

Gebze Technical University

CSE222 Data Structures and Algorithms

Term Project Proposal

Report 2

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Github: <https://github.com/Cse222-Grup4/Student-Information-System->

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1. Problem Definition

The problem is to be able to Access all kinds of information about the school from the school system quickly, easily and safely. In large institutions such as universities, which include all kinds of social, educational and cultural activities, often the problem is weak communication and information between staff, teachers and students. Our aim is to set up a student system and be aware of all kinds of activities in the university and the problems of the student regarding the school will be solved easily from the system. There are advisor teachers, teachers, school officials and students in the school system. There are many options in the system such as adding or removing courses, course schedules, transcripts, grades, course attendance, student registration to the system. All this information is followed by students, teachers and staff from the system.

Of course, there are system features that the student cannot interfere with such as entering the grades into the system, the course registration approval and determining the course Schedule. Finally, by using this system, we will be able to tackle the problem of weak communication and information in such a way that students and teachers have instant Access to everything.

2. Users of the System

Our school system consists of Admin, Students, Advisors Teachers, Teachers and School Staff (to solve problems related to the system faster and more easily).

The advisor teacher has the authority to view the grades, view the course curriculum, approve course selection and Inquire Student's Information.

The teacher has the authority to view grades, add/edit attendance, add/edit grades, view curriculum, inquire student's information.

School officers have the authority to approve scientific and cultural event, print certificate, inquire student's information, view transcript, register students, add/remove scientific and cultural event.

Students have features such as choose courses, add scientific and cultural event, join scientific and cultural event, view transcript, view grades, view attendance, view curriculum, view scientific and cultural events.

Admin has authority such as add/remove user, inquire user's information, inquire student information.

In addition, of course, all of them can log into the system with their own id numbers and passwords (if they are registered in the system).

In addition, we will open a service in the system where everyone will be informed about school activities.

To give information about our student system program.

- First, a login screen opens where teachers, student, admins and student affairs can sign in from the same place.
- After clicking the sign in option, the student login in system asks us for an Id and a password. The user, on the other hand, can log in to the system by entering the Id and passwords that we have saved in the files according to that group.

- If the user enters an incorrect Id or password, the system prompts the user to enter their information again.
- For example, if the user's password and Id are in 'teacher.txt', the user is logged in as a teacher and can use all the features of the teacher on the system, but cannot do what other users in different roles can do. In other words, which user you want to enter, you must enter the information of the user you want in the txt files that we have divided into classes.
- Same thing in officer.txt, student.txt to give valid example, I just gave teacher.txt file.
- Admin is only one person, she cannot find more than 1 like other users.
- In the events.txt file, you can see the events that will take place and even whether these events are canceled or accepted.
- When we register a student, teacher or advisor, we save all the necessary information in the file and use the information there log into the system.
- Also, admin can add and remove users.

3. System Requirements

3.1 Functional Requirements

STUDENT

- Student should able to login the system by the student Id and password.
- Student should able to choose the courses.
- Student can view course grades.
- Student can view the curriculum.
- Student can view attendance list.
- Student can view transcript.
- Student can Add scientific and cultural events.
- Student can view scientific and cultural events.

ADVISOR TEACHER

- Advisor Teacher can view course grades.
- Advisor Teacher should able to login the system by the
- Advisor Teacher Id and password.
- Advisor Teacher can view the curriculum.
- Advisor Teacher can approve course selection.
- Advisor Teacher can inquire student's information.

TEACHER

- Teacher can add/edit attendance.
- Teacher can add/edit grades.
- Teacher can view the curriculum.
- Teacher can view grades.
- Teacher can login the system by the teacher Id and password.
- Teacher can inquire student's information.

OFFICER:

- Officer should be able to login the system by the officer Id and password.
- Officer can inquire student's information.
- Officer can print student certificate.
- Officer can view transcript.
- Officer can register students.
- Officer can approve scientific and cultural events.
- Officer can Add/Remove scientific and cultural events.

ADMIN

- Admin can Add/Remove user
- Admin can inquire user's information
- Admin inquires student's information.

3.2 Non-Functional Requirements

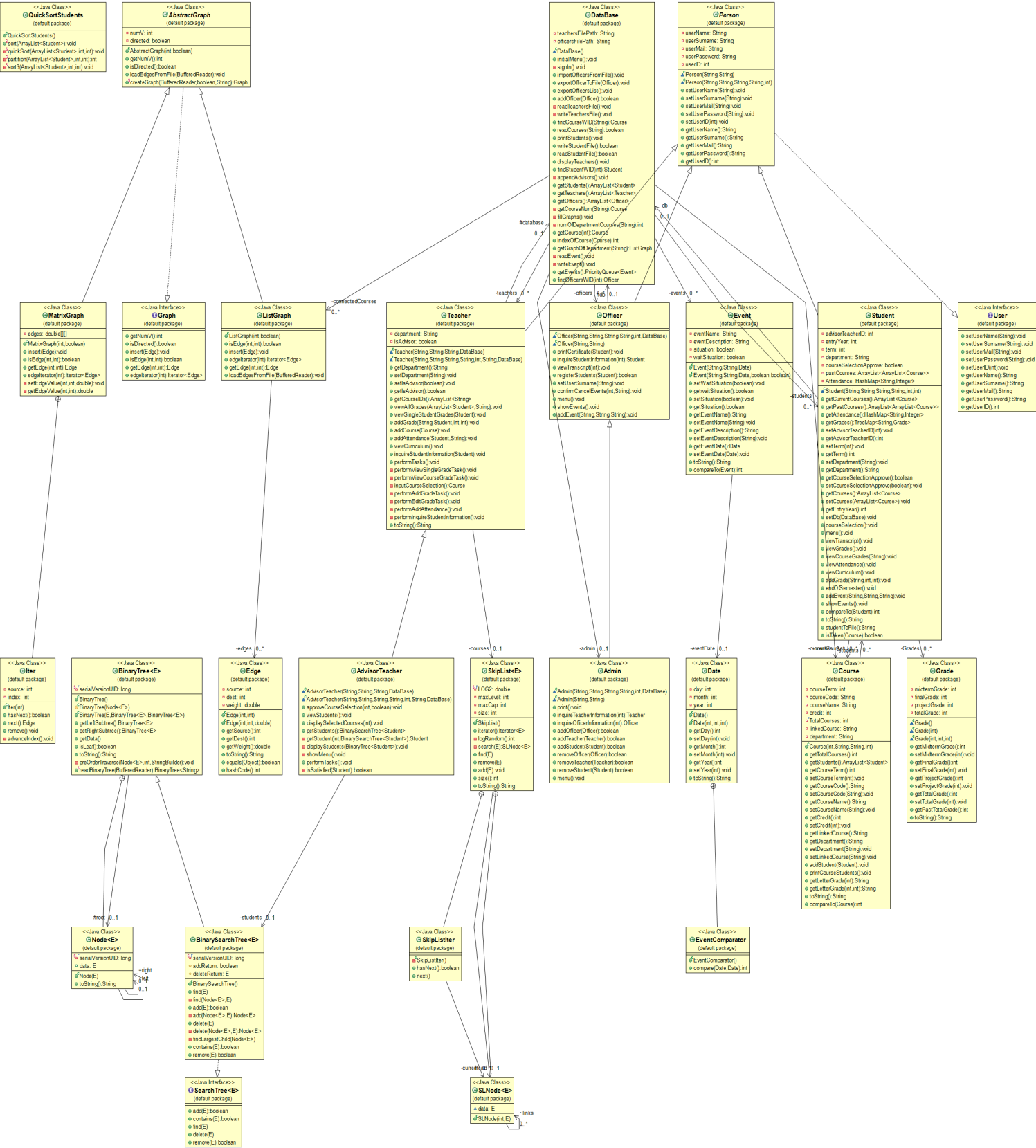
- Hardware should be able to run at least JAVA SE15.
- System users should obtain the information required for access to the system from the school administration.
- The system should be easy to use, and the user experience should be simple enough, so that even rookie staff must learn the system easily.
- Users who use the system are required to report the maximum capacity of the school (maximum number of students, teachers, consultant teachers).
- For registering someone new into the system they are required to be in possession of an either id number or password, otherwise they can't login the system.
- Anyone outside the school (Except for teachers, school personnel and advisors.) does not have any access to student's information which in system.

