

# Reports and Results

## API Testing Report

Below are the test cases for each API endpoint. Each test includes the command (irm in PowerShell), expected outcome, and will be backed up with screenshots of actual responses.

### 1. Event Management

#### 1.1 Create Event (Valid)

```
irm http://localhost:5000/api/events -Method Post -ContentType "application/json" -  
Body '{  
  "collegeId":"C001",  
  "title":"AI Workshop",  
  "type":"workshop",  
  "state":"published"  
'
```

```
id      : 59822027-37d3-4d14-9727-882c07181017  
state   : draft  
collegeId : C001  
title    : AI Workshop  
type     : workshop  
updatedAt : 2025-09-07T04:48:33.016Z  
createdAt : 2025-09-07T04:48:33.016Z
```

#### 1.2 Create Event (Missing Title)

```
irm http://localhost:5000/api/events -Method Post -ContentType "application/json" -  
Body '{  
  "collegeId":"C001"  
'
```

```
irm : {"error":"collegeId and title are required"}  
At line:1 char:1  
+ irm http://localhost:5000/api/events -Method Post -ContentType "appli ...  
+ ~~~~~  
+ CategoryInfo          : InvalidOperation: (System.Net.HttpWebRequest:HttpWebRequest) [Invoke-RestMethod], WebException  
+ FullyQualifiedErrorId : WebCmdletWebResponseException,Microsoft.PowerShell.Commands.InvokeRestMethodCommand
```

#### 1.3 List Events

```
irm http://localhost:5000/api/events
```

```
id      : 82ec219d-d6f6-4dc5-8260-c6b5b43dc90a
collegeId : C001
title    : ML Mini Workshop
description : Intro to ML
type     : workshop
startTime :
endTime  :
location :
state    : draft
eventCode :
createdAt : 2025-09-06T18:22:34.922Z
updatedAt : 2025-09-06T18:22:34.922Z
```

#### 1.4 List Published Events Only

irm "http://localhost:5000/api/events?state=published"

```
id      : E001
collegeId : C001
title    : AI Workshop
description :
type     : workshop
startTime :
endTime  :
location :
state    : published
eventCode :
createdAt : 2025-09-06T17:55:43.321Z
updatedAt : 2025-09-06T17:55:43.321Z

id      : E002
collegeId : C001
title    : Tech Fest
description :
type     : fest
startTime :
endTime  :
location :
state    : published
eventCode :
createdAt : 2025-09-06T17:55:43.324Z
updatedAt : 2025-09-06T17:55:43.324Z
```

## 2. Student Registration

### 2.1 Register Student (Valid)

```
irm http://localhost:5000/api/register -Method Post -ContentType "application/json"
-Body '{
  "eventId":"E001",
  "studentRoll":"R005",
  "collegeId":"C001","name":"Kishan", "email":"kishan@example.com"
}'
```

```
PS C:\Users\kisha\Desktop\campus-drive-node> irm http://localhost:5000/api/register -Method Post -ContentType "application/json" -Body '{
>> "eventId":"E001",
>> "studentRoll":"R021",
>> "collegeId":"C001",
>> "name":"Kishan",
>> "email":"kishan@example.com"
>> }'
```

```
id           : 40487468-fc96-40b5-9fd9-5e2baf38fce5
registeredAt : 2025-09-06T18:24:55.204Z
attendanceStatus : registered
eventId      : E001
studentId    : 36218645-9d38-4420-81e4-669d25b03629
collegeId    : C001
updatedAt    : 2025-09-06T18:24:55.204Z
createdAt    : 2025-09-06T18:24:55.204Z
```

## 2.2 Register Student (Duplicate)

```
irm http://localhost:5000/api/register -Method Post -ContentType "application/json"
-Body '{
  "eventId":"E001",
  "studentRoll":"R005",
  "collegeId":"C001"
}'
```

```
irm : {"error":"Student already registered for this event"}
At line:1 char:1
+ irm http://localhost:5000/api/register -Method Post -ContentType "app ...
+ ~~~~~
+ CategoryInfo          : InvalidOperation: (System.Net.HttpWebRequest:HttpWebRequest) [Invoke-RestMethod], WebException
+ FullyQualifiedErrorId : WebCmdletWebResponseException,Microsoft.PowerShell.Commands.InvokeRestMethodCommand
```

## 2.3 Register for Unpublished Event

```
irm : {"error":"Event not found or not published"}
At line:1 char:1
+ irm http://localhost:5000/api/register -Method Post -ContentType "app ...
+ ~~~~~
+ CategoryInfo          : InvalidOperation: (System.Net.HttpWebRequest:HttpWebRequest) [Invoke-RestMethod], WebException
+ FullyQualifiedErrorId : WebCmdletWebResponseException,Microsoft.PowerShell.Commands.InvokeRestMethodCommand
```

## 3. Attendance Tracking

### 3.1 Mark Attendance (Valid)

```
irm http://localhost:5000/api/attendance -Method Post -ContentType
"application/json" -Body '{
  "eventId":"E001",
  "studentRoll":"R005",
  "collegeId":"C001",
  "status":"present"
}'
```

```

id           : 33025351-cedb-46dc-ad78-96acc1b6e8cf
eventId      : E001
studentId    : S005
collegeId    : C001
registeredAt : 2025-09-06T17:55:43.354Z
attendanceStatus : present
createdAt    : 2025-09-06T17:55:43.354Z
updatedAt    : 2025-09-06T18:27:58.446Z

```

### 3.2 Mark Attendance (Invalid Student)

```

irm http://localhost:5000/api/attendance -Method Post -ContentType
"application/json" -Body '{
  "eventId":"E001",
  "studentRoll":"R999", "collegeId":"C001","status":"present"
}'

```

