



# OpenAPI definition v0 OAS 3.0

[/v3/api-docs](#)

## Servers

http://localhost:8080 - Generated server url ▾

## Borrow History Controller API endpoints for managing borrowing history of bicycles and classroom keys ^

**POST**[/api/history/return/{borrowId}](#) Return borrowed item

^

Marks a borrowed item (bicycle or key) as returned and updates its availability

### Parameters

[Try it out](#)

Name	Description
------	-------------

**borrowId** \* requiredID of the borrow record  
*Example : 1*  
(path)

1

### Responses

Code	Description	Links
------	-------------	-------

200 Item returned successfully

No links

Media type

\*/\*

Controls Accept header.

Example Value |

Item returned successfully

Code	Description	Links
400	Item already returned	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">/*</div> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 60px; margin-top: 10px;">Item is already returned</div>	
404	Borrow record not found	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">/*</div> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 60px; margin-top: 10px;">Borrow record not found</div>	
500	Internal server error	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">/*</div> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 60px; margin-top: 10px;">Error processing return</div>	

**POST**`/api/history/return-with-feedback/{borrowId}` Return item with feedback

Returns a borrowed item (bicycle or key) and optionally provides feedback

### Parameters

**Try it out**

Name	Description
------	-------------

**borrowId** \* required

integer(\$int64)  
(path)

1

**feedback**

string  
(query)

Great condition

Name	Description
conditionDescription <small>string (query)</small>	Description of item condition <i>Example</i> : Minor scratches  Minor scratches
experienceRating <small>integer(\$int32) (query)</small>	Rating from 1 to 5 <i>Example</i> : 4  4

  

## Responses

Code	Description	Links
200	Item returned successfully with feedback  Media type <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> Controls Accept header.  Example Value    <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Item returned successfully <b>with</b> feedback</div>	No links
400	Invalid feedback data  Media type <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> Example Value    <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Experience rating must be between 1 and 5</div>	No links
404	Borrow record not found  Media type <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> Example Value    <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Borrow record not found</div>	No links
409	Item already returned  Media type <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> Example Value	No links

[Links](#)[Code](#)[Description](#)

```
Item has already been returned
```

[GET](#)[/api/history/user/{userId}](#) Get user's borrowing history

Retrieves complete borrowing history for a specific user

### Parameters

[Try it out](#)[Name](#)[Description](#)**userId** \* required

ID of the user

integer(\$int64)

(path)

1

### Responses

[Code](#)[Description](#)[Links](#)

200

Successfully retrieved user's borrowing history

No links

Media type

\*/\*



Controls Accept header.

[Example Value](#) | [Schema](#)

```
[
  {
    "id": 1,
    "student": {
      "id": 1
    },
    "classroomKey": {
      "id": 1,
      "keyNumber": "A101"
    },
    "borrowTime": "2023-05-15T09:00:00",
    "isReturned": true
  }
]
```

204

No borrowing history found for user

No links

Media type

\*/\*

[Example Value](#) |

[]

Code	Description	Links				
404	User not found	No links				
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">*/*</div>					
	<p>Example Value   Schema</p> <pre>User not found</pre>					
<b>GET</b>	/api/history/user/{userId}/classroom-keys Get user's key history	<a href="#">^</a>				
Retrieves only classroom key borrowing history for a specific user						
<b>Parameters</b>		<a href="#">Try it out</a>				
<table border="1"> <thead> <tr> <th>Name</th><th>Description</th></tr> </thead> <tbody> <tr> <td><b>userId</b> * required integer(\$int64) (path)</td><td>ID of the user <i>Example : 1</i> <input type="text" value="1"/></td></tr> </tbody> </table>			Name	Description	<b>userId</b> * required integer(\$int64) (path)	ID of the user <i>Example : 1</i> <input type="text" value="1"/>
Name	Description					
<b>userId</b> * required integer(\$int64) (path)	ID of the user <i>Example : 1</i> <input type="text" value="1"/>					
<b>Responses</b>						
<b>Code</b>	<b>Description</b>	Links				
200	Successfully retrieved key history	No links				
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">*/*</div>					
	Controls Accept header.					
	<p>Example Value   Schema</p> <pre>[   {     "id": 2,     "classroomKey": {       "id": 1,       "keyNumber": "A101"     },     "borrowTime": "2023-05-15T09:00:00",     "returnTime": "2023-05-15T11:00:00"   } ]</pre>					
204	No key history found for user	No links				

[Links](#)[Code](#)[Description](#)

Media type

[Example Value](#)

[]

[GET](#)[/api/history/user/{userId}/bicycles](#)

Get user's bicycle history



Retrieves only bicycle borrowing history for a specific user

## Parameters

[Try it out](#)[Name](#)[Description](#)**userId** \* required

integer(\$int64)

(path)

ID of the user

Example : 1

1

## Responses

[Code](#)[Description](#)[Links](#)

200

Successfully retrieved bicycle history

No links

Media type

Controls Accept header.

[Example Value](#)[Schema](#)

```
[  
  {  
    "id": 1,  
    "bicycle": {  
      "id": 1,  
      "qrCode": "bike123"  
    },  
    "borrowTime": "2023-05-15T10:00:00",  
    "returnTime": "2023-05-15T12:30:00"  
  }  
]
```

204

No bicycle history found for user

No links

Media type

[Links](#)[Code](#)[Description](#)[Example Value](#)

[]

[GET](#)[/api/history/user/{userId}/active-keys](#) Get user's active key borrowings

Retrieves currently active classroom key borrowings for a user

### Parameters

[Try it out](#)[Name](#)[Description](#)**userId** \* required

integer(\$int64)

(path)

1

### Responses

[Code](#)[Description](#)[Links](#)

200

Successfully retrieved active keys

No links

Media type

\*/\*



Controls Accept header.

[Example Value](#)[Schema](#)

```
[
  {
    "id": 4,
    "classroomKey": {
      "id": 2,
      "keyNumber": "B202"
    },
    "borrowTime": "2023-05-16T15:00:00",
    "isReturned": false
  }
]
```

204

No active key borrowings found

No links

Media type

\*/\*

[Example Value](#)

[]

Code	Description	Links
GET	/api/history/user/{userId}/active-borrowings Get user's active borrowings	^
<p>Retrieves all currently active borrowings for a user</p>		
<b>Parameters</b>		<b>Try it out</b>
Name	Description	
<b>userId</b> * required integer(\$int64) (path)	ID of the user <i>Example : 1</i>	<input type="text" value="1"/>
<b>Responses</b>		
Code	Description	Links
200	Successfully retrieved active borrowings	No links
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*<span style="float: right;">▼</span></div> <p>Controls Accept header.</p>		
<p><a href="#">Example Value</a>   <a href="#">Schema</a></p> <pre>[   {     "id": 3,     "bicycle": {       "id": 2,       "qrCode": "bike456"     },     "borrowTime": "2023-05-16T14:00:00",     "isReturned": false   } ]</pre>		
204	No active borrowings found	No links
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*<span style="float: right;">▼</span></div>		
<p><a href="#">Example Value</a>  </p> <pre>[]</pre>		

GET

/api/history/user/{userId}/active-bicycles Get user's active bicycle borrowings



Retrieves currently active bicycle borrowings for a user

### Parameters

[Try it out](#)

Name	Description
<b>userId</b> * required integer(\$int64) (path)	ID of the user <i>Example : 1</i> 1

### Responses

Code	Description	Links
200	Successfully retrieved active bicycles	No links
204	No active bicycle borrowings found	No links

Media type

\*/\*

Controls Accept header.

[Example Value](#) | [Schema](#)

```
[{"id": 3, "bicycle": {"id": 2, "qrCode": "bike456"}, "borrowTime": "2023-05-16T14:00:00", "isReturned": false}]
```

GET

/api/history/classroom-keys Get all key history



Retrieves complete history of all classroom key borrowings

### Parameters

[Try it out](#)

No parameters

### Responses

Code	Description	Links
200	Successfully retrieved key history	<a href="#">No links</a>

Media type

\*/\*



Controls Accept header.

