Service Specification

1. **Add student service**

RESTful API:

HTTP Method: POST

Endpoint: api/students/add-student

Access Role: Personnel

Inputs:

Email: string,

Password: string,

Picture: jpg/jpeg,

first-name: string,

last-name: string,

father’s name: string,

birth-date: string, national-ID: string,

education-license: jpg, jpeg, pdf,

phone-num: int,

edu-level: string

Outputs:

Message of successful operation, 200 OK

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Email or phone number isn’t unique, throws 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **Edit student**

RESTful API:

HTTP Method: POST

Endpoint: api/ students/edit-student

Access Role: Personnel

Inputs:

Email: string,

Password: string,

Picture: jpg/jpeg,

first-name: string,

last-name: string,

father’s name: string,

birth-date: string,

national-ID: string,

education-license: jpg, jpeg, pdf,

phone-num: int,

edu-level: string

Outputs:

Message of successful operation, status code: 200 OK,

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Email doesn’t exist or password mismatch throw 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **Delete student**

RESTful API:

HTTP Method: GET

Endpoint: api/ students/delete-student

Access Role: Personnel

Inputs:

Email: string,

Outputs:

Message of successful operation status code: 200 OK,

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Email doesn’t exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **Add Teacher/Personnel**

RESTful API:

HTTP Method: POST

Endpoint: api/personnel/add-teacher-or-personnel

Access Role: personnel

Inputs:

Email: string,

Password: string,

Picture: jpg/jpeg,

first-name: string,

last-name: string,

father’s name: string,

national-ID: string,

education-license: jpg, jpeg, pdf,

birth-date: string,

phone-num: int,

edu-level: string

ttc-test: int,

ttc-scan: jpg, jpeg, pdf,

Outputs:

Message of successful operation,

Error message in case of failure,

status code: 200 OK,

Error message\_400 Bad Request,

Error message\_401 Unauthorized,

Error message\_500 Internal Server Error,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Email doesn’t exist or password mismatch throw 400 bad request.

1. **Edit Teacher/Personnel**

RESTful API:

HTTP Method: POST

Endpoint: api/personnel/edit-teacher-or-personnel

Access Role: Personnel

Inputs:

Email: string,

Password: string,

Picture: jpg/jpeg,

first-name: string,

last-name: string,

father’s name: string,

birth-date: string,

national-ID: string,

education-license: jpg, jpeg, pdf,

phone-num: int,

edu-level: string

Outputs:

Message of successful operation, 200 OK

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Email and phone\_num must be unique, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **delete Teacher/Personnel**

RESTful API:

HTTP Method: POST

Endpoint: api/personnel/delete-teacher-or-personnel

Access Role: Personnel

Inputs:

Email: string,

Outputs:

Message of successful operation,

Error message in case of failure,

status code: 200 OK,

Error message\_400 Bad Request,

Error message\_401 Unauthorized,

Error message\_500 Internal Server Error,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Email does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **Add New Class Service**

RESTful API:

HTTP Method: POST

Endpoint: api/personnel/add-class

Access Role: Personnel

Inputs:

Title: string,

Book\_ID: int,

Min\_sessions: int,

Base\_fee: int,

Teacher\_fee: int,

Outputs:

Message of successful operation,

Error message in case of failure,

status code: 200 OK,

Error message\_400 Bad Request,

Error message\_401 Unauthorized,

Error message\_500 Internal Server Error,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **Edit Class Service**

RESTful API:

HTTP Method: POST

Endpoint: api/personnel/edit-class

Access Role: Personnel

Inputs:

Class\_ID: int,

Title: string,

Book\_ID: int,

Min\_sessions: int,

Base\_fee: int,

Teacher\_fee: int,

Outputs:

Message of successful operation status code: 200 OK,

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Class\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Notes:

Class\_ID field is the ID of the class user tend to edit.

1. **Delete Class Service**

RESTful API:

HTTP Method: POST

Endpoint: api/personnel/delete-class

Access Role: Personnel

Inputs:

Class\_ID: int,

Outputs:

Message of successful operation status code: 200 OK,

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Class\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Notes:

Class\_ID field is the ID of the class user tend to delete.

1. **View Class Attendance Service**

RESTful API:

HTTP Method: GET

Endpoint: api/management/view-class-attendance

Access Role: Personnel/Teacher

Inputs:

Class\_ID: int,

Outputs:

Message of successful operation status code: 200 OK,

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Class\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Notes:

Class\_ID field is the ID of the class user tend to see it’s attendance.

Fineds all sessions and all attendances related to each session for the input class.

