Three and a Half Asians Inventory System API

Sessions API

SESS-1: Login to a Session

POST /api/sessions

Brief Description

Creates an authentication token for a newcomer to the website. The authentication token is randomly generated and is associated with a user account. Further interaction with the user API requires use of the entered alphanumeric token as an Authorization header.

Parameter	Description	Data Type
Email	User email address. (Required)	String
Password	Password associated with user. (Required)	String

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
422	Unprocessable Entity

Sample Outputs

Successful Login (200)

```
{
  id: 13,
  email: "exampleapproved-1@example.com",
  permission: "admin",
  authorization: "MRM_kQsq4TD61QRaVNN_"
}
```

Incorrect Username/Password (422)

```
{
   errors: "Invalid username or password"
}
```

Account has been deactivated (401)

```
{
  errors: "Your account has not been approved by an administrator"
}
```

SESS-2 Logout of a Session

GET /api/sessions/{id}

Brief Description

Removes your authorization token, creating a randomly generated alphanumerical token that is not shown as output.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String

HTTP Status Code	Reasons
204	No Content
422	Unprocessable Entity

Successful Session Deletion (204)

```
no content
```

Incorrect Authorization Token (422)

```
{
   errors: "Invalid authorization token"
}
```

CustomFields API

CF-1 Shows all or specified Custom Fields

GET /api/custom_fields

Brief Description

Queries all available custom fields if no query parameters specified. Otherwise, queries by query parameters.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
Field Name	Name of Custom Field (Optional)	String
Private?	Determines if students may see this field (Optional)	Boolean
Field Type	Content Type of Field (Optional)	Enum (see below)

 $\textbf{Field Type} \ \ \text{must be one of the following: } \ \ [\text{short_text_type, long_text_type, integer_type, float_type}]$

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Correct Query (200)

CF-2 Create Custom Fields

Brief Description

Admins may create a new custom field that is available for all items to reference.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
custom_field[field_name]	Name of the Custom Field (Required)	String
custom_field[private_indicator]	Determines if students may see this field (Required)	Boolean
custom_field[field_type]	Content Type of Field (Required)	Enum (see below)

Field Type must be one of the following: [short_text_type, long_text_type, integer_type, float_type]

Response Messages

HTTP Status Code	Reasons
201	Created
401	Unauthorized
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Custom Field Creation (200)

```
{
  "id": 6,
  "field_name": "price",
  "private_indicator": true,
  "field_type": "float_type"
}
```

CF-3 Deletes Custom Fields

DELETE /api/custom_fields/{id}

Brief Description

Admins may delete a custom field, also removing references to it by items.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Custom Field ID (Required)	Integer

Note: Determining Custom Field ID for a custom field can be obtained by using GET /api/custom_fields

Response Messages

HTTP Status Code	Reasons
204	No Content
401	Unauthorized
404	Not found
422	Unprocessable Entity

Successful CustomField Deletion (204)

```
no content
```

CF-4 Fetches a specific Custom Field

GET /api/custom_fields/{id}

Brief Description

Admins/Managers may view any particular custom field. Students may only view public custom fields. Query by custom field id.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Custom Field (Required)	Integer

Note: Determining Custom Field ID for a custom field can be obtained by using GET /api/custom_fields

Response Messages

HTTP Status Code	Reasons
200	OK
401	Unauthorized
404	Not found

Sample Correct Input

Sample Outputs

Successful Custom Field Fetch (200)

```
{
  "id": 1,
  "field_name": "location",
  "private_indicator": false,
  "field_type": "short_text_type"
}
```

CF-5 Updates the name of a Custom Field

PUT/PATCH /api/custom_fields/{id}/update_name

Brief Description

Admins may change the name of a custom field using this API.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Custom Field ID (Required)	Integer
custom_field[field_name]	Updated Custom Field Name (Required)	String

Note: Determining Custom Field ID for a custom field can be obtained by using GET /api/custom_fields



200	OK
401	Unauthorized
404	Not found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful CustomField Name Update (200)

```
{
  "id": 7,
  "field_name": "modified_test_field_name",
  "private_indicator": true,
  "field_type": "float_type"
}
```

CF-6 Updates the privacy of a CustomField

PUT/PATCH /api/custom_fields/{id}/update_privacy

Brief Description

Admins may change the privacy of a custom field.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Custom Field ID (Required)	Integer
custom_field[private_indicator]	Is Updated Custom Field 'Private'? (Required)	Boolean

 $\textit{Note:} \ \text{Determining Custom Field ID for a custom field can be obtained by using } \textit{GET /api/custom_fields}$

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Custom Field Type Update (200)

```
{
  "id": 7,
  "private_indicator": false,
  "field_name": "modified_test_field_name",
  "field_type": "float_type"
}
```

CF-7 Updates the type of a CustomField

Brief Description

Admins may change the type of a custom field. When the type of custom field is changed, then all associated field contents for items are also cleared.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Custom Field ID (Required)	Integer
custom_field[field_type]	Custom Field Type (Required)	Enum (see below)

 $\textbf{Field Type} \ \ \text{must be one of the following: } \ \ [\text{short_text_type, long_text_type, integer_type, float_type}]$

Note: Determining Custom Field ID for a custom field can be obtained by using GET /api/custom_fields

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful CustomField Type Update (200)

```
{
  "id": 7,
  "field_type": "short_text_type",
  "field_name": "modified_test_field_name",
  "private_indicator": false
}
```

Tags API

TAG-1 Obtains all or query-specified tags

GET /api/tags

Brief Description

Obtains all currently defined tags. Can also query based on tag name.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
name	Tag Name (Optional)	String

Response Messages

HTTP Status Code	Reasons
200	OK
401	Unauthorized

Successful Searching Tags (200)