[Example Value](#) | [Schema](#)

```
[  
  {  
    "id": 2,  
    "student": {  
      "id": 2  
    },  
    "classroomKey": {  
      "id": 1  
    },  
    "borrowTime": "2023-05-15T09:00:00",  
    "returnTime": "2023-05-15T11:00:00"  
  }  
]
```

204	No key history found	<a href="#">No links</a>
-----	----------------------	--------------------------

Media type

\*/\*



[Example Value](#) |

```
[]
```

GET

/api/history/bicycles Get all bicycle history



Retrieves complete history of all bicycle borrowings

### Parameters

[Try it out](#)

No parameters

## Responses

Code	Description	Links
------	-------------	-------

200	Successfully retrieved bicycle history	No links
-----	--	----------

Media type

\*/\*



Controls Accept header.

[Example Value](#) | [Schema](#)

```
[
  {
    "id": 1,
    "student": {
      "id": 1
    },
    "bicycle": {
      "id": 1
    },
    "borrowTime": "2023-05-15T10:00:00",
    "returnTime": "2023-05-15T12:30:00"
  }
]
```

204	No bicycle history found	No links
-----	--------------------------	----------

Media type

\*/\*

[Example Value](#) |

[]

**GET** /api/history/all Get all borrowing history ^

Retrieves complete borrowing history including both bicycles and classroom keys

## Parameters

[Try it out](#)

No parameters

## Responses

Code	Description	Links
------	-------------	-------

200	Successfully retrieved borrowing history	No links
-----	--	----------

Media type

[Links](#)[Code](#)[Description](#)[\\*/\\*](#)[▼](#)

Controls Accept header.

[Example Value](#) | [Schema](#)

```
[  
  {  
    "id": 1,  
    "student": {  
      "id": 1,  
      "name": "John Doe"  
    },  
    "bicycle": {  
      "id": 1,  
      "qrCode": "bike123"  
    },  
    "borrowTime": "2023-05-15T10:00:00",  
    "isReturned": false  
  }  
]
```

204

No borrowing history found

[No links](#)

Media type

[\\*/\\*](#)[▼](#)[Example Value](#) |[\[\]](#)

## Bicycle Controller API endpoints for bicycle management and booking operations

[^](#)[PUT](#)[/api/bicycles/{id}/availability](#) Update bicycle availability[^](#)

Updates the availability status of a specific bicycle

### Parameters

[Try it out](#)

Name	Description
------	-------------

<b>id</b> * required	ID of the bicycle to update
integer(\$int64) (path)	Example : 1

[1](#)

<b>available</b> * required	New availability status
boolean (query)	Example : false

[false](#)[▼](#)

### Responses

Code	Description	Links
200	Availability updated successfully	No links
404	Bicycle not found	No links

**POST**

/api/bicycles/book/{bicycleId} Book bicycle by ID



Books an available bicycle using its ID for a specific user. Marks the bicycle as unavailable and creates a borrow history record.

**Parameters****Try it out****Name****bicycleId** \* required

integer(\$int64)

(path)

1

**userId** \* required

integer(\$int64)

(query)

1

**Responses**

Code	Description	Links
200	Bicycle booked successfully	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/*</div> <p>Controls Accept header.</p> <p>Example Value  </p> <div style="background-color: #2e3436; color: white; padding: 10px; border-radius: 5px; min-height: 100px;"> <pre>Bicycle booked successfully</pre> </div>	
400	Bicycle is not available	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/*</div> <p>Example Value  </p> <div style="background-color: #2e3436; color: white; padding: 10px; border-radius: 5px; min-height: 100px;"> <pre>Bicycle is not available</pre> </div>	
404	Bicycle or user not found	No links
500	Internal server error	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/*</div> <p>Example Value  </p> <div style="background-color: #2e3436; color: white; padding: 10px; border-radius: 5px; min-height: 100px;"> <pre>Error processing booking</pre> </div>	

**POST**/api/bicycles/book-by-qr Book bicycle by QR code ^

Books an available bicycle using its QR code for a specific user. Marks the bicycle as unavailable and creates a borrow history record.

**Parameters**Try it out

Name	Description
<b>qrCode</b> * required string (query)	QR code of the bicycle to book <i>Example : bike12345</i> <div style="border: 1px solid #ccc; width: 200px; height: 30px; margin-top: 5px; text-align: center;">bike12345</div>

Name	Description	
<b>userId</b> * required integer(\$int64) (query)	ID of the user booking the bicycle <i>Example : 1</i>  <input type="text" value="1"/>	

  

Responses		
Code	Description	Links
200	Bicycle booked successfully  Media type  <input style="border: 2px solid green;" type="text" value=" */* "/>  Controls Accept header.  Example Value    <div style="background-color: black; color: white; padding: 10px;">Bicycle booked successfully</div>	No links
400	Bicycle is not available  Media type  <input style="border: 2px solid green;" type="text" value=" */* "/>  Example Value    <div style="background-color: black; color: white; padding: 10px;">Bicycle is not available</div>	No links
404	Bicycle or user not found	No links
500	Internal server error  Media type  <input style="border: 2px solid green;" type="text" value=" */* "/>  Example Value    <div style="background-color: black; color: white; padding: 10px;">Error processing booking</div>	No links

**POST**

/api/bicycles/add Add new bicycle



Creates a new bicycle record in the system

**Parameters****Try it out**

No parameters

**Request body** required**application/json**

Bicycle details to add

[Example Value](#) | [Schema](#)

```
{  
    "qrCode": "newbike123",  
    "location": "West Campus",  
    "isAvailable": true  
}
```

**Responses**

Code	Description	Links
200	Bicycle added successfully	<i>No links</i>
400	Bicycle with this QR code already exists	<i>No links</i>

Media type

`*/*`

Controls Accept header.

[Example Value](#) | [Schema](#)

```
{  
    "id": 1,  
    "qrCode": "newbike123",  
    "location": "West Campus",  
    "isAvailable": true  
}
```

Media type

`*/*`

[Example Value](#) |

`{}`

**GET**[/api/bicycles/available](#) List available bicycles

Returns a list of all bicycles that are currently available for booking

**Parameters****Try it out**

No parameters

## Responses

Code	Description	Links
200	<p>Successfully retrieved available bicycles</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Controls Accept header.</p> <p><a href="#">Example Value</a>   <a href="#">Schema</a></p> <pre>[   {     "id": 1,     "qrCode": "bike123",     "location": "Main Campus",     "isAvailable": true   } ]</pre>	No links

GET /api/bicycles/available-at-location Find available bicycles at location ^

Returns available bicycles at the specified location

## Parameters

[Try it out](#)

Name	Description
<b>location</b> * required string (query)	Location to search for bicycles <i>Example : North Campus</i> <input type="text" value="North Campus"/>

## Responses

Code	Description	Links
200	<p>Successfully retrieved bicycles at location</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Controls Accept header.</p> <p><a href="#">Example Value</a>   <a href="#">Schema</a></p> <pre>[   {     "id": 1,     "qrCode": "bike123",     "location": "Main Campus",     "isAvailable": true   } ]</pre>	No links

