**iStudent**

School Management System

*Control your virtual school!*

**Note: The app is in active development and it’s receiving constant updates with new features! Everything is subject to change!**

1. **How to use the app:**

There are 2 available versions of the software – console-runner and web! You can choose which one you would like to use:

* **Console-Runner app:**

Download the whole project from *Console-Runner App* folder and use a compatible Java IDE (IntelliJ Idea, Eclipse, etc.). Run the *SchoolManagementSystemApplication* class and you are all set to go!

Available commands:

1. Add **Student** – The app will request all information needed for this operation. Follow the instructions!
2. Add **Teacher** – The app will request all information needed for this operation. Follow the instructions!
3. Add **Employee** – The app will request all information needed for this operation. Follow the instructions!
4. Add **Club** – The app will request all information needed for this operation. Follow the instructions!
5. Add **Mark** to a **Student** – The app will request all information needed for this operation. Follow the instructions!
6. Add **Club** to a Student– The app will request all information needed for this operation. Follow the instructions!
7. Add **Parent** to a Student – The app will request all information needed for this operation. Follow the instructions!
8. View **Student** information - The app will request all information needed for this operation. Follow the instructions!
9. View **Teacher** information - The app will request all information needed for this operation. Follow the instructions!
10. View **Employee** information - The app will request all information needed for this operation. Follow the instructions!
11. View **Club** information - The app will request all information needed for this operation. Follow the instructions!
12. **End** – The app will end its process!

* **Web app:**

The web version of the application uses all-things **Spring (Data, Web, Security, Validation)** + **REST API** architecture! Download the whole project from *Web App* folder and you are ready to go! Feel free to check the whole source code of the software!

1. **All versions:**

* **Current version – 2.7 – 26.02.2023**

*Since the last update was sad for the students, this one is just for them! 😊*

Clubs are here! Students can now be members of clubs! The admin of iStudent can now add a club with unique name and description. A new validation for unique club name has been added! Changing club’s name is also a possibility but again – the name should be unique! Of course, the admin of the app can also delete a club and the connection with all members (students) will be removed.

This update also brings new DTOs, validations and bug fixes!

* **Version – 2.6 – 25.02.2023**

Parents have arrived! *\*drums roll\* (such a sad update for the students…)*

The admin in your school can now add parents to the database! Of course, the removal of a parent is also a possibility! The most important action is assigning a parent to a student – the admin is free to do it! When a parent gets deleted from the DB, the connection with all associated students will be removed.

This update also brings bug fixes and optimization!

* **Version – 2.5 – 21.02.2023**

A school has other employees too – people who work in the different departments in the school! With this update, the **REST API** of iStudent is now covering Employees!

You can freely add, delete or get information for an employee as well as edit the *work hours*, the *job title* and the *department* of an already created employee! The departments in the school are 4 and they are inserted into the DB with the start of the application!

This update also bring bug fixes, more validators and more DTOs available for optimizing the desired operations!

* **Version – 2.4 – 14.02.2023**

*Same day, another update 😉!*

Teachers, teachers and more teachers!

This update is all about the most important entity in iStudent – the Teacher! The *admin* of the software can get all information about a certain teacher, add a new teacher in the school, delete a teacher *(perhaps retirement 😊)* and even update the subject of a teacher! All is now available with this update!

A small addition when adding a new Student – the enroll date is now automatically the time when the student got added to the school!

* **Version – 2.3 – 14.02.2023**

Users can now be registered by the admin of the software (the school).

When registering a new user in the system, the app will automatically check what is the current user – a student, a teacher, an employee or a parent of a student! How it works:

Before registering a user in the app, the admin must add a corresponding entity (Student, Teacher, Employee, Parent) – after that, the admin should register a new user with the same email which was used when adding the corresponding entity…and the magic will happen – iStudent will map the emails and will give the user its role and its rights!

The REST architecture for this action will return OK status response + the corresponding entity!

* **Version – 2.2 – 10.02.2023**

Configuring security in the app!

A new password encoder was added! Now, only the *admin* has rights to add, update and remove a student, teacher or employee in the virtual school. Adding a student was implemented successfully!

