

## 1. route.js

This code sets up routing for an Express.js application by defining various endpoints for managing different entities such as admins, students, teachers, notices, complaints, classes, and subjects. Each route is linked to a specific controller function that handles the logic for that route. Below is a detailed explanation of each part of the router code:

### Importing Dependencies

- Imports the Express Router, which allows us to create modular, mountable route handlers.

### Importing Controller Functions

Controller functions for each entity (admin, student, teacher, notice, complain, sclass, subject) are imported from their respective controller files. These functions contain the logic for handling requests and interacting with the database.

### Admin Routes

- **Admin Registration and Login:**
  - `POST /AdminReg`: Registers a new admin.
  - `POST /AdminLogin`: Logs in an admin.
- **Admin Details:**
  - `GET /Admin/:id`: Fetches details of a specific admin by ID.
- **Commented Out Routes:** The routes for deleting and updating an admin are currently commented out.

### Student Routes

- **Student Registration and Login:**
  - `POST /StudentReg`: Registers a new student.
  - `POST /StudentLogin`: Logs in a student.
- **Student Details and Management:**
  - `GET /Students/:id`: Fetches a list of students for a specific school by ID.
  - `GET /Student/:id`: Fetches details of a specific student by ID.
  - `DELETE /Students/:id`: Deletes all students for a specific school by ID.
  - `DELETE /StudentsClass/:id`: Deletes all students for a specific class by ID.
  - `DELETE /Student/:id`: Deletes a specific student by ID.
  - `PUT /Student/:id`: Updates details of a specific student by ID.
  - `PUT /UpdateExamResult/:id`: Updates the exam result of a specific student by ID.

- `PUT /StudentAttendance/:id`: Updates the attendance record of a specific student by ID.
- `PUT /RemoveAllStudentsSubAtten/:id`: Clears attendance for a specific subject for all students.
- `PUT /RemoveAllStudentsAtten/:id`: Clears all attendance records for all students.
- `PUT /RemoveStudentSubAtten/:id`: Removes attendance for a specific subject for a specific student.
- `PUT /RemoveStudentAtten/:id`: Removes all attendance records for a specific student.

## Teacher Routes

- **Teacher Registration and Login:**
  - `POST /TeacherReg`: Registers a new teacher.
  - `POST /TeacherLogin`: Logs in a teacher.
- **Teacher Details and Management:**
  - `GET /Teachers/:id`: Fetches a list of teachers for a specific school by ID.
  - `GET /Teacher/:id`: Fetches details of a specific teacher by ID.
  - `DELETE /Teachers/:id`: Deletes all teachers for a specific school by ID.
  - `DELETE /TeachersClass/:id`: Deletes all teachers for a specific class by ID.
  - `DELETE /Teacher/:id`: Deletes a specific teacher by ID.
  - `PUT /TeacherSubject`: Updates the subject a teacher is assigned to.
  - `POST /TeacherAttendance/:id`: Updates the attendance record of a specific teacher by ID.

## Notice Routes

- **Notice Management:**
  - `POST /NoticeCreate`: Creates a new notice.
  - `GET /NoticeList/:id`: Fetches a list of notices for a specific school by ID.
  - `DELETE /Notices/:id`: Deletes all notices for a specific school by ID.
  - `DELETE /Notice/:id`: Deletes a specific notice by ID.
  - `PUT /Notice/:id`: Updates a specific notice by ID.

## Complain Routes

- **Complain Management:**
  - `POST /ComplainCreate`: Creates a new complaint.
  - `GET /ComplainList/:id`: Fetches a list of complaints for a specific school by ID.

## Sclass Routes

- **Class Management:**
  - `POST /SclassCreate`: Creates a new class.
  - `GET /SclassList/:id`: Fetches a list of classes for a specific school by ID.
  - `GET /Sclass/:id`: Fetches details of a specific class by ID.
  - `GET /Sclass/Students/:id`: Fetches a list of students in a specific class by ID.
  - `DELETE /Sclasses/:id`: Deletes all classes for a specific school by ID.
  - `DELETE /Sclass/:id`: Deletes a specific class by ID.

## Subject Routes

- **Subject Management:**
  - `POST /SubjectCreate`: Creates a new subject.
  - `GET /AllSubjects/:id`: Fetches all subjects for a specific school by ID.
  - `GET /ClassSubjects/:id`: Fetches all subjects for a specific class by ID.
  - `GET /FreeSubjectList/:id`: Fetches all subjects not assigned to a teacher.
  - `GET /Subject/:id`: Fetches details of a specific subject by ID.
  - `DELETE /Subject/:id`: Deletes a specific subject by ID.
  - `DELETE /Subjects/:id`: Deletes all subjects for a specific school by ID.
  - `DELETE /SubjectsClass/:id`: Deletes all subjects for a specific class by ID.

## Exporting the Router

```
module.exports = router;
```

- Exports the router to be used in the main application file.

## Summary

This router file organizes and defines routes for various administrative tasks related to managing schools, students, teachers, notices, complaints, classes, and subjects. Each route is associated with a controller function that handles the specific request logic. The routes are designed to perform CRUD operations (Create, Read, Update, Delete) and other specific actions for each entity in the system.