Code	Description	Links																			
	<pre>"location": "North Campus", "isAvailable": true }</pre> <p>404 No bicycles found at the specified location</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Example Value   Schema</p> <pre>[]</pre>	No links																			
GET	<a href="#">/api/bicycles/at-location</a> Find all bicycles at location	^																			
<p>Returns all bicycles at the specified location regardless of availability</p> <h3>Parameters</h3> <div style="float: right;"><a href="#">Try it out</a></div> <table border="1"> <thead> <tr> <th>Name</th><th>Description</th></tr> </thead> <tbody> <tr> <td><b>location</b> * required string (query)</td><td>Location to search for bicycles <i>Example : North Campus</i> North Campus</td></tr> </tbody> </table> <h3>Responses</h3> <table border="1"> <thead> <tr> <th>Code</th><th>Description</th><th>Links</th></tr> </thead> <tbody> <tr> <td>200</td><td>Successfully retrieved bicycles at location</td><td>No links</td></tr> <tr> <td></td><td> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Controls Accept header.</p> <p>Example Value   Schema</p> <pre>[   {     "id": 1,     "qrCode": "bike123",     "location": "North Campus",     "isAvailable": false   } ]</pre> </td><td></td></tr> <tr> <td>404</td><td>No bicycles found at the specified location</td><td>No links</td></tr> <tr> <td></td><td>Media type</td><td></td></tr> </tbody> </table>			Name	Description	<b>location</b> * required string (query)	Location to search for bicycles <i>Example : North Campus</i> North Campus	Code	Description	Links	200	Successfully retrieved bicycles at location	No links		<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Controls Accept header.</p> <p>Example Value   Schema</p> <pre>[   {     "id": 1,     "qrCode": "bike123",     "location": "North Campus",     "isAvailable": false   } ]</pre>		404	No bicycles found at the specified location	No links		Media type	
Name	Description																				
<b>location</b> * required string (query)	Location to search for bicycles <i>Example : North Campus</i> North Campus																				
Code	Description	Links																			
200	Successfully retrieved bicycles at location	No links																			
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Controls Accept header.</p> <p>Example Value   Schema</p> <pre>[   {     "id": 1,     "qrCode": "bike123",     "location": "North Campus",     "isAvailable": false   } ]</pre>																				
404	No bicycles found at the specified location	No links																			
	Media type																				

Code	Description	Links
<pre>/*</pre>		

Example Value |

```
[]
```

**GET** /api/bicycles/all List all bicycles ^

Returns a list of all bicycles regardless of their availability status

**Parameters** **Try it out**

No parameters

**Responses**

Code	Description	Links
200	Successfully retrieved all bicycles	<i>No links</i>

Media type /\* ▼

Controls Accept header.

Example Value | Schema

```
[  
  {  
    "id": 1,  
    "qrCode": "bike123",  
    "location": "Main Campus",  
    "isAvailable": false  
  }  
]
```

## Admin Controller API endpoints for administrative operations ^

**PUT** /api/admin/mark-key-borrowed/{keyId} Mark key as borrowed ^

Update key status to borrowed

**Parameters** **Try it out**

Name	Description	
<b>keyId</b> * required integer(\$int64) (path)	ID of the key to mark as borrowed <i>Example : 1</i>  <input type="text" value="1"/>	

  

### Responses

  

Code	Description	Links
200	Key marked as borrowed	No links
	Media type  <input checked="" type="button" value="*/*"/> <input type="button" value="▼"/>	
	Controls Accept header.	
	Example Value	
	<pre>Key marked as borrowed successfully</pre>	
404	Key not found	No links
	Media type  <input checked="" type="button" value="*/*"/> <input type="button" value="▼"/>	
	Example Value	
	<pre>Key not found</pre>	
500	Internal server error	No links
	Media type  <input checked="" type="button" value="*/*"/> <input type="button" value="▼"/>	
	Example Value	
	<pre>Error marking key as borrowed</pre>	

PUT

/api/admin/mark-key-available/{keyId} Mark key as available



Update key status to available

Parameters

Try it out

Name	Description	
<b>keyId</b> * required integer(\$int64) (path)	ID of the key to mark as available <i>Example : 1</i>  <input type="text" value="1"/>	
<b>Responses</b>		
Code	Description	Links
200	Key marked as available	No links
	<p>Media type</p> <p><input checked="" type="text" value="*/*"/> <span>▼</span></p> <p>Controls Accept header.</p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 5px;"><b>Key marked as available successfully</b></div>	
400	Invalid key ID	No links
	<p>Media type</p> <p><input checked="" type="text" value="*/*"/> <span>▼</span></p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 5px;"><b>Key ID cannot be null</b></div>	
404	Key not found	No links
	<p>Media type</p> <p><input checked="" type="text" value="*/*"/> <span>▼</span></p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 5px;"><b>Key not found</b></div>	
500	Internal server error	No links
	<p>Media type</p> <p><input checked="" type="text" value="*/*"/> <span>▼</span></p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 5px;"><b>Error marking key as available</b></div>	

Code	Description	Links
PUT	/api/admin/mark-bicycle-borrowed/{bicycleId} Mark bicycle as borrowed	^
Update bicycle status to borrowed		
<b>Parameters</b>		
Name	Description	<b>Try it out</b>
bicycleId * required integer(\$int64) (path)	ID of the bicycle to mark <i>Example : 1</i> <input type="text" value="1"/>	
<b>Responses</b>		
Code	Description	Links
200	Bicycle marked as borrowed	No links
Media type <input checked="" type="button" value="/*"/> ▼ Controls Accept header.		
Example Value    <pre>Bicycle marked as borrowed successfully</pre>		
404	Bicycle not found	No links
Media type <input checked="" type="button" value="/*"/> ▼ Example Value    <pre>Bicycle not found</pre>		
500	Internal server error	No links
Media type <input checked="" type="button" value="/*"/> ▼ Example Value    <pre>Error marking bicycle as borrowed</pre>		

Code	Description	Links
PUT	/api/admin/mark-bicycle-available/{bicycleId} Mark bicycle as available	^
Update bicycle status to available		
<b>Parameters</b>		
Name	Description	<a href="#">Try it out</a>
<b>bicycleId</b> * required integer(\$int64) (path)	ID of the bicycle to mark <i>Example : 1</i>  1	
<b>Responses</b>		
Code	Description	Links
200	Bicycle marked as available	No links
Media type  */*		
Controls Accept header.		
Example Value		
Bicycle marked as available successfully		
404	Bicycle not found	No links
Media type  */*		
Example Value		
Bicycle not found		
500	Internal server error	No links
Media type  */*		
Example Value		

Code	Description	Links						
<p>Error marking bicycle as available</p>								
PUT	/api/admin/change-role/{userId} Change user role	^						
Toggle user role between CR and NON_CR								
<b>Parameters</b>		<a href="#">Try it out</a>						
<table><thead><tr><th>Name</th><th>Description</th><th></th></tr></thead><tbody><tr><td><b>userId</b> * required integer(\$int64) (path)</td><td>ID of the user to modify <i>Example : 3</i></td><td><input type="text" value="3"/></td></tr></tbody></table>			Name	Description		<b>userId</b> * required integer(\$int64) (path)	ID of the user to modify <i>Example : 3</i>	<input type="text" value="3"/>
Name	Description							
<b>userId</b> * required integer(\$int64) (path)	ID of the user to modify <i>Example : 3</i>	<input type="text" value="3"/>						
<b>Responses</b>								
Code	Description	Links						
200	Role changed successfully	No links						
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">*/*</div>								
Controls Accept header.								
<p>Example Value</p> <div style="background-color: black; color: white; padding: 5px; height: 40px;">User role updated to CR</div>								
400	Invalid role change	No links						
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">*/*</div>								
Controls Accept header.								
<p>Example Value</p> <div style="background-color: black; color: white; padding: 5px; height: 40px;">Invalid role change</div>								
404	User not found	No links						
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">*/*</div>								
Controls Accept header.								