1. **Record student attendance**

RESTful API:

HTTP Method: POST

Endpoint: api/management/Record student attendance

Access Role: Teacher

Inputs:

Student\_ID: int,

Session\_ID: int,

Present: bool,

Outputs:

Message of successful operation\_ status code: 200 OK

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Student\_ID does not exist,

Session\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Notes:

Class\_ID field is the ID of the class user tend to see it’s attendance.

Payments contains transactions and its date and time.

1. **View Payments List**

RESTful API:

HTTP Method: GET

Endpoint: api/management/view-payments-list

Access Role: Personnel/Student

Inputs:

Student\_ID: int,

Outputs:

Payments: list, status code: 200 OK,

Error message in case of failure,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Student\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Notes:

Class\_ID field is the ID of the class user tend to see it’s attendance.

Payments contains transactions and its date and time.

1. **Log in service**

RESTful API:

HTTP Method: POST

Endpoint: api/users/login

Access Role: free

Inputs:

Email: string,

Password: string,

Outputs:

Message of successful operation and navigate to dashboard\_ status code: 200 OK

Error message in case of failure

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Email already exists, 400 bad request.

Server error, 500 Internal Server Error.

1. **View class panel service**

RESTful API:

HTTP Method: GET

Endpoint: api/students/classpanel

Access Role: Student

Inputs:

Student\_ID: int,

Outputs:

Class-title: string,

Teacher-name: string,

Book-title: string,

Exams-date: datetime,

Next-session-time: datetime,

recent announcements,

last assignments(with info like score,…),

open assignments,

status code: 200 OK,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Student\_ID does not exist or student doesn’t have any active class, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **Payment service**

RESTful API:

HTTP Method: POST

Endpoint: api/students/payment

Access Role: Student

Inputs:

Student\_ID: int,

Required\_Payment: double,

Outputs:

Redirect to payment gateway(service providers api needs to be set up)

Status code 200 OK,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Student\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Notes:

Payments records must be checked(in case user has paid already).

1. **Full report of educational status and history service**

RESTful API:

HTTP Method: GET

Endpoint: api/students/educational-status

Access Role: Student

Inputs:

Student\_ID: int,

Outputs:

Redirect to educational status report page.

Enrollments: list, (Contains all previous class enrollments of the student(with level names and detailed grades) and the average of the final grades of all term as overall grade), 200 OK,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Student\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **View teacher’s classes service**

RESTful API:

HTTP Method: GET

Endpoint: api/teachers/classes

Access Role: Teacher/Personnel

Inputs:

Teacher\_ID: int,

Outputs:

List<class>,(All classes that are held by the teacher), 200 OK,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Teacher\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **Create Timeslot Service**

RESTful API:

HTTP Method: POST

Endpoint: api/management/add-timeslot

Access Role: Personnel

Inputs:

Day:int,

Capacity: int,

start\_time: time,

end\_time: time,

Outputs:

Success message\_New timeslot is created in database, 200 OK,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

start\_time and end\_time don’t follow clock conventions or day of week is invalid, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Notes:

start\_time and end\_time should be stored as military time

1. **View Enrolled students service**

RESTful API:

HTTP Method: GET

Endpoint: api/management/enrolled-students

Access Role: Teacher/Personnel

Inputs:

Class\_ID: int,

Outputs:

List<student>\_ List of all students in the class(who relate with the class\_ID), 200 OK,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Class\_ID does not exist, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

1. **Grading Student Service**

RESTful API:

HTTP Method: POST

Endpoint: api/teachers/grading

Access Role: Teacher

Inputs:

Enrollment\_ID: int,

Student\_ID: int,

Grades[attendance, midterm, final]: list,

Outputs:

Message of successful operation, 200 OK,

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

Enrollment\_ID doesn’t exist,

the teacher has no active class,

teacher and class aren’t related,

studentID doesn’t exist or the student and class aren’t related,

grades aren’t in correct range,

the class is not held in current semester, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.

Notes:

Warning is given if student already has grades.

1. **Personnel schedule classes service**

RESTful API:

HTTP Method: POST

Endpoint: api/management/schedule-class

Access Role: Personnel

Inputs:

Class\_ID: int,

Timeslot\_ID: int,

Outputs:

Message of successful operation, 200 OK,

error message in case of failure.

Errors:

All input fields are to be provided, otherwise empty field error is thrown.

timeslotID or classID doesn’t exist,

the timeslot has no capacity,

the class is not active, 400 bad request.

User isn’t in required role or is not authenticated, 401 Unauthorized.

Server error, 500 Internal Server Error.