4. Use Case Diagram

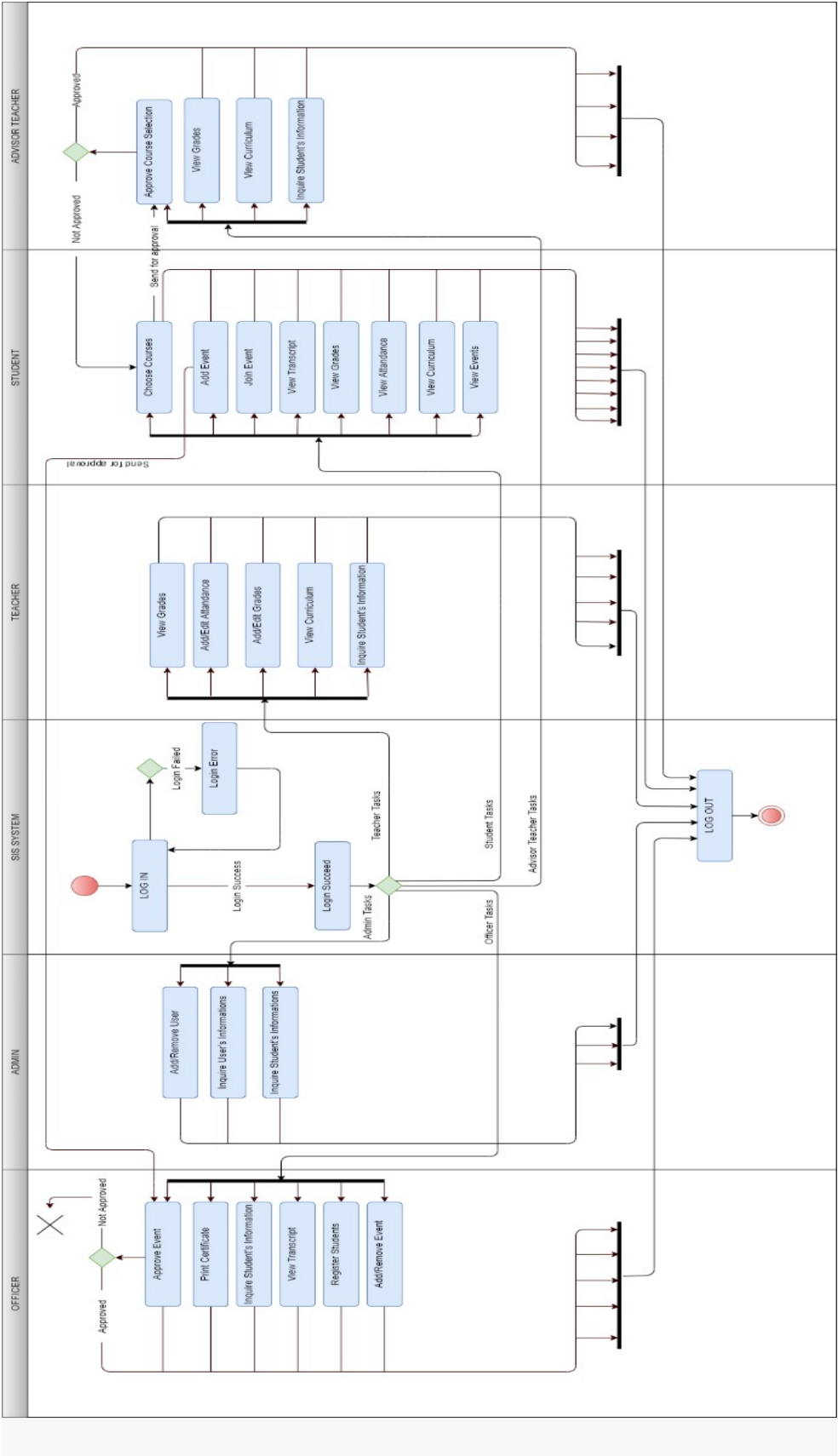
STUDENT INFORMATION SYSTEM



CLASS DIAGRAM

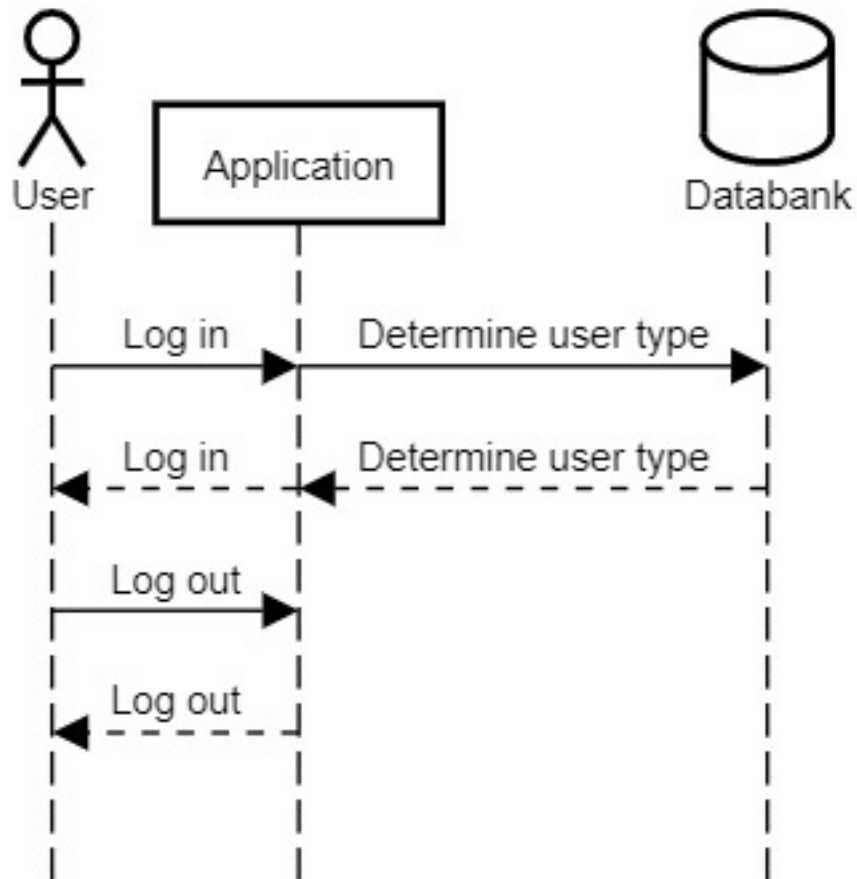


5. ACTIVITY DIAGRAM

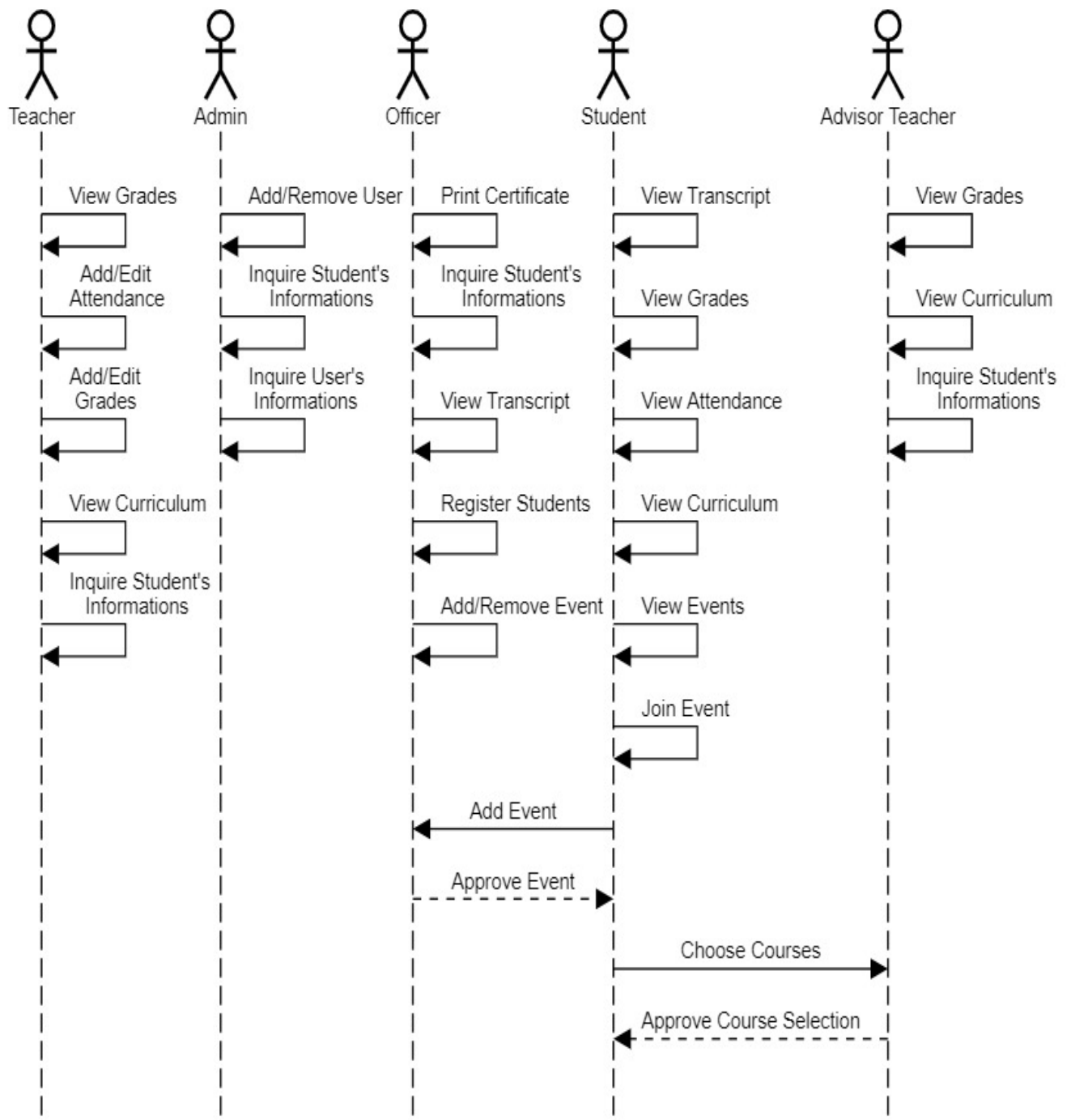


6. Sequence Diagram

User Sequence Diagram

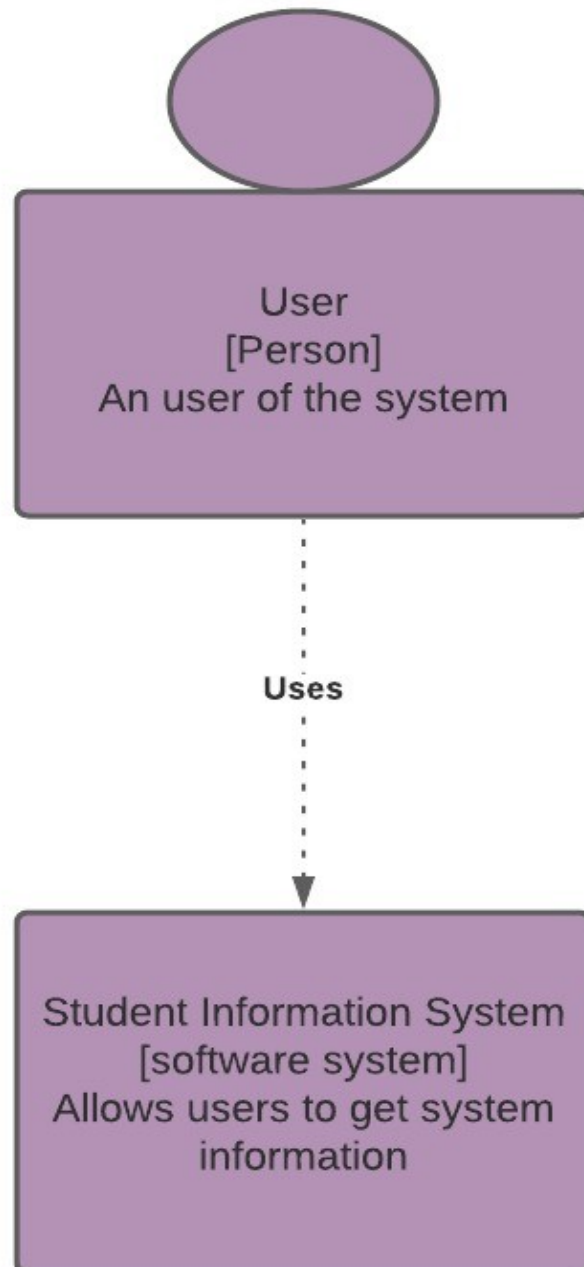


Interactions of Users

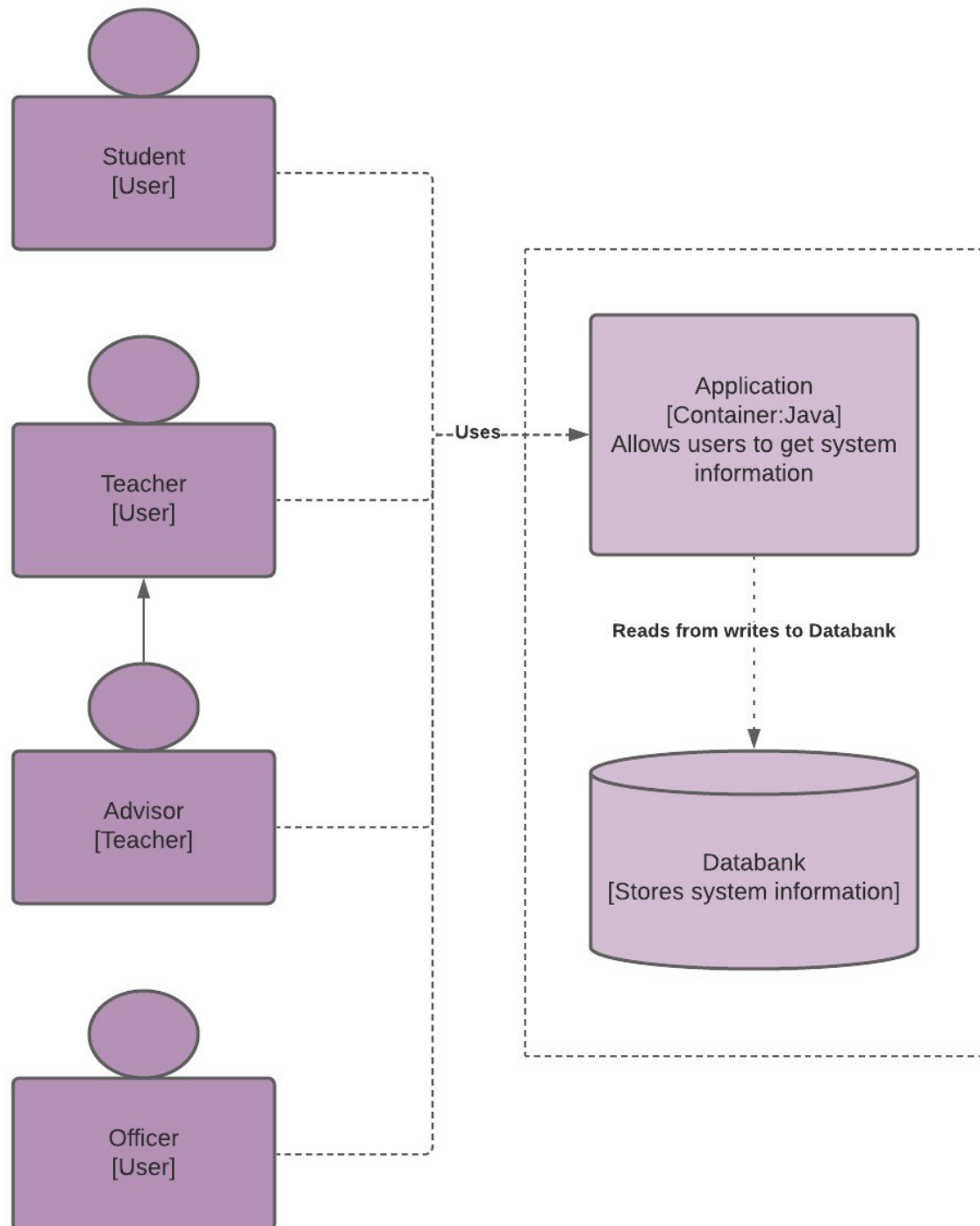


7. C4 Model

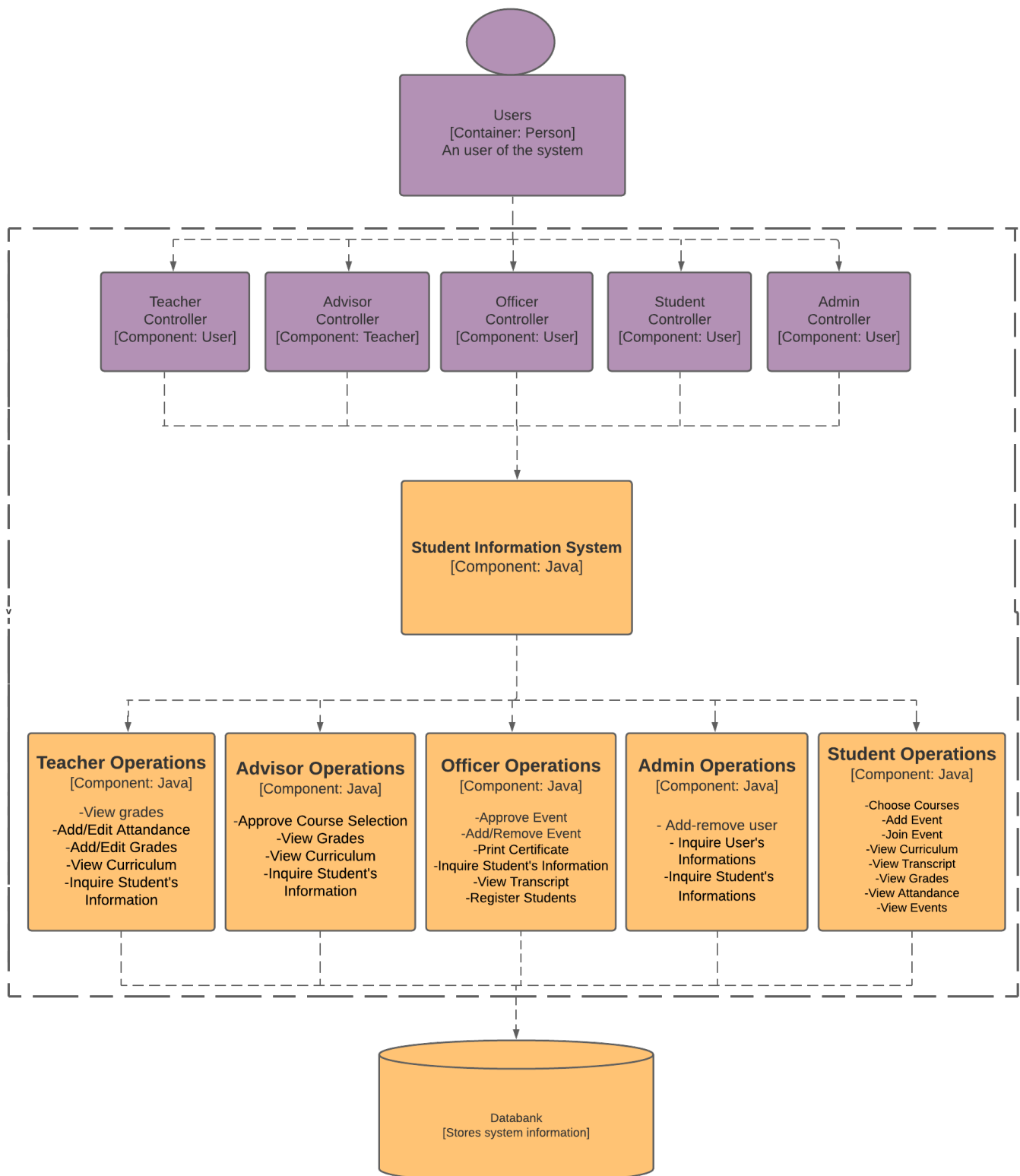
8.1. Level 1- System Context



8.2 Level 2- Component Diagram



8.3 Level 3- Component Diagram



8. Non-trivial Implementation Details

- We created one event class and we specify the time and name of that event. We have combined all the people in the student information system under the Person abstract class.
- The advisor teacher will also extend the teacher because it has many common features. We also opened separate classes for the curriculum, course attendance, student grade and courses. We also linked the Person class to the user interface.
- We use login method in Student information system and thanks to this method, we separate the login process according to whoever has done it and enable the user to use their own features.
- After the Officer approves a scientific or cultural event to the system thanks to the approveEvent method in officer class, the student becomes aware of this event and can participate in it thanks to joinEvent method in student class. At the same time, the student can send an event to the officer with addEvent in student class and the officer makes the approval process in officer method.
- The student can choose the course with the chooseCourse method in the student class, but it must be approved by the approveCourse method in the Advisor teacher class.

Which data structure we use in which class?

- We use ArrayList for Admin, Student and officer class because it is easy for implement.