Code	Description	Links
	<p>Example Value  </p> <pre>User not found</pre>	

**POST** /api/admin/signup Alternative admin signup ^

Alternative endpoint for admin registration

**Parameters** **Try it out**

No parameters

**Request body** required application/json ▼

**Example Value** | Schema

```
{  
    "id": 0,  
    "name": "string",  
    "email": "string",  
    "userName": "string",  
    "picture": "string",  
    "role": "string",  
    "password": "string"  
}
```

**Responses**

Code	Description	Links
200	Admin registered successfully	<i>No links</i>
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px 10px; width: fit-content;">*/* <span style="float: right;">▼</span></div> <p>Controls Accept header.</p>	
	<p>Example Value  </p> <pre>Admin registered successfully</pre>	
400	Bad request	<i>No links</i>
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px 10px; width: fit-content;">*/* <span style="float: right;">▼</span></div>	
	<p>Example Value  </p>	

Code	Description	Links
<p><b>Invalid request data</b></p>		
<b>POST</b>	/api/admin/signup2 Admin signup	<a href="#">^</a>
Register a new admin user		
<b>Parameters</b>		<a href="#">Try it out</a>
No parameters		
<b>Request body</b> <small>required</small>	<a href="#">application/json</a> <small>▼</small>	
Admin user details		
<a href="#">Example Value</a>   <a href="#">Schema</a>		
{ "userName": "newadmin", "password": "secure123", "email": "admin@example.com" }		
<b>Responses</b>		
Code	Description	Links
200	Admin registered successfully	<a href="#">No links</a>
Media type		
<a href="#">*/*</a> <small>▼</small>		
Controls Accept header.		
<a href="#">Example Value</a>		
<b>Admin registered successfully</b>		
400	Username already in use	<a href="#">No links</a>
Media type		
<a href="#">*/*</a> <small>▼</small>		
<a href="#">Example Value</a>		
<b>Username already in use</b>		

Code	Description	Links
<b>POST</b>	/api/admin/login Alternative admin login	^
Alternative endpoint for admin authentication		
<b>Parameters</b>		<b>Try it out</b>
No parameters		
<b>Request body</b> <small>required</small>		application/json ▾
<b>Example Value</b>   Schema		
{ "id": 0, "name": "string", "email": "string", "userNume": "string", "picture": "string", "role": "string", "password": "string" }		
<b>Responses</b>		
Code	Description	Links
200	Login successful	No links
Media type		
*/* ▾		
Controls Accept header.		
<b>Example Value</b>		
Login successful		
401	Unauthorized	No links
Media type		
*/* ▾		
<b>Example Value</b>		
Invalid credentials		

**POST** /api/admin/login2 Admin login ^

Authenticate admin user

**Parameters** **Try it out**

No parameters

**Request body** required application/json ▼

Login credentials

[Example Value](#) | [Schema](#)

```
{ "userN...": "admin", "password": "password123" }
```

**Responses**

Code	Description	Links
200	Login successful	<small>No links</small>
	Media type	
	<input type="text" value="*/*"/> <small>▼</small>	
	Controls Accept header.	
	<a href="#">Example Value</a>	
	<pre>{ "message": "Login successful", "role": "ADMIN" }</pre>	
401	Invalid credentials	<small>No links</small>
	Media type	
	<input type="text" value="*/*"/> <small>▼</small>	
	<a href="#">Example Value</a>	
	<pre>{ "error": "Invalid username or password" }</pre>	

**POST** /api/admin/bookbicycle/{bicycleId} Book bicycle ^

Book a bicycle for a user

### Parameters

[Try it out](#)

Name	Description
<b>bicycleId</b> * required integer(\$int64) (path)	ID of the bicycle to book <i>Example : 1</i> <input type="text" value="1"/>
<b>userId</b> * required integer(\$int64) (query)	ID of the user booking the bicycle <i>Example : 3</i> <input type="text" value="3"/>

### Responses

Code	Description	Links
200	Bicycle booked successfully	No links
	<p>Media type</p> <p><input style="border: 2px solid green; width: 150px; height: 20px; border-radius: 5px; margin-right: 10px;" type="text" value=" */*"/> <span style="border: 1px solid black; padding: 2px;">▼</span></p> <p>Controls Accept header.</p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; border-radius: 5px;"><code>Bicycle booked successfully by user ID: 3</code></div>	
400	Bad request	No links
	<p>Media type</p> <p><input style="border: 1px solid black; width: 150px; height: 20px; border-radius: 5px; margin-right: 10px;" type="text" value=" */*"/> <span style="border: 1px solid black; padding: 2px;">▼</span></p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; border-radius: 5px;"><code>Invalid request parameters</code></div>	
404	Bicycle not found	No links
	<p>Media type</p> <p><input style="border: 1px solid black; width: 150px; height: 20px; border-radius: 5px; margin-right: 10px;" type="text" value=" */*"/> <span style="border: 1px solid black; padding: 2px;">▼</span></p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; border-radius: 5px;"><code>Bicycle not found</code></div>	

Code	Description	Links
POST	/api/admin/addclassrooms Add classroom key	^
Add a new classroom key to the system		
<b>Parameters</b>		
No parameters		<b>Try it out</b>
<b>Request body</b> <small>required</small>		application/json ▾
Classroom key details		
<a href="#">Example Value</a>   <a href="#">Schema</a>		
{ "classroomName": "A101", "blockName": "Block A", "isAvailable": 1 }		
<b>Responses</b>		
Code	Description	Links
200	Classroom added successfully	No links
Media type		
*/* ▾		
Controls Accept header.		
<a href="#">Example Value</a>		
Classroom added successfully		
400	Classroom name cannot be empty	No links
Media type		
*/* ▾		
Controls Accept header.		
<a href="#">Example Value</a>		
Classroom name cannot be empty		
409	Classroom already exists	No links

Code	Description	Links
Media type	<code>*/*</code>	
Example Value	<code>Classroom already exists</code>	
<b>POST</b>	<a href="#">/api/admin/addbicycle Add bicycle</a>	<a href="#">^</a>
Add a new bicycle to the system		
<b>Parameters</b>		<a href="#">Try it out</a>
No parameters		
<b>Request body</b> <small>required</small>	<code>application/json</code>	<a href="#">▼</a>
Bicycle details		
Example Value	<a href="#">Schema</a>	
<pre>{   "qrCode": "BIKE123",   "available": true }</pre>		
<b>Responses</b>		
Code	Description	Links
201	Bicycle added successfully	<i>No links</i>
Media type	<code>*/*</code>	
Controls Accept header.		
Example Value	<a href="#">Schema</a>	
<pre>{   "id": 1,   "qrCode": "BIKE123",   "available": true }</pre>		
409	Bicycle with QR code already exists	<i>No links</i>
Media type		

Code	Description	Links
	<p>Example Value  </p> <pre>Bicycle with this QR Code already exists</pre>	
500	<p>Internal server error</p> <p>Media type</p> <p>Example Value  </p> <pre>An error occurred while adding the bicycle</pre>	No links

<b>GET</b>	/api/admin/recently-added-keys	Get recently added keys	^
Get keys added most recently			
<b>Parameters</b>		<b>Try it out</b>	
No parameters			
<b>Responses</b>			
Code	Description	Links	
200	Successfully retrieved recent keys	No links	
	<p>Media type</p> <p>Example Value   Schema</p> <pre>[{"id": 5, "classroomName": "B202", "blockName": "Block B", "isAvailable": 1}]</pre>		

<b>GET</b>	/api/admin/recently-added-bicycle	Get recently added bicycles	^

Get bicycles added most recently

### Parameters

Try it out

No parameters

### Responses

Code	Description	Links
200	Successfully retrieved recent bicycles	<i>No links</i>

Media type

/\*

Controls Accept header.

Example Value | Schema

```
[  
  {  
    "id": 5,  
    "qrCode": "BIKE555",  
    "available": true  
  }  
]
```

GET

/api/admin/key-history Get key history



Get borrowing history for all classroom keys

### Parameters

Try it out

No parameters

### Responses

Code	Description	Links
200	Successfully retrieved key history	<i>No links</i>

Media type

/\*

Controls Accept header.

Example Value | Schema

Code	Description	Links
	<pre>[   {     "id": 1,     "userId": 3,     "classroomKeyId": 1,     "borrowTime": "2023-05-15T10:30:00"   } ]</pre>	

GET /api/admin/borrowed-keys Get borrowed keys ^

Get currently borrowed classroom keys

**Parameters** [Try it out](#)

No parameters

**Responses**

Code	Description	Links
200	Successfully retrieved borrowed keys	<i>No links</i>

Media type \*/\* ▼

Controls Accept header.

[Example Value](#) | [Schema](#)

```
[  
  {  
    "id": 1,  
    "userId": 3,  
    "classroomKeyId": 1,  
    "borrowTime": "2023-05-15T10:30:00"  
  }  
]
```

GET /api/admin/borrowed-bicycles Get borrowed bicycles ^

Get currently borrowed bicycles

**Parameters** [Try it out](#)

No parameters

**Responses**

Code	Description	Links
200	Successfully retrieved borrowed bicycles	No links

Media type

\*/\*

Controls Accept header.

