
dob	2020-10-28 00:00:00.000Z	Date
gender	Male	String
unt	125	Int32
address	navoi 210/1	String
email	azamatzhubandikk@gmail.com	String
phone	87080167585	String
testtype	IELTS	String
tetscore	6.5	Double
program	Data Science	String
__v	0	Int32

This is available page for user, he can see the same basic information

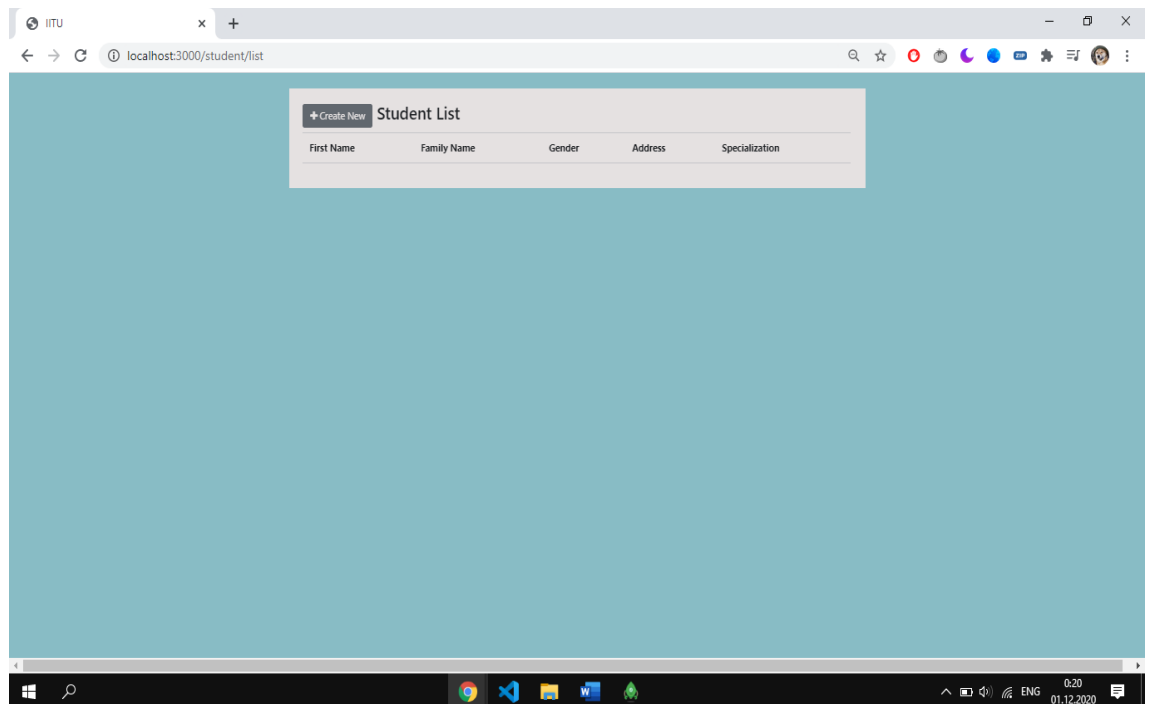


Admin can use buttons on the right side to update and delete the record.

So, I am going to change my name from Azamat to Bekzat. As you can see, the record was updated successfully.



Moreover, admin can delete the data. It was made to complete CRUD circle



And it successfully deleted.