Student Document

```
{
  "email": "string",        // Student's email
  "name": "string",         // Student's name
  "avatar": "string",       // URL or path to the student's avatar
  "studentID": "number",    // Unique ID for the student
  "grade": "number",        // Current grade of the student
  "class": "string",        // Class or section the student belongs to
  "subject": ["string"],    // Array of subject IDs the student is enrolled in
  "teacherID": ["string"],  // Array of teacher IDs associated with the student
  "parentsname": "string",  // Name of the student's parents
  "address": {              // Address object
    "homeNo": "string",
    "street": "string",
    "city": "string"
  },
  "phoneNumber": "number"   // Student's phone number
}
```

User (Teacher/Admin/Super Admin) Document

```
{
  "username": "string",     // Username of the user
  "name": "string",         // Name of the user
  "email": "string",        // Email of the user
  "password": "string",     // Password for the user's account
  "phoneNumber": "number",   // Phone number of the user
  "grade": "number",        // Grade associated with the user (if applicable)
  "class": "string",        // Class or section associated with the user (if applicable)
  "role": "string",         // Role of the user (teacher/admin/super admin)
  "avatar": "string"        // URL or path to the user's avatar
}
```

Student Grade Document

```
{
  "studentID": "string",     // Reference to Student document
  "semester": "number",      // Semester number (1, 2, or 3)
  "grades": [
   {
     "subjectID": "string",   // Reference to Subject document
     "grade": "string"      // Grade (e.g., A, B, C, etc.)
   }
  ],
  "year": "number"          // Academic year
}
```

Student Attendance Document

```
{

 "studentID": "string",     // Reference to Student document

 "date": "date",           // Date of attendance

 "status": "string",       // Status (e.g., Present, Absent, Late)

 "subjectID": "string",    // Reference to Subject document (if attendance is per subject)

 "semester": "number"      // Semester number (1, 2, or 3)

}
```

Subject Document

```
{

 "subjectID": "string",    // Unique ID for the subject

 "name": "string",         // Name of the subject

 "teacherID": "string"     // Reference to User (Teacher) document

}
```

Relationships

1. Student Document Relationships

- Subjects: A student can be enrolled in multiple subjects, referenced by an array of subjectIDs.
- Teachers: A student can have multiple teachers, referenced by an array of teacherIDs.
- Grades: A student can have multiple grades, which will reference the student by studentID.
- Attendance: A student can have multiple attendance records, which will reference the student by studentID.

2. User (Teacher/Admin/Super Admin) Document Relationships

- Subjects: A teacher can teach multiple subjects, referenced by the teacherID in the Subject document.
- Students: Indirect relationship through the subjects they teach and the student grades/attendance they manage.

3. Student Grade Document Relationships

- Student: Each grade document references a specific student by studentID.
- Subject: Each grade entry within the grade document references a specific subject by subjectID.

4. Student Attendance Document Relationships

- Student: Each attendance document references a specific student by studentID.

5. Subject Document Relationships

- Teacher: Each subject is taught by a specific teacher, referenced by teacherID.
- Students: Each subject can have multiple students enrolled, referenced indirectly through the student documents.