Example Value | Schema

```
[  
  {  
    "id": 1,  
    "userId": 3,  
    "bicycleId": 1,  
    "borrowTime": "2023-05-15T10:30:00"  
  }  
]
```

GET /api/admin/bicycle-history Get bicycle history ^

Get borrowing history for all bicycles

Parameters Try it out

No parameters

Responses

Code	Description	Links
200	Successfully retrieved bicycle history	No links

Media type

\*/\*

Controls Accept header.

Example Value | Schema

```
[  
  {  
    "id": 1,  
    "userId": 3,  
    "bicycleId": 1,  
    "borrowTime": "2023-05-15T10:30:00"  
  }  
]
```

GET /api/admin/available-keys List available keys ^

Get all currently available classroom keys

### Parameters

[Try it out](#)

No parameters

### Responses

Code	Description	Links
200	Successfully retrieved available keys	<a href="#">No links</a>

Media type

/\*

Controls Accept header.

[Example Value](#) | [Schema](#)

```
[  
  {  
    "id": 1,  
    "classroomName": "A101",  
    "blockName": "Block A",  
    "isAvailable": 1  
  }  
]
```

[GET](#)[/api/admin/available-bicycles](#) List available bicycles

Get all currently available bicycles

### Parameters

[Try it out](#)

No parameters

### Responses

Code	Description	Links
200	Successfully retrieved available bicycles	<a href="#">No links</a>

Media type

/\*

Controls Accept header.

[Example Value](#) | [Schema](#)

Code	Description	Links
<pre>[   {     "id": 1,     "qrCode": "BIKE123",     "available": true   } ]</pre>		
GET	/api/admin/api/user Get current authenticated user	^
Returns details of currently logged in user		
<b>Parameters</b>		<a href="#">Try it out</a>
No parameters		
<b>Responses</b>		
Code	Description	Links
200	Successfully retrieved user	<a href="#">No links</a>
Media type		
/*		▼
Controls Accept header.		
<a href="#">Example Value</a>   <a href="#">Schema</a>		
<pre>{   "id": 1,   "userName": "admin",   "email": "admin@example.com",   "role": "ADMIN" }</pre>		
401	Unauthorized	<a href="#">No links</a>
Media type		
/*		▼
Controls Accept header.		
<a href="#">Example Value</a>   <a href="#">Schema</a>		
<pre>{   "id": 0,   "name": "string",   "email": "string",   "userName": "string",   "picture": "string",   "role": "string",   "password": "string" }</pre>		
GET	/api/admin/all-users List all users	^

Get all users in the system

### Parameters

[Try it out](#)

No parameters

### Responses

Code	Description	Links
200	Successfully retrieved all users	<a href="#">No links</a>

Media type

/\*▼

Controls Accept header.

[Example Value](#) | [Schema](#)

```
[  
  {  
    "id": 1,  
    "userName": "admin",  
    "email": "admin@example.com",  
    "role": "ADMIN"  
  }  
]
```

[GET](#)[/api/admin/all-keys List all keys](#)

Get all classroom keys regardless of availability

### Parameters

[Try it out](#)

No parameters

### Responses

Code	Description	Links
200	Successfully retrieved all keys	<a href="#">No links</a>

Media type

/\*▼

Controls Accept header.

[Example Value](#) | [Schema](#)

Code	Description	Links
[ { "id": 1, "classroomName": "A101", "blockName": "Block A", "isAvailable": 0 } ]		
<b>GET</b>	/api/admin/all-bicycles List all bicycles	^
Get all bicycles regardless of availability		
<b>Parameters</b>		<b>Try it out</b>
No parameters		
<b>Responses</b>		
<b>Code</b>	<b>Description</b>	<b>Links</b>
200	Successfully retrieved all bicycles	No links
Media type		
<input style="border: 1px solid green; width: 100%; height: 20px; margin-bottom: 5px;" type="text" value=" */*"/> <span style="border: 1px solid black; padding: 2px;">▼</span>		
Controls Accept header.		
<a href="#">Example Value</a>   <a href="#">Schema</a>		
[ { "id": 1, "qrCode": "BIKE123", "available": false } ]		
<b>DELETE</b>	/api/admin/delete-user/{userId} Delete user	^
Remove a user from the system		
<b>Parameters</b>		<b>Try it out</b>
<b>Name</b>	<b>Description</b>	
<b>userId</b> * required	ID of the user to delete	
integer(\$int64) (path)	Example : 3	

Name	Description	
	<input type="text" value="3"/>	

### Responses

Code	Description	Links
200	User deleted successfully	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Controls Accept header.</p> <p>Example Value  </p> <pre>User deleted successfully</pre>	
500	Internal server error	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Example Value  </p> <pre>Error deleting user</pre>	

---

**DELETE** /api/admin/delete-key/{keyId} Delete classroom key ^

Remove a key from the system

---

**Parameters** Try it out

Name	Description
<b>keyId</b> * required	ID of the key to delete
integer(\$int64)	Example : 1
(path)	<input type="text" value="1"/>

---

**Responses**

Code	Description	Links
200	Key deleted successfully	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/* ▼</div> <p>Controls Accept header.</p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Key deleted successfully</div>	
400	Invalid key ID	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/* ▼</div> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Invalid Key ID</div>	
404	Key not found	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/* ▼</div> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Key not found</div>	
500	Internal server error	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/* ▼</div> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Error deleting key</div>	

**DELETE**

/api/admin/delete-bicycle/{bicycleId} Delete bicycle



Remove a bicycle from the system

**Parameters****Try it out**

Name	Description	
<b>bicycleId</b> * required integer(\$int64) (path)	ID of the bicycle to delete <i>Example : 1</i>	<input type="text" value="1"/>
<b>Responses</b>		
Code	Description	Links
200	Bicycle deleted successfully	No links
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Controls Accept header.</p> <p>Example Value  </p> <pre>Bicycle deleted successfully</pre>		
404	Bicycle not found	No links
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Example Value  </p> <pre>Bicycle not found</pre>		
500	Internal server error	No links
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/* ▾</div> <p>Example Value  </p> <pre>Error deleting bicycle</pre>		

## Student Controller

API endpoints for student operations including key and bicycle management



<b>POST</b>	/api/student/signup Student signup	

Registers a new student account

### Parameters

[Try it out](#)

No parameters

### Request body required

[application/json](#) ▾

Student details to register

[Example Value](#) | [Schema](#)

```
{  
    "name": "John Doe",  
    "email": "john@example.com",  
    "password": "secure123"  
}
```

### Responses

Code	Description	Links
200	Student registered successfully	<i>No links</i>
400	Registration failed	<i>No links</i>

[POST](#)[/api/student/login](#) Student login

Authenticates a student and returns a token

## Parameters

[Try it out](#)

No parameters

Request body required

application/json



Student login credentials

[Example Value](#) | [Schema](#)

```
{  
  "email": "john@example.com",  
  "password": "secure123"  
}
```

## Responses

Code	Description	Links
200	Login successful	<i>No links</i>
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;"> */*</div> <p>Controls Accept header.</p> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Login successful</div>	
401	Unauthorized	<i>No links</i>
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;"> */*</div> <p>Example Value  </p> <div style="background-color: black; color: white; padding: 10px; height: 100px; width: 100%;">Invalid credentials</div>	

POST

/api/student/bookbicycle/{bicycleId} Book bicycle



Books an available bicycle for a student

## Parameters

[Try it out](#)

Name	Description
<b>bicycleId</b> * required integer(\$int64) (path)	ID of the bicycle to book <i>Example : 1</i> <input type="text" value="1"/>
<b>userId</b> * required integer(\$int64) (query)	ID of the user booking the bicycle <i>Example : 1</i> <input type="text" value="1"/>

## Responses

Code	Description	Links
200	Bicycle booked successfully  Media type <input type="text" value="*/*"/> Controls Accept header.  Example Value    <code>Bicycle booked successfully</code>	No links
400	Booking failed	No links