- We use ArrayList for creating user objects in Database class.
- The queue structure is preferred to show the first capability that entered first.
- We used priority queue to compare events in student class.
- We used the queue structure to forward events to the user in student and officer class.
- We used hash-map for attendance and course scores in Student's class so that everyone can have course score and participation in a special way according to their name and we also used tree map structure from treeset for this.
- We used is Binary Search Tree and AVL Tree in the Advisor teacher class. Our purpose of use is to record the students who choose the course and place them on the tree according to the student's Id name,etc.in short.
- We used LinkedList in Officer and student classes while getting data from the file.
- In the Teacher class, we used the SkipList structure to save the courses and placed them one after the other.

Implementations in creating sequence diagram:

- Most of actions are on by own and not sequence based so we created 2 sequence diagrams: user-system interactions and user-user interactions.

Implementations in creating C4 model level 3:

- We detailed Application Container by showing user types specific operations through diagram.

Implementations due to feedbacks from report 1:

- We added "Admin" user type and Admin can Add/Remove user, inquire users informations and inquire students informations.
- We added "Scientific and Cultural Events" section to Student Information System.

Implementations in creating the Activity Diagram:

We use the Activity diagram to distribute tasks and features that are related or not, from the student information system to other people in the student system. In this way, we showed the relationship between the properties that are related to each other by linking them together. Also, we have placed the methods with their own characteristics in that person's field. At the end, when the exit will be made, we exit the area where the student information system is located thanks to logout method.

