



# **Object-oriented programming and design**

## **University system**

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# Functionality of system

- Every user can log in, change password and view news

## Student

```
/-----Student's mode-----/
[1]      Information about Student
[2]      View courses
[3]      View available courses
[4]      View course files
[5]      View Teacher info
[6]      View marks
[7]      View transcript
[8]      Rate teacher
[9]      Get Transcript
[10]     Order book
[11]     Register to Course
[12]     Drop Course
[13]     View news
[14]     Quit
[0]     Change password
```

## Teacher

```
/-----Teacher's mode-----/
[1]      Information about Teacher
[2]      View courses
[3]      Add course file
[4]      Delete course file
[5]      View list of students
[6]      View info about student
[7]      Put mark
[8]      View marks
[9]      Send message
[10]     Get messages
[11]     View rating
[12]     View news
[13]     Quit
[0]     Change password
```

## Manager

```
/-----Manager's mode-----/
[1]      Create course
[2]      View info about students
[3]      View info about teachers
[4]      View requests about registration
[5]      Approve registration
[6]      Assign course to teachers
[7]      Add news
[8]      Remove news
[9]      Update news
[10]     Get max score of students
[11]     Get min score of students
[12]     Get average score of students
[13]     Get number of retakes
[14]     Order of students by GPA
[15]     Order students alphabetically
[16]     Order teachers alphabetically
[17]     Order teachers by status
[18]     View news
[19]     View messages
[20]     Send message
[21]     Quit
[0]     Change password
```

## Librarian

```
/-----Librarian's mode-----/
[1]      Add book
[2]      Remove book
[3]      Update order book
[4]      View news
[5]      Send message
[6]      Get messages
[7]      Quit
[8]      View books
[0]      Change password
```

## Admin

```
/-----Admin's mode-----/
[1]      Create Student
[2]      Create Teacher
[3]      Create Manager
[4]      Create Librarian
[5]      View news
[6]      Send message
[7]      Get messages
[8]      Get users
[9]      Quit
[10]     Delete user
[0]      Change password
```

**All methods works properly**

## Problems we faced with

- In database some fields were null because of some bugs with serialization, so we spent a lot of time to fix it.
- Couldn't realize attendance.

# Conclusion

We tried our best to cover all topics that we learned throughout the whole semester. Also we mastered genmymodel to build uml diagrams, and also mastered how to create documentation to project. This project really helped us to work as a team. Thanks for this amazing semester :)