```

irm : {"error":"Student not found"}
At line:1 char:1
+ irm http://localhost:5000/api/attendance -Method Post -ContentType "a ...
+ ~~~~~
+ CategoryInfo          : InvalidOperation: (System.Net.HttpWebRequest:HttpWebRequest) [Invoke-RestMethod], WebException
+ FullyQualifiedErrorId : WebCmdletWebResponseException,Microsoft.PowerShell.Commands.InvokeRestMethodCommand

```

### 3.3 Mark Attendance (Invalid Status)

```

irm : {"error":"Validation error: Validation isIn on attendanceStatus failed"}
At line:1 char:1
+ irm http://localhost:5000/api/attendance -Method Post -ContentType "a ...
+ ~~~~~
+ CategoryInfo          : InvalidOperation: (System.Net.HttpWebRequest:HttpWebRequest) [Invoke-RestMethod], WebException
+ FullyQualifiedErrorId : WebCmdletWebResponseException,Microsoft.PowerShell.Commands.InvokeRestMethodCommand

```

## 4. Feedback Collection

### 4.1 Submit Feedback (Valid)

```

irm http://localhost:5000/api/feedback -Method Post -ContentType
"application/json" -Body '{
  "eventId":"E002",
  "studentRoll":"R005",
  "collegeId":"C001",
  "rating":4,
  "comments":"Great event!"
}'

```

```

id           : 71b920fb-259e-4a3a-bbc6-cdaa544b1d43
eventId      : E002
studentId    : S005
collegeId    : C001
rating       : 4
comments     : Great event!
updatedAt    : 2025-09-07T05:32:57.482Z
createdAt    : 2025-09-07T05:32:57.482Z

```

### 4.2 Submit Feedback (Missing Rating)

```
irm http://localhost:5000/api/feedback -Method Post -ContentType
"application/json" -Body '{
  "eventId":"E002",
  "studentRoll":"R005",
  "collegeId":"C001"
}'
```

```
irm : {"error":"eventId, studentRoll, collegeId, rating are required"}
At line:1 char:1
+ irm http://localhost:5000/api/feedback -Method Post -ContentType "app ...
+ ~~~~~
+ CategoryInfo          : InvalidOperation: (System.Net.HttpWebRequest:HttpWebRequest) [Invoke-RestMethod], WebException
+ FullyQualifiedErrorId : WebCmdletWebResponseException,Microsoft.PowerShell.Commands.InvokeRestMethodCommand
```

## 5. Reporting APIs

### 5.1 Event Popularity Report

```
irm "http://localhost:5000/api/reports/event-popularity?collegeId=C001"
```

eventId	title	registrations
E001	AI Workshop	15
E002	Tech Fest	10

### 5.2 Attendance Percentage Report

```
irm http://localhost:5000/api/reports/attendance-
percent?collegeId=C001&eventId=E001
```

```
eventId          : E001
totalRegistered  : 15
presentCount     : 7
title            : AI Workshop
attendancePercent : 46.67
```

### 5.3 Average Feedback Report

```
irm "http://localhost:5000/api/reports/avg-feedback?collegeId=C001"
```

eventId	avgRating	feedbackCount	title
E001	4.5	2	AI Workshop
E002	3.75	4	Tech Fest

### 5.4 Student Participation Report

```
irm "http://localhost:5000/api/reports/student-participation?collegeId=C001"
```

studentId : S007	studentId : S005
eventsRegistered : 2	eventsRegistered : 2
eventsAttended : 2	eventsAttended : 1
studentRoll : R007	studentRoll : R005
name : Sneha	name : Kavana
studentId : S001	studentId : S004
eventsRegistered : 2	eventsRegistered : 2
eventsAttended : 2	eventsAttended : 1
studentRoll : R001	studentRoll : R004
name : Akshay	name : Ananya
studentId : S012	studentId : S002
eventsRegistered : 1	eventsRegistered : 2
eventsAttended : 1	eventsAttended : 1
studentRoll : R012	studentRoll : R002
name : Varun	name : Priya
studentId : S011	studentId : S014
eventsRegistered : 1	eventsRegistered : 1
eventsAttended : 1	eventsAttended : 0
studentRoll : R011	studentRoll : R014
name : Meera	name : Pooja
	studentId : S013
	eventsRegistered : 1
	eventsAttended : 0
	studentRoll : R013
	name : Snehal

### 5.5 Top Active Students Report

```
irm "http://localhost:5000/api/reports/top-active-students?collegeId=C001&limit=3"
```

studentId	attended	studentRoll	name
S007	2	R007	Sneha
S001	2	R001	Akshay
S012	1	R012	Varun

## 6. Event Deletion & Cancellation

### 6.1 Hard Delete Event (Valid)

```
irm http://localhost:5000/api/events/E001 -Method Delete
```

```
message
-----
Event deleted successfully
```

### 6.2 Hard Delete Event (Not Found)

```
irm http://localhost:5000/api/events/XYZ -Method Delete
```

```
irm : {"error":"Event not found"}
At line:1 char:1
+ irm http://localhost:5000/api/events/XYZ -Method Delete
+ ~~~~~
+ CategoryInfo          : InvalidOperation: (System.Net.HttpWebRequest:HttpWebRequest) [Invoke-RestMethod], WebException
+ FullyQualifiedErrorId : WebCmdletWebResponseException,Microsoft.PowerShell.Commands.InvokeRestMethodCommand
```

### 6.3 Cancel Event (Soft Delete)

irm http://localhost:5000/api/events/E002/cancel -Method Post

```
message      event
-----
Event cancelled @id=E002; collegeId=C001; title=Tech Fest; description=; type=fest; startTime=; endTime=;
```