9. Test Cases

1. Test Case

Title: Sign in Users – Sign in Successfully

Description: Any users should be able to successfully sign in.

Precondition: The user must be on sign in necessary information.

Test Steps:

- This part will complete when written code.

Expected Result: The user sign-in this information.

Admin:

```
UserID:1
Password:admin
WELCOME TO ADMIN MENU
0) Exit
1) Add User
2) Remove User
3) Inquire User
```

Teacher:

```
Please select:
1-Sign In
0-Exit
1
UserID:1002
Password:123
-----Welcome To Teacher Menu-----
ID:1002 --- Name:Yusuf Sinan --- Surname:Akgul

Please select from the Teacher Menu:
1-View Single Student Grades
2-View Course Grades
3-Add Grade
4-Edit Grade
5-Add Attendance
6-View Curriculum
7-Inquire Student Information's(Transcript of Student)
8-Display Teacher Information's
0-Exit
```

Advisor Teacher:

```
Please select:
1-Sign In
0-Exit
1
UserID:1007
Password:123
|-----
Welcome Teacher HabilKalkan
What do you want to do?
1) View Students.
2) View Student's Selected Course
3) Approve Course Selection
0) Exit
```

Student:

```
Please select:
1-Sign In
0-Exit
1
UserID:1801042614
Password:123456
|
WELCOME TO STUDENT MENU
0) Exit
1) View Transcript
2) View All Grades
3) View Course Grade
4) View Curriculum
5) View Attendances
6) Select Courses
7) Add Event
8) Show Event
```

Officer:

```
Please select:
1-Sign In
0-Exit
1
UserID:210110
Password:000000
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
```

2. Test Case

Title: Sign in user with wrong or missing information – Sign in Fail

Description: An unregistered user cannot be able to successfully sign-in.