POST	/api/student/book-classroom-key/{keyId} Book classroom key	^
Books a classroom key for a student		
<b>Parameters</b>		<b>Try it out</b>
Name	Description	
<b>keyId</b> * required integer(\$int64) (path)	ID of the key to book <i>Example : 1</i> <input type="text" value="1"/>	
<b>userId</b> * required integer(\$int64) (query)	ID of the user booking the key <i>Example : 1</i> <input type="text" value="1"/>	

## Responses

Code	Description	Links
200	<p>Key booked successfully</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Controls Accept header.</p> <p>Example Value  </p> <pre>Key successfully booked by John Doe</pre>	No links
400	Booking failed	No links

GET

/api/student/{userId} Get user by ID



Retrieves student details by user ID

## Parameters

[Try it out](#)

Name	Description
<b>userId</b> * required integer(\$int64) (path)	ID of the user to retrieve <i>Example : 1</i>

## Responses

Code	Description	Links
200	<p>Successfully retrieved user</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Controls Accept header.</p> <p>Example Value   Schema</p> <pre>{   "id": 1,   "name": "John Doe",   "email": "john@example.com" }</pre>	No links

Code	Description	Links
404	User not found  Media type <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div>  Example Value    <div style="background-color: black; color: white; padding: 5px; border-radius: 5px;">User not found with id: 1</div>	No links

GET /api/student/check-key-availability/{keyId} Check key availability ^

Checks the availability status of a specific classroom key

Parameters Try it out

Name	Description
keyId * required	ID of the key to check
integer(\$int64)	Example : 1
(path)	1

Responses

Code	Description	Links
200	Key availability status  Media type <div style="border: 1px solid green; padding: 2px; display: inline-block;">*/*</div>  Controls Accept header.  Example Value    <div style="background-color: black; color: white; padding: 5px; border-radius: 5px;">1</div>	No links
400	Key not found  Media type <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div>  Example Value    <div style="background-color: black; color: white; padding: 5px; border-radius: 5px;">0</div>	No links

Code	Description	Links
<p><b>GET</b> /api/student/available-rooms Get all available rooms <span style="float: right;">^</span></p> <p>Retrieves list of all available classroom keys with additional details</p>		
<b>Parameters</b>		<b>Try it out</b>
No parameters		
<b>Responses</b>		
Code	Description	Links
200	Successfully retrieved available rooms	<i>No links</i>
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">*/*<span style="float: right;">▼</span></div> <p>Controls Accept header.</p>		
<a href="#">Example Value</a>   <a href="#">Schema</a>		
<pre>[   {     "classroomName": "A101",     "blockName": "A",     "floor": "1",     "status": "Available"   } ]</pre>		

Code	Description	Links
<b>GET</b>	/api/student/available-rooms/{blockName}/{floor} Get available rooms by block and floor <span style="float: right;">^</span>	
Retrieves list of available classroom keys for a specific block and floor		
<b>Parameters</b>		<b>Try it out</b>
Name	Description	
<b>blockName</b> * required string (path)	Name of the building block <i>Example : A</i>	<input type="text" value="A"/>

Name	Description
<b>floor</b> * required string (path)	Floor number <i>Example : 1</i> 1

**Responses**

Code	Description	Links
200	Successfully retrieved available rooms	No links
	<p>Media type</p> <div style="border: 2px solid green; padding: 2px; width: fit-content;">*/*</div> <p>Controls Accept header.</p> <p><a href="#">Example Value</a>   <a href="#">Schema</a></p> <pre>[   {     "id": 1,     "classroomName": "A101",     "blockName": "A",     "floor": "1",     "isAvailable": 1   } ]</pre>	

  

204	No available rooms found	No links
	<p>Media type</p> <div style="border: 2px solid green; padding: 2px; width: fit-content;">*/*</div> <p>Controls Accept header.</p> <p><a href="#">Example Value</a>  </p> <pre>[]</pre>	

**GET** /api/student/available-bicycles List available bicycles ^

Retrieves list of all available bicycles

**Parameters**

[Try it out](#)

No parameters

**Responses**

Code	Description	Links
200	Successfully retrieved available bicycles	No links

Media type

/\*
▼

Controls Accept header.

[Example Value](#) | [Schema](#)

```
[  
  {  
    "id": 1,  
    "qrCode": "bike123",  
    "location": "Main Gate",  
    "isAvailable": true  
  }  
]
```

**GET** /api/student/all-keys/{blockName}/{floor} Get all keys by block and floor ^

Retrieves all classroom keys for a specific block and floor regardless of availability

**Parameters** [Try it out](#)

Name	Description
<b>blockName</b> * required	Name of the building block <i>Example : A</i>
string (path)	A
<b>floor</b> * required	Floor number <i>Example : 1</i>
string (path)	1

Code	Description	Links
200	Successfully retrieved keys	No links

Media type

/\*
▼

Controls Accept header.

[Example Value](#) | [Schema](#)

```
[  
  {  
    "id": 1,  
    "classroomName": "A101",  
    "isAvailable": true  
  }  
]
```

Code	Description	Links
	<pre>"blockName": "A", "floor": "1", "isAvailable": 0 }</pre> <p>[ ]</p>	
204	No keys found	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">/*</div>	
	<p>Example Value  </p> <pre>[]</pre>	
<b>GET</b>	/api/student/all-bicycles List all bicycles	^
<p>Retrieves list of all bicycles regardless of availability</p>		
<b>Parameters</b>		<a href="#">Try it out</a>
No parameters		
<b>Responses</b>		
Code	Description	Links
200	Successfully retrieved all bicycles	No links
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">/*</div>	
	Controls Accept header.	
	<p>Example Value   Schema</p> <pre>[   {     "id": 1,     "qrCode": "bike123",     "location": "Main Gate",     "isAvailable": false   } ]</pre>	

## Feedback Controller API endpoints for managing and retrieving feedback on bicycle usage ^

<b>GET</b>	/api/feedback/user/{userId} Get feedback provided by a user	^
------------	---	---

Retrieves paginated feedback entries provided by a specific user

## Parameters

[Try it out](#)

Name	Description
<b>userId</b> * required integer(\$int64) (path)	ID of the user <i>Example : 1</i> <input type="text" value="1"/>
<b>pageable</b> * required object (query)	Pagination and sorting parameters <pre>{     "page": 0,     "size": 1,     "sort": [         "string"     ] }</pre>

## Responses

Code	Description	Links
200	Successfully retrieved user feedback  Media type <input type="text" value=" */*"/> ▼  Controls Accept header.	No links
	<a href="#">Example Value</a>   <a href="#">Schema</a>  <pre>{     "content": [         {             "id": 1,             "conditionDescription": "Brakes were squeaky"         }     ],     "pageable": {         "sort": {             "sorted": false         }     } }</pre>	
204	No feedback found for user	No links

Code	Description	Links																	
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p><b>Example Value</b></p> <pre>{   "content": [] }</pre>																		
404	User not found	No links																	
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p><b>Example Value</b></p> <pre>{}</pre>																		
<b>GET</b>	/api/feedback/borrow/{borrowId} Get feedback for specific borrow record	<a href="#">^</a>																	
<p>Retrieves feedback for a specific bicycle borrowing instance</p> <hr/> <p><b>Parameters</b></p> <div style="float: right; border: 1px solid #ccc; padding: 2px 10px; margin-bottom: 10px;">Try it out</div> <table border="1"> <thead> <tr> <th>Name</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>borrowId</b> * required</td> <td>ID of the borrow record</td> </tr> <tr> <td>integer(\$int64)</td> <td>Example : 1</td> </tr> <tr> <td>(path)</td> <td><input type="text" value="1"/></td> </tr> </tbody> </table> <p><b>Responses</b></p> <hr/> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> <th>Links</th> </tr> </thead> <tbody> <tr> <td>200</td> <td>Successfully retrieved feedback</td> <td>No links</td> </tr> <tr> <td></td> <td> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Controls Accept header.</p> <p><b>Example Value</b>   Schema</p> <pre>{   "id": 1,   "conditionDescription": "Chain needed lubrication",   "experienceRating": 3,   ... }</pre> </td> <td></td> </tr> </tbody> </table>			Name	Description	<b>borrowId</b> * required	ID of the borrow record	integer(\$int64)	Example : 1	(path)	<input type="text" value="1"/>	Code	Description	Links	200	Successfully retrieved feedback	No links		<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Controls Accept header.</p> <p><b>Example Value</b>   Schema</p> <pre>{   "id": 1,   "conditionDescription": "Chain needed lubrication",   "experienceRating": 3,   ... }</pre>	
Name	Description																		
<b>borrowId</b> * required	ID of the borrow record																		
integer(\$int64)	Example : 1																		
(path)	<input type="text" value="1"/>																		
Code	Description	Links																	
200	Successfully retrieved feedback	No links																	
	<p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Controls Accept header.</p> <p><b>Example Value</b>   Schema</p> <pre>{   "id": 1,   "conditionDescription": "Chain needed lubrication",   "experienceRating": 3,   ... }</pre>																		