* **Version – 2.1 – 07.02.2023**

Validation update! While registering a new student in your school, you need to meet specific criteria – from valid first, middle and last name, to unique email in the whole DB and valid gender (M, F).

iStudent is a school management system which has Users – all of them with a certain role – Admin, Student, Teacher, Employee or Parent. Admin is the user who has all rights to manipulate the software – adding, updating and deleting information for everyone involved! The role of the user is matched with the email – a user is a student if its email is in the students table in the DB, a user is a teacher if its email is in the teachers table in the DB, etc.!

* **Version – 2.0 – 05.02.2023**

Welcome to the world, **iStudent**!

Our software finally has a name – iStudent! The reason to choose this exact name is to represent what our application is - with a single word.

iStudent is officially a web-sided software! Rest controllers got introduced with this update!

You can check all students, find a student, add a student and delete a student!

* **Version – 1.10 – 19.01.2023**

The last console version of the project! You can now add and connect the last element in the software – Parent. If you want to connect a parent to a student, type command *AddParentToStudent*. You will automatically create a new parent first and then get asked to which student you want to connect the parent to.

This is the console version of the software. You can do everything you want through it! Every command is now available. There were many challenges and architecture questions but it all works great at the end. The next update will mark the new beginning of the app and introduce many **web** technologies and principles!

* **Version – 1.9 – 18.01.2023**

Two new main commands were added – you can now evaluate a student (by adding a mark to its collection) and register a student for a specific club (by adding the club to its collection). There are two mapping tables for those actions – *students\_marks* and *students\_clubs*. The database diagram is attached in the **README** file.

The two new commands are *AddMarkToStudent* and *AddClubToStudent*.

* **Version – 1.8 – 12.01.2023**

We welcome clubs in our system! Easy to add a club – easy to view an info for a desired club (by its name). The two new commands are *AddClub* and *ViewClub.* Some changes were made to the database.

* **Version - 1.7 - 11.01.2023**

(*Two updates in one day…phew 😊*)

Employees are now fully available in our system. You can add a new employee or view data for a specific one – all up to you! Our school will work **only** with *4* departments:

1. "Administrative and management"
2. "Facilities"
3. "Pupil support and welfare"
4. "Specialist and technical"

When adding a new employee to your school, on the department field you must choose one of them. You can still add new towns and countries while adding a new employee but the same doesn’t apply to the departments. They are permanent! (the goal is to simulate a real environment with specific restrictions). A new *json* file was added containing the aforementioned departments. Тhere was a slight restructuring of the folders (*base folders*).

* **Version - 1.6 - 11.01.2023**

Refactoring and adding two new commands – *ViewStudent* and *ViewTeacher* (both requesting first and last name!). The two commands introduced with the previous update were integrated in the *addStudent* and *addTeacher* commands – now, when adding either a new student or a teacher, the software will check if the current town exists or not – if not, you will get asked if you want to add it. Alongside this, you might also add a new country if you wish to – a relation will be automatically created and saved in the database!

* **Version - 1.5 - 05.01.2023**

Two new commands related to the towns/countries relation were added – *addTown* and *addCountry*. Previously created txt.file-s were converted to **JSON** files. You can now freely add new towns and countries to the database and the software will automatically check if you also need to add a new country with the insertion of a new town – if not, a relation will be created!

* **Version - 1.4 - 03.01.2023**

You can now add a new teacher! With this new version, if you want to add either a new student or a new teacher in a town that currently isn’t included in the database, you will be asked if you want the desired town to be added in the database – YES (the town will be added) or NO (the command will end). Updated *application,properties* with more information.

* **Version - 1.3 - 31.12.2022**

New database model! The top 10 towns in Bulgaria were added and you will be able to register students in any of them. If you want to add a new town, simply add it in the “towns.txt” file or add a new student in the desired town – the system will automatically add it (*note: The app currently works only with towns in Bulgaria*)

Path – “*src/main/resources/DataBaseContent/towns.txt”*

* **Version - 1.2 - 30.12.2022**

The biggest update yet! Added DTOs for the needed classes, a whole repository package with repositories (interfaces) which will communicate with the database and its data. Services were added as well (both interfaces + classes). The very first command is now available – Add a student!

* **Version - 1.1 - 25.12.2022**

More classes and basic logic was implemented in the app. New interfaces and classes were introduced and even a new base entity – parent!

* **Version - 1.0 - 22.12.2022**

The base logic of the software was added! The system has its base entities, needed dependencies in the *pom.xml* file and the required connector to the database (MySQL).

* **Base release - 19.12.2022**

A repository in GitHub was opened! The app is about to release its first version!