Precondition: The user must be on sign in page.

Test Steps:

- This part will complete when written code.

Expected Result: An unregistered user cannot be able to successfully sign-in.

```
-----Welcome to the Student Information System Application-----  
  
Please select:  
1-Sign In  
0-Exit  
1  
UserID:123455  
Password:12123  
Wrong ID or password.
```

3. Test Case

Title: Admin Add User - Successful

Description: Admin can add user.

Precondition: The admin must be on user adding page.

Test Steps:

- This part will complete when written code.

Expected Result: The user can be added successfully.

Officer:

```
0) Exit
1) Add Officer
2) Add Student
3) Add Teacher
1
Enter name:
Steven
Enter surname:
Jobs
Enter id:
210170
Enter mail:
steve@jobs
Enter password:
123456
WELCOME TO ADMIN MENU
0) Exit
1) Add User
```

Student:

```
0) Exit
1) Add Officer
2) Add Student
3) Add Teacher
2
Enter name:
Muhammed
Enter surname:
Aslan
Enter id:
1901042658
Enter mail:
hasan@gtu
Enter password:
123456
Enter year
2021
WELCOME TO ADMIN MENU
0) Exit
1) Add User
2) Remove User
3) Inquire User
```

Teacher:

```
0) Exit
1) Add Officer
2) Add Student
3) Add Teacher
3
Enter name:
Burak
Enter surname:
Koca
Enter id:
1008
Enter mail:
b.koca@gtu
Enter password:
123
Enter department
CSE|
WELCOME TO ADMIN MENU
0) Exit
1) Add User
2) Remove User
3) Inquire User
```

4. Test Case

Title: Admin Remove User – Successful

Description: Admin can remove user.

Precondition: The admin must be on user removing page.

Test Steps:

- This part will complete when written code.

Expected Result: The user can be removed by admin successfully.

Teacher:

```
1
UserID:1
Password:admin
WELCOME TO ADMIN MENU
0) Exit
1) Add User
2) Remove User
3) Inquire User
2
0) Exit
1) Remove User
1
Enter id
1008
```

5. Test Case

Title: Admin Remove User - Fail

Description: Admin can remove user.