Code	Description	Links
404	<p>Borrow record not found or no feedback available</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Example Value   Schema</p> <pre>{}</pre>	No links

**GET** /api/feedback/bicycles Get all bicycle feedback ^

Retrieves paginated feedback for all bicycles in the system

---

**Parameters** Try it out

Name	Description
<b>pageable</b> * required	Pagination and sorting parameters
object (query)	<pre>{   "page": 0,   "size": 1,   "sort": [     "string"   ] }</pre>

**Responses**

---

Code	Description	Links
200	Successfully retrieved bicycle feedback	No links

Media type

\*/\*

Controls Accept header.

Example Value | Schema

[Links](#)[Code](#)[Description](#)

```
{
  "content": [
    {
      "id": 1,
      "conditionDescription": "Tires needed air"
    }
  ],
  "pageable": {
    "sort": {
      "sorted": false
    }
  }
}
```

204

No feedback available

[No links](#)

Media type

\*/\*



Example Value |

```
{
  "content": []
}
```

[GET](#)

/api/feedback/bicycles/summary Get bicycle feedback summary



Retrieves aggregated statistics about bicycle feedback

[Parameters](#)[Try it out](#)

No parameters

[Responses](#)[Code](#)[Description](#)[Links](#)

200

Successfully retrieved feedback summary

[No links](#)

Media type

\*/\*



Controls Accept header.

Example Value |

```
{
  "totalFeedback": 15,
  "averageRating": 4.2,
  "commonIssues": [
    "Brakes",
    "Tires"
  ]
}
```

204

No feedback available for summary

[No links](#)

[Links](#)[Code](#)[Description](#)

Media type

[Example Value](#)

{}

[GET](#)[/api/feedback/bicycle/{bicycleId}](#) Get feedback for a bicycle

Retrieves all feedback entries for a specific bicycle, ordered by most recent

## Parameters

[Try it out](#)[Name](#)[Description](#)**bicycleId** \* required

ID of the bicycle

integer(\$int64)

Example : 1

(path)

1

## Responses

[Code](#)[Description](#)[Links](#)

200

Successfully retrieved bicycle feedback

No links

Media type



Controls Accept header.

[Example Value](#) | [Schema](#)

```
[  
  {  
    "id": 1,  
    "conditionDescription": "Minor scratches",  
    "experienceRating": 4,  
    "feedback": "Good condition overall"  
  }  
]
```

404

Bicycle not found or no feedback available

No links

Media type

[Example Value](#)

Code	Description	Links
	[]	

## Key Request Controller

API endpoints for managing classroom key requests and transfers



PUT

/api/key-requests/initiate-transfer/{requestId} Initiate key transfer



Initiates the transfer process for an approved key request

### Parameters

[Try it out](#)

Name	Description
------	-------------

<b>requestId</b> * required integer(\$int64) (path)	ID of the key request <i>Example : 1</i>
---	---

1

### Responses

Code	Description	Links
------	-------------	-------

200	Transfer initiated successfully	<a href="#">No links</a>
-----	---------------------------------	--------------------------

Media type

\*/\*



Controls Accept header.

Example Value |

Transfer initiated. Waiting for requester to accept

400	Invalid transfer request	<a href="#">No links</a>
-----	--------------------------	--------------------------

PUT

/api/key-requests/decline/{requestId} Decline key request



Declines a pending key request

### Parameters

[Try it out](#)

Name	Description
<b>requestId</b> * required integer(\$int64) (path)	ID of the key request <i>Example : 1</i> <input type="text" value="1"/>

## Responses

Code	Description	Links
200	Key request declined successfully	No links
400	<p>Media type</p> <p><code>*/*</code></p> <p>Controls Accept header.</p> <p>Example Value</p> <p><code>Key request declined successfully</code></p>	No links

PUT

/api/key-requests/complete-transfer/{requestId} Complete key transfer



Completes the key transfer process initiated by the current holder

## Parameters

[Try it out](#)

Name	Description
<b>requestId</b> * required integer(\$int64) (path)	ID of the key request <i>Example : 1</i> <input type="text" value="1"/>

## Responses

Code	Description	Links
200	<p>Key transferred successfully</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/*</div> <p>Controls Accept header.</p> <p>Example Value  </p> <pre>Key successfully transferred</pre>	No links
400	Invalid transfer completion	No links

PUT /api/key-requests/cancel/{requestId} Cancel key request ^

Cancels a pending or approved key request

#### Parameters

[Try it out](#)

Name	Description
------	-------------

**requestId** \* required  
integer(\$int64)  
(path)

1

#### Responses

Code	Description	Links
200	<p>Request cancelled successfully</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/*</div> <p>Controls Accept header.</p> <p>Example Value  </p> <pre>{   "message": "Request cancelled successfully" }</pre>	No links
400	Request cannot be canceled	No links

Code	Description	Links
	Example Value   <pre>{   "message": "Request cannot be canceled in its current state" }</pre>	
404	Request not found Media type <input type="button" value="*/*"/> ▼	No links
	Example Value   <pre>{   "message": "Request not found" }</pre>	
500	Internal server error Media type <input type="button" value="*/*"/> ▼	No links
	Example Value   <pre>{   "message": "Error cancelling request" }</pre>	

PUT /api/key-requests/approve/{requestId} Approve key request ^

Approves a pending key request

Parameters

Try it out

Name	Description
<b>requestId</b> * required integer(\$int64) (path)	ID of the key request Example : 1 <input type="text" value="1"/>

Responses

Code	Description	Links
200	Key request approved successfully Media type <input type="button" value="*/*"/> ▼	No links

Code	Description	Links
	<p>Controls Accept header.</p> <p><b>Example Value</b>  </p> <pre>Key request approved successfully</pre>	
400	Invalid approval request	No links

**POST** /api/key-requests/request Request a classroom key ^

Creates a new request for a classroom key with specified time range and purpose

---

**Parameters** **Try it out**

Name	Description
<b>studentId</b> * required integer(\$int64) (query)	ID of the student making the request <i>Example : 1</i> <input type="text" value="1"/>
<b>classroomKeyId</b> * required integer(\$int64) (query)	ID of the classroom key being requested <i>Example : 1</i> <input type="text" value="1"/>
<b>startTime</b> * required string (query)	Start time for key usage (format: yyyy-MM-dd HH:mm:ss or yyyy-MM-ddTHH:mm) <i>Example : 2023-05-20T09:00</i> <input type="text" value="2023-05-20T09:00"/>
<b>endTime</b> * required string (query)	End time for key usage (format: yyyy-MM-dd HH:mm:ss or yyyy-MM-ddTHH:mm) <i>Example : 2023-05-20T11:00</i> <input type="text" value="2023-05-20T11:00"/>
<b>purpose</b> * required string (query)	Purpose for key request <i>Example : Class presentation</i> <input type="text" value="Class presentation"/>

---

**Responses**

Code	Description	Links
200	Key request submitted successfully	No links
400	Invalid request parameters	No links

**GET /api/key-requests/sent-requests/{userId}** Get sent key requests ^

Retrieves all key requests sent by a user with detailed information

**Parameters** Try it out

Name	Description
<b>userId</b> * required	ID of the user <i>Example : 1</i>
<i>(path)</i>	1

**Responses**

Code	Description	Links
200	Successfully retrieved sent requests	No links

Media type

\*/\*

Controls Accept header.

