API Design Document:

IAU Student Statistics API

1. Overview

The IAU Student Statistics API provides statistical data related to students and demographics at Imam Abdulrahman Bin Faisal University. It is likely used for dashboards, reporting, or internal analytics.

2. Base URL

https://admitportal.iau.edu.sa/Services/studentinfo/api

3. Endpoint

GET /statistics

Description: Retrieves statistical data about students, such as admission counts, gender distribution, and program enrollment.
Method: GET
URL Example: GET /statistics

4. Response

a. Success Response (200 OK)

```
{
  "year": 2025,
  "totalStudents": 12000,
  "genderDistribution": {
    "male": 7000,
    "female": 5000
  },
  "programs": [
    {
      "name": "Computer Science",
      "students": 1500
    },
    {
      "name": "Medicine",
      "students": 1000
    }
```

```
    ]
}
```

b. Error Responses

```
400 Bad Request
{
  "error": "Invalid query parameters"
}
404 Not Found
{
  "error": "Statistics not available for the given criteria"
}
500 Internal Server Error
{
  "error": "An unexpected error occurred"
}
```

5. Data Model

Field	Type	Description
Campus	string	Indicates the physical location or branch of the university.
Career	string	Specifies the academic level or track the student is pursuing.
Program_Status	string	Reflects the current enrollment status of the student in the program.
College	string	Names the academic college or faculty the student belongs to.
Program_Name	string	Describes the specific academic program or major the student is enrolled in.
Nationality	string	States the country of citizenship of the student.
Gender	string	Indicates the gender identity of the student.
Studs_Count	integer	Represents the total number of students matching the given criteria.

6. Security

Use HTTPS for all requests.

If required, use API key or Bearer token for authentication.

Implement rate limiting and logging for monitoring.

7. Usage Example

```
curl -X GET "https://admitportal.iau.edu.sa/Services/studentinfo/api/statistics?year=2025" \
    -H "Content-Type: application/json"
```