Precondition: The admin must be on user removing page.

Test Steps:

- This part will complete when written code.

Expected Result: The user can be removed by admin failure.

```
WELCOME TO ADMIN MENU
0) Exit
1) Add User
2) Remove User
3) Inquire Student
2
0) Exit
1) Remove Officer
1
Enter officer id:
210110
```


6. Test Case

Title: Admin inquires Student's Information – Successful

Description: Admin can inquire student's information about class, grades, activities etc.

Precondition: The admin must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Admin inquires student's information.

```
WELCOME TO ADMIN MENU
0) Exit
1) Add User
2) Remove User
3) Inquire Student
3
0) Exit
1) Inquire Student
1
Enter id
1801042614
Enter student id:
Name: Samet Surname: Nalbant Mail: samet.nalbant@gtu.edu.tr Password: 123456 User-id: 1801042614 Advisor-id: 1007 Department: CSE Term: 2 Course-Selection: true
```

7. Test Case

Title: Admin inquires Student's Information – Fail

Description: Admin can inquire student's information about class, grades, activities etc.

Precondition: The admin must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Admin doesn't inquire student's information.

```
UserID:1
Password:admin
WELCOME TO ADMIN MENU
0) Exit
1) Add User
2) Remove User
3) Inquire Student
3
0) Exit
1) Inquire Student
1
Enter id
1234567
Enter student id:
Student couldn't found!
```

8. Test Case

Title: Teacher View Grades - Successful

Description: Teacher can view grades of students.

Precondition: Teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Teacher will view grades.

```
Please select from the Teacher Menu:
1-View Single Student Grades
2-View Course Grades
3-Add Grade
4-Edit Grade
5-Add Attendance
6-View Curriculum
7-Inquire Student Information's(Transcript of Student)
8-Display Teacher Information's
0-Exit
2
Please select from one of your courses to print out all the grades of students who taki
Your courses are listed in below. Please type the index of the course you want to selec
1-CSE 107
2-CSE 101
1
The grades for student:Emine Esra Karaosmanoglu of course:CSE 107
    Midterm: 10 Final: 30 Project: 5 Total grade: 19

The grades for student:Aygun Bayir of course:CSE 107
    Midterm: 10 Final: 30 Project: 5 Total grade: 19

The grades for student:Berkcan Ekici of course:CSE 107
    Midterm: 10 Final: 30 Project: 5 Total grade: 19

The grades for student:Samet Nalbant of course:CSE 107
    Midterm: 10 Final: 30 Project: 5 Total grade: 19
```

9. Test Case

Title: Add/Edit Attendance – Successful

Description: Teacher add, remove basically edit attendance of students.

Precondition: Teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Teacher edits attendance.

```
>
-----Add Attendance-----
Your courses are listed in below. Please type the index of the course you want to select
1-CSE 107
2-CSE 101
1
The students who takes the course is listed below. Please type the index of the student you want to increase attendance
1-161044026--Emine Esra--Karaosmanoglu
2-161044119--Aygün--Bayır
3-171044015--Berkcan--Ekici
4-1801042614--Samet--Nalbant
5-1801042639--Ahmet--Yazici
6-1801042672--Serdil Anil--Unlu
7-1901042262--Uğur--Er
8-1901042643--Bilal--Yalçınkaya
1
Attendance is successfully increased.
```

10. Test Case

Title: Add/Edit Attendance – Fail

Description: Teacher add, remove basically edit attendance of students.

Precondition: Teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Teacher doesn't edit attendance.

```
-----Add Attendance-----  
Your courses are listed in below. Please type the index of the course you want to select  
1-CSE 452  
2-CSE 107  
3-CSE 101  
1  
There is no student who takes this course.
```

11. Test Case

Title: Add/Edit Grades – Successful

Description: Teacher add, remove, increase, or decrease basically edit grades of students.

Precondition: Teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Teacher edits grades.

```
-----Add/Edit Grade-----
Your courses are listed in below. Please type the index of the course you want to select
1-CSE 452
2-CSE 107
3-CSE 101
2
The students who takes the course is listed below. Please type the index of the student you want to add/edit grade.
1-161044026--Emine Esra--Karaosmanoglu
2-161044119--Aygün--Bayir
3-171044015--Berkcan--Ekici
4-1801042614--Samet--Nalbant
5-1801042639--Ahmet--Yazici
6-1801042672--Serdil Anil--Unlu
7-1901042262--Ugur--Er
8-1901042643--Bilal--Yalcinkaya
1
Please select the grade type
1-Midterm
2-Final
3-Project
2
Please type the grade out of 100
0
Grade is successfully added/edited.
```

```
→
-----Add/Edit Grade-----
Your courses are listed in below. Please type the index of the course you want to select
1-CSE 452
2-CSE 107
3-CSE 101
2
The students who takes the course is listed below. Please type the index of the student you want to add/edit grade.
1-161044026--Emine Esra--Karaosmanoglu
2-161044119--Aygun--Bayir
3-171044015--Berkcan--Ekici
4-1801042614--Samet--Nalbant
5-1801042639--Ahmet--Yazici
6-1801042672--Serdil Anil--Unlu
7-1901042262--Ugur--Er
8-1901042643--Bilal--Yalçınkaya
1
Please select the grade type
1-Midterm
2-Final
3-Project
3
Please type the grade out of 100
100
Grade is successfully added/edited.|
```

12. Test Case

Title: Add/Edit Grades – Fail

Description: Teacher add, remove, increase or decrease basically edit grades of students.

Precondition: Teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Teacher doesn't edit grades.

```
-----Add/Edit Grade-----  
Your courses are listed in below. Please type the index of the course you want to select  
1-CSE 452  
2-CSE 107  
3-CSE 101  
1  
There is no student who takes this course.
```


13. Test Case

Title: View Curriculum – Successful

Description: Teacher view curriculum of lessons.

Precondition: Teacher must be on lesson page.

Test Steps:

- This part will complete when written code.

Expected Result: Teacher views curriculum.

Semester	Course Code	Course Name	Credit
1	CSE 101	Introduction to Computer Engineering and Career Planning	8
1	CSE 107	Introduction To Computer Science Laboratory	2
1	MATH 101	Calculus I	7
1	PHYS 121	Physics I	6
1	PHYS 151	Physics Laboratory I	1
1	HIS 101	Principles of Atatürk And The History of Turkish Revolution I	2
1	TUR 101	Turkish I	2
2	CSE 102	Computer Programming	8
2	CSE 108	Computer Programming Laboratory	2
2	MATH 102	Calculus II	7
2	PHYS 122	Physics II	6
2	PHYS 152	Physics Laboratory II	1
2	HIS 102	Principles of Atatürk And The History of Turkish Revolution II	2
2	TUR 102	Turkish II	2

14. Test Case

Title: Inquire Student's Informations– Successful

Description: Teacher views information about students.

Precondition: Teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Teacher views information about students.