Example Value | Schema

```
[{"id": 1, "status": "PENDING", "classroomKey": {"classroomName": "A101"}, "holderAtRequestTime": {"name": "John Doe"}]
```

Code	Description	Links
404	User not found	No links
500	Internal server error	No links

**GET /api/key-requests/request-details/{classroomKeyId}** Get key request details ^

Retrieves detailed information about a classroom key's current status and requests

**Parameters** Try it out

Name	Description
<b>classroomKeyId</b> * required integer(\$int64) (path)	ID of the classroom key <i>Example : 1</i> 1

**Responses**

Code	Description	Links
200	Successfully retrieved key details	No links

Media type \*/\*

Controls Accept header.

Example Value | Schema

[Links](#)[Code](#)

```
{
  "keyStatus": "Unavailable",
  "currentHolder": {
    "id": 1,
    "name": "John Doe"
  },
  "requester": {
    "id": 2,
    "name": "Jane Smith"
  }
}
```

400

Classroom key not found

[No links](#)

Media type

`*/*`[Example Value](#) | [Schema](#)`Classroom key not found`[GET](#)[/api/key-requests/received-requests/{userId}](#) Get received key requests

Retrieves all key requests received by a user for keys they currently hold

[Parameters](#)[Try it out](#)[Name](#)[Description](#)**userId** \* required

ID of the user

`integer($int64)`*Example : 1*`(path)``1`[Responses](#)[Code](#)[Description](#)[Links](#)

200

Successfully retrieved received requests

[No links](#)

Media type

`*/*`

Controls Accept header.

[Example Value](#) | [Schema](#)

```
[
  {
    "id": 1,
    "status": "PENDING",
    "student": {
      "id": 1,
      "name": "John Doe"
    }
  }
]
```

Code	Description	Links									
	<pre>         "name": "John Doe"     },     "classroomKey": {         "classroomName": "A101"     } ] </pre>										
400	User not found	No links									
<p>Media type</p> <div style="border: 1px solid #ccc; padding: 5px; width: fit-content;"> <span>*/*</span> <span style="float: right;">▼</span> </div> <p>Example Value   Schema</p> <div style="background-color: black; color: white; padding: 10px; height: 60px;"> User not found </div>											
<b>GET</b>	/api/key-requests/check-pending/{userId}/{keyId} Check pending requests	<span>Try it out</span>									
<p>Checks if a user has any pending or approved requests for a specific key</p>											
<b>Parameters</b>		<span>Try it out</span>									
<table border="1"> <thead> <tr> <th>Name</th><th>Description</th><th></th></tr> </thead> <tbody> <tr> <td><b>userId</b> * required integer(\$int64) (path)</td><td>ID of the user <i>Example : 1</i></td><td><input type="text" value="1"/></td></tr> <tr> <td><b>keyId</b> * required integer(\$int64) (path)</td><td>ID of the classroom key <i>Example : 1</i></td><td><input type="text" value="1"/></td></tr> </tbody> </table>			Name	Description		<b>userId</b> * required integer(\$int64) (path)	ID of the user <i>Example : 1</i>	<input type="text" value="1"/>	<b>keyId</b> * required integer(\$int64) (path)	ID of the classroom key <i>Example : 1</i>	<input type="text" value="1"/>
Name	Description										
<b>userId</b> * required integer(\$int64) (path)	ID of the user <i>Example : 1</i>	<input type="text" value="1"/>									
<b>keyId</b> * required integer(\$int64) (path)	ID of the classroom key <i>Example : 1</i>	<input type="text" value="1"/>									
<b>Responses</b>											
<b>Code</b>	<b>Description</b>	Links									
200	Successfully checked pending requests	No links									
<p>Media type</p> <div style="border: 2px solid green; padding: 5px; width: fit-content;"> <span>*/*</span> <span style="float: right;">▼</span> </div> <p>Controls Accept header.</p> <p>Example Value   Schema</p> <div style="background-color: black; color: white; padding: 10px; height: 60px;"> {     "hasPendingRequest": true } </div>											

Code	Description	Links
500	Internal server error	No links

## auth-controller

^

<b>POST</b>	/api/logout	Try it out
<b>Parameters</b>		
No parameters		
<b>Responses</b>		
Code	Description	Links
200	OK	No links

<b>GET</b>	/api/user	Try it out
<b>Parameters</b>		
No parameters		
<b>Responses</b>		

Code	Description	Links
200	<p>OK</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/*</div> <p>Controls Accept header.</p> <p><a href="#">Example Value</a>   <a href="#">Schema</a></p> <pre>{   "id": 0,   "name": "string",   "email": "string",   "userName": "string",   "picture": "string",   "role": "string",   "password": "string" }</pre>	No links

## user-controller

^

POST	/api/admin/signup1	^
<b>Parameters</b>		<a href="#">Try it out</a>
No parameters		
<b>Request body</b> <small>required</small>		application/json
<p><a href="#">Example Value</a>   <a href="#">Schema</a></p> <pre>{   "id": 0,   "name": "string",   "email": "string",   "picture": "string",   "role": "string",   "password": "string" }</pre>		
<b>Responses</b>		
Code	Description	Links
200	<p>OK</p> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">/*</div> <p>Controls Accept header.</p> <p><a href="#">Example Value</a>   <a href="#">Schema</a></p> <pre>string</pre>	No links

Code	Description	Links
<p>POST /api/admin/login3 ^</p>		
<b>Parameters</b>		<b>Try it out</b>
No parameters		
<b>Request body</b> <small>required</small>		<small>application/json</small> ▾
<b>Example Value</b>   Schema		
{ "id": 0, "name": "string", "email": "string", "picture": "string", "role": "string", "password": "string" }		
<b>Responses</b>		
Code	Description	Links
200	OK	<i>No links</i>
Media type		
*/* ▾		
Controls Accept header.		
<b>Example Value</b>   Schema		
string		

## Schemas

^

Code	Description	Links
<p>POST /api/admin/login3 ^</p>		
<b>Parameters</b>		<b>Try it out</b>
No parameters		
<b>Request body</b> <small>required</small>		<small>application/json</small> ▾
<b>Example Value</b>   Schema		
{ "id": 0, "name": "string", "email": "string", "picture": "string", "role": "string", "password": "string" }		
<b>Responses</b>		
Code	Description	Links
200	OK	<i>No links</i>
Media type		
*/* ▾		
Controls Accept header.		
<b>Example Value</b>   Schema		
string		

```
Bicycle ▼ {  
    id          > [...]  
    qrCode      > [...]  
    isAvailable > [...]  
    location    > [...]  
    available   > [...]  
}
```

```
User ▼ {  
    id          > [...]  
    name        > [...]  
    email       > [...]  
    userName    > [...]  
    picture     > [...]  
    role        > [...]  
    password   > [...]  
}
```

```
Fake ▼ {  
    id          > [...]  
    name        > [...]  
    email       > [...]  
    picture     > [...]  
    role        > [...]  
    password   > [...]  
}
```

```
ClassroomKey ▼ {  
    id          > [...]  
    classroomName > [...]  
    blockName    > [...]  
    isAvailable  > [...]  
    floor        > [...]  
}
```

```
BorrowHistory ▾ {  
    id  
        > [...]  
    student  
        User > {...}  
    bicycle  
        Bicycle > {...}  
    classroomKey  
        ClassroomKey > {...}  
    borrowTime  
        > [...]  
    returnTime  
        > [...]  
    feedback  
        > [...]  
    conditionDescription  
        > [...]  
    experienceRating  
        > [...]  
    isReturned  
        > [...]  
}
```

Pageable >

Page >

PageableObject >

SortObject >