////////////////////////////////TRANSCRIPT////////////////////////////////

Name-Surname: Samet Nalbant
ID: 1801042614
Department: CSE
Register Date: 2018
Advisor Teacher ID: 1007

Current Courses:

2018 Fall

Course code: CSE 101 | Course name: Introduction to Computer Engineering and Career Planning | Course credit: 8 | Grade: NA
Course code: CSE 107 | Course name: Introduction To Computer Science Laboratory | Course credit: 2 | Grade: FF

Past Courses:

2018 Fall

Course code: MATH 101 | Course name: Calculus I | Course credit: 7 | Grade: FF
Course code: TUR 101 | Course name: Turkish I | Course credit: 2 | Grade: FF

2018 Spring

Course code: PHYS 151 | Course name: Physics Laboratory I | Course credit: 1 | Grade: FF

////////////////////////////////

15. Test Case

Title: Inquire Student's Informations– Fail

Description: Teacher views information about students.

Precondition: Teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Teacher doesn't view information about students.

Please select from the Teacher Menu:

1-View Single Student Grades

2-View Course Grades

3-Add Grade

4-Edit Grade

5-Add Attendance

6-View Curriculum

7-Inquire Student Information's(Transcript of Student)

8-Display Teacher Information's

0-Exit

7

Please type the Student ID for inquire the information's of student.

1002

Student couldn't found.

16. Test Case

Title: View Grades – Successful

Description: Advisor teacher view grades of students.

Precondition: Advisor teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Advisor teacher edits grades successfully.

```
l
Please type the Student ID for print out all the grades of student.
1801042614
The grades for student:Samet Nalbant

Current Courses:
2018 Fall
Code: CSE 101 | Midterm: 20 | Final: 30 | Project: 70 | Total Grade: 30 | Name: Introduction to Computer Engineering and Career Planning
Code: CSE 107 | Midterm: 10 | Final: 30 | Project: 5 | Total Grade: 19 | Name: Introduction To Computer Science Laboratory
```

17. Test Case

Title: Approve Course Selection – Successful

Description: Advisor teacher approves lessons that students take want.

Precondition: Advisor teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Advisor teacher can approve the lesson.

```
-----  
Welcome Teacher HabilKalkan  
What do you want to do?  
1) View Students.  
2) View Student's Selected Course  
3) Approve Course Selection  
0) Exit  
3  
Enter the ID of student:  
1801042614  
Do you want to approve?(1-Yes, 0-No)  
1  
|
```

18. Test Case

Title: Approve Course Selection – Fail

Description: Advisor teacher approves lessons that students take want.

Precondition: Advisor teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Advisor teacher can't approve the lesson.

```
-----  
      Welcome Teacher HabilKalkan  
What do you want to do?  
1) View Students.  
2) View Student's Selected Course  
3) Approve Course Selection  
0) Exit  
3  
Enter the ID of student:  
1801042655  
Student couldn't found  
-----
```

19. Test Case

Title: Doesn't approve Course Selection– Successful

Description: Advisor teacher approves lessons that students take want. When student can't take the lesson, advisor teacher rejects the lesson.

Precondition: Advisor teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Advisor teacher can reject the lesson.

```
-----  
Welcome Teacher HabilKalkan  
What do you want to do?  
1) View Students.  
2) View Student's Selected Course  
3) Approve Course Selection  
0) Exit  
3  
Enter the ID of student:  
1801042614  
Do you want to approve?(1-Yes, 0-No)  
0  
|-----  
Welcome Teacher HabilKalkan  
What do you want to do?  
1) View Students.  
2) View Student's Selected Course  
3) Approve Course Selection  
0) Exit
```

20. Test Case

Title: Advisor Teacher Prints Student's Selected Courses – Successful

Description Advisor Teacher can print student's selected courses.

Precondition: Advisor teacher must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Advisor Teacher can print student's selected COURSES.

```
-----  
Welcome Teacher HabilKalkan  
What do you want to do?  
1) View Students.  
2) View Student's Selected Course  
3) Approve Course Selection  
0) Exit  
2  
Enter the ID of student:  
1801042614  
Course, courseCode='CSE 101', courseName='Introduction to Computer Engineering and Career Planning', credit=8', courseTerm=1  
Course, courseCode='CSE 107', courseName='Introduction To Computer Science Laboratory', credit=2', courseTerm=1  
Total credit taken by student: 10  
Student has satisfied requirements to take this courses  
-----
```

21. Test Case

Title: Officer prints certificate – Fail

Description: Officer can print certificate about any event for students.

Precondition: Officer must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer can't print certificate.

```
1
UserID:210110
Password:000000
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
2
Enter student id:
123456
,
```

22. Test Case

Title: Officer prints certificate– Successful

Description: Officer can print certificate about any event for students.

Precondition: Officer must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Advisor teacher prints certificate.

```
////////////////////////////////TRANSCRIPT////////////////////////////////
Name-Surname: Samet Nalbant
ID: 1801042614
Department: CSE
Register Date: 2018
Advisor Teacher ID: 1007

Current Courses:
  2019 Spring
    Course code: CSE 101 | Course name: Introduction to Computer Engineering and Career Planning | Course credit: 8 | Grade: NA
    Course code: CSE 107 | Course name: Introduction To Computer Science Laboratory | Course credit: 2 | Grade: FF

Past Courses:
  2018 Fall
    Course code: MATH 101 | Course name: Calculus I | Course credit: 7 | Grade: FF
    Course code: TUR 101 | Course name: Turkish I | Course credit: 2 | Grade: FF
  2018 Spring
    Course code: PHYS 151 | Course name: Physics Laboratory I | Course credit: 1 | Grade: FF

////////////////////////////////
```

23. Test Case

Title: Inquire Student's Informations– Successful

Description: Officer views information about students.

Precondition: Officer must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer views information about students.

```
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
1
Enter student id:
1801042614
Name: Samet Surname: Nalbant Mail: samet.nalbant@gtu.edu.tr Password: 123456 User-id: 1801042614 Advisor-id: 1007 Department: CSE Term: 2 Course-Selection: true
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
```

24. Test Case

Title: Inquire Student's Informations– Fail

Description: Officer views information about students.

Precondition: Officer must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer doesn't view information about students.

```
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
1
Enter student id:
123456
Student couldn't found!
```

25. Test Case

Title: Officer View Transcript - Success

Description: Officer can view transcript of students.

Precondition: Officer must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer can view transcript.

////////////////////////////////TRANSCRIPT////////////////////////////////

Name-Surname: Samet Nalbant
ID: 1801042614
Department: CSE
Register Date: 2018
Advisor Teacher ID: 1007

Current Courses:

2019 Spring

Course code: CSE 101 | Course name: Introduction to Computer Engineering and Career Planning | Course credit: 8 | Grade: NA
Course code: CSE 107 | Course name: Introduction To Computer Science Laboratory | Course credit: 2 | Grade: FF

Past Courses:

2018 Fall

Course code: MATH 101 | Course name: Calculus I | Course credit: 7 | Grade: FF
Course code: TUR 101 | Course name: Turkish I | Course credit: 2 | Grade: FF

2018 Spring

Course code: PHYS 151 | Course name: Physics Laboratory I | Course credit: 1 | Grade: FF

////////////////////////////////

26. Test Case

Title: Officer View Transcript - Fail

Description: Officer can view transcript of students.

Precondition: Officer must be on student page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer can't view transcript.

```
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
2
Enter student id:
123456
123456
```

27. Test Case

Title: Officer registers a new student – Successful

Description: Officer can register a new student.

Precondition: Officer must be in register page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer registers the student.

```
Enter student mail
ahmet@hgtu
Enter student passwd
123456
Enter student name
Ahmet
Enter student surname
Kaya
Enter student id
1801042618
Enter year
2021
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
1
Enter student id:
1801042618
Name: Ahmet Surname: Kaya Mail: ahmet@hgtu Password: 123456 User-id: 1801042618 Advisor-id: 0 Department: null Term: 0 Course-Selection: false
~ ~ ~
```

28. Test Case

Title: Officer registers a new student – Fail

Description: Officer can register a new student.

Precondition: Officer must be in register page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer doesn't register the student.

```
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
3
Enter student mail
ahmet@gtu
Enter student passwd
123456
Enter student name
ahmet
Enter student surname
kadir
Enter student id
1801042601
Enter year
2021
```


29. Test Case

Title: Officer add event - Successful

Description: Officer can add an event.

Precondition: Officer must be in event page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer adds an event.

```
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
6
Enter event name
Geekday
Enter event description
Geekday2022
Enter event date (ex: 25/11/2019):
25/11/2022
```

30. Test Case

Title: Officer cancel event - Successful

Description: Officer can cancel an event.

Precondition: Officer must be in event page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer cancels an event.

```
1
UserID:210110
Password:000000
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
4
Enter event name
Bahar Senligi
Enter Event Sition(ex: 1 or 0):
0
.
```

31. Test Case

Title: Officer cancel event - Fail

Description: Officer can cancel an event.

Precondition: Officer must be in event page.

Test Steps:

- This part will complete when written code.

Expected Result: Officer doesn't cancel an event.

```
0-) Exit
1-) Inquire Student information with student id
2-) View transcript
3-) Register student
4-) Confirm/cancel event
5-) Show events
6-) Add new event
4
Enter event name
GeekDay
Enter Event Sitation(ex: 1 or 0):
0
Event couldn't found!
```

32. Test Case

Title: Student View Grades - Successful

Description: Student can view grades of students.

Precondition: Student must be on profile page.

Test Steps:

- This part will complete when written code.

Expected Result: Student will view grades.

```
WELCOME TO STUDENT MENU
0) Exit
1) View Transcript
2) View All Grades
3) View Course Grade
4) View Curriculum
5) View Attendances
6) Select Courses
7) Add Event
8) Show Event
2

Current Courses:
2019 Spring
Code: CSE 101 | Midterm: 20 | Final: 30 | Project: 70 | Total Grade: 30 | Name: Introduction to Computer Engineering and Career Planning
Code: CSE 107 | Midterm: 10 | Final: 30 | Project: 5 | Total Grade: 19 | Name: Introduction To Computer Science Laboratory
```

33. Test Case

Title: View Attendance – Successful

Description: Student views basically edit attendance of students.

Precondition: Student must be on own page.

Test Steps:

- This part will complete when written code.

Expected Result: Student views attendance.

```
WELCOME TO STUDENT MENU
0) Exit
1) View Transcript
2) View All Grades
3) View Course Grade
4) View Curriculum
5) View Attendances
6) Select Courses
7) Add Event
8) Show Event
5
Course: CSE 101 | Introduction to Computer Engineering and Career Planning
Total number of courses 30
Number of absent day: 10
Currently your grade is NA. You should attend your classes if you want to pass..

Course: CSE 107 | Introduction To Computer Science Laboratory
Total number of courses 30
Number of absent day: 9
```

34. Test Case

Title: View Curriculum – Successful

Description: Student view curriculum of lessons.

Precondition: Student must be on lesson page.

Test Steps:

- This part will complete when written code.

Expected Result: Student views curriculum.

```
WELCOME TO STUDENT MENU
0) Exit
1) View Transcript
2) View All Grades
3) View Course Grade
4) View Curriculum
5) View Attendances
6) Select Courses
7) Add Event
8) Show Event
4
Semester      Course Code   Course Name                                     Credit
1             CSE 101      Introduction to Computer Engineering and Career Planning      8
1             CSE 107      Introduction To Computer Science Laboratory                    2
1             MATH 101     Calculus I                                                    7
1             PHYS 121     Physics I                                                     6
1             PHYS 151     Physics Laboratory I                                           1
1             HIS 101      Principles of Atatürk And The History of Turkish Revolution I  2
1             TUR 101      Turkish I                                                      2

2             CSE 102      Computer Programming                                           8
2             CSE 108      Computer Programming Laboratory 2
2             MATH 102     Calculus II                                                    7
2             PHYS 122     Physics II                                                     6
2             PHYS 152     Physics Laboratory II                                          1
2             HIS 102      Principles of Atatürk And The History of Turkish Revolution II 2
2             TUR 102      Turkish II                                                     2
```

35. Test Case

Title: Student View Transcript - Success

Description: Student can view transcript of students.

Precondition: Student must be on own page.

Test Steps:

- This part will complete when written code.

Expected Result: Student can view transcript.

```
WELCOME TO STUDENT MENU
0) Exit
1) View Transcript
2) View All Grades
3) View Course Grade
4) View Curriculum
5) View Attendances
6) Select Courses
7) Add Event
8) Show Event
1
|
////////////////////////////////TRANSCRIPT////////////////////////////////

Name-Surname: Samet Nalbant
ID: 1801042614
Department: CSE
Register Date: 2018
Advisor Teacher ID: 1007

Current Courses:
  2019 Spring
    Course code: CSE 101 | Course name: Introduction to Computer Engineering and Career Planning | Course credit: 8 | Grade:
    Course code: CSE 107 | Course name: Introduction To Computer Science Laboratory | Course credit: 2 | Grade: FF

Past Courses:
  2018 Fall
    Course code: MATH 101 | Course name: Calculus I | Course credit: 7 | Grade: FF
    Course code: TUR 101 | Course name: Turkish I | Course credit: 2 | Grade: FF
  2018 Spring
    Course code: PHYS 151 | Course name: Physics Laboratory I | Course credit: 1 | Grade: FF
```

36. Test Case

Title: Student view events - Successful

Description: Student can view events.

Precondition: Student must be in event page.

Test Steps:

- This part will complete when written code.

Expected Result: Student views events.

```
WELCOME TO STUDENT MENU
0) Exit
1) View Transcript
2) View All Grades
3) View Course Grade
4) View Curriculum
5) View Attendances
6) Select Courses
7) Add Event
8) Show Event
8
Event Date: 20/1/2022 Event Name: Bahar Senligi Event Description: EglenceEvent Situation: falseEvent Wait Situationtrue
```