TAG-2 Create a new tag

POST /api/tags

Brief Description

Admins may create their own tags for later associations with items

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
name	Tag Name (Required)	String

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized

Sample Correct Input

Sample Outputs

Create New Tags (200)

```
{
    "id": 11,
    "name": "monster",
    "created_at": "2017-03-28T01:26:45.649-04:00",
    "updated_at": "2017-03-28T01:26:45.649-04:00"
}
```

TAG-3 Delete a tag

DELETE /api/tags/{:id}

Brief Description

Admins may delete tags. Deletes all associations of tags with items as well.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Tags ID (Required)	Integer

Note: Determining Tag ID for a tag can be obtained by using GET /api/tags

HTTP Status Code	Reasons
204	No Content
401	Unauthorized
404	Not Found

Sample Correct Input

Sample Outputs

Successful Tag Deletion (204)

no content

TAG-4 Obtain a specific tag

SHOW /api/tags/{:id}

Brief Description

Obtains a specific tag based on tag id.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Tags ID (Required)	String

Note: Determining Tag ID for a tag can be obtained by using GET /api/tags

Response Messages

HTTP Status Code	Reasons	
200	ОК	
401	Unauthorized	
404	Not Found	

Sample Correct Input

Sample Outputs

Successful Tag Fetch (200)

```
{
    "id": 1,
    "name": "ECE110",
    "created_at": "2017-03-27T18:12:05.934-04:00",
    "updated_at": "2017-03-27T18:12:05.934-04:00"
}
```

TAG-5 Update a specific tag

PUT/PATCH /api/tags/{:id}

Brief Description

Admins can change the name of existing tags. Checks privilege.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String

id	Tags ID (Required)	String	
tag[name]	Update Tag Name (Required)	String	

Note: Determining Tag ID for a tag can be obtained by using GET /api/tags

Response Messages

HTTP Status Code	Reasons	
200	ОК	
401	Unauthorized	
404	Not Found	

Sample Correct Input

Sample Outputs

Successful Tag Fetch (200)

```
{
    "id": 7,
    "name": "updated_tag_name",
    "created_at": "2017-03-28T00:37:45.474-04:00",
    "updated_at": "2017-03-28T01:44:11.012-04:00"
}
```

Users API

USERS-1 Update Password

PUT/PATCH /api/users/{id}/update_password

Brief Description

Updates your own password. Your new password goes in user[password]. There must also be a confirmation of the password.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	User ID (Required)	Integer
user[password]	Updated Password (Required)	String
user[password_confirmation]	Updated Password Confirmation (Required)	String

Note: Determining User ID for a user can be obtained by using $\ensuremath{\mathit{GET/api/users}}$

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Successful Password Update (200)

```
{
    "message": "Password Updated!"
}
```

USERS-2 Update Status

PUT/PATCH /api/users/{id}/update_status

Brief Description

Admins may activate or deactive a particular user from using the system. The ID of the user can be obtained using GET /api/users.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	User ID (Required)	Integer
user[status]	Updated Status of User (Required)	Enum (see below)

Status must be one of the following: [approved, deactivated]

Note: Determining User ID for a user can be obtained by using GET /api/users

Response Messages

HTTP Status Code	Reasons
200	OK
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Status Update (200)

```
{
  "id": 1,
  "email": "example-1@example.com",
  "status": "approved",
  "permission": "admin"
}
```

USERS-3 Update Privilege

PUT/PATCH /api/users/{id}/update_privilege

Brief Description

Admins may update the privilege of any user except themselves.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	User ID (Required)	Integer
user[privilege]	Updated Privilege of User (Required)	Enum (see below)

Privilege must be one of the following: [student, manager, admin]

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Privilege Update (200)

```
{
  "id": 1,
  "email": "example-1@example.com",
  "status": "approved",
  "permission": "manager"
}
```

USERS-4 Return all Users

GET /api/users/index

Brief Description

Managers can view all users as well as filtered users. Managers are able to optionally filter by: email, status, and privilege.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
email	Search by exact Email (Optional)	String
status	Search by status (Optional)	Enum (see below)
privilege	Search by privilege (Optional)	Enum (see below)

Status must be one of the following: [approved, deactivated]

Privilege must be one of the following: [student, manager, admin]

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful User Index Fetch (200)

```
[ {
```

```
"id": 25,
   "email": "adminusername@example.com",
   "status": "approved",
   "permission": "admin"
}
```

USERS-5 Create a local user

POST /api/users

Brief Description

Administrators can create local users (Non-NETID)

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
user[username]	New User's Username (Required)	String
user[email]	New User's Email (Required)	String
user[password]	New User's Password (Required)	String
user[password_confirmation]	New User's Password Confirmation (Required)	String
user[privilege]	New User's Privilege (Required)	Enum (see below)
user[status]	New User's Status (Optional)	Enum (see below)

Status must be one of the following: [approved, deactivated]. By default it is 'approved'.

Privilege must be one of the following: [student, manager, admin]

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful User Creation (200)

```
{
  "id": 37,
  "email": "test_email@example.com",
  "status": "approved",
  "permission": "student"
}
```

USERS-6 Delete User

DELETE /api/users/{id}

Brief Description

Administrators can delete local users' accounts

Parameter	Description	Data Type

Authorization	Authorization Token (Required)	Header/String
id	User ID (Required)	Integer

Note: Determining User ID for a user can be obtained by using GET /api/users

Response Messages

HTTP Status Code	Reasons
204	No Content
401	Unauthorized
404	Not Found

Sample Correct Input

Sample Outputs

Successful User Deletion (204)

no content

USERS-7 Show Particular User by ID

SHOW /api/users/{id}

Brief Description

Managers can view specific users by their ID. Students can only view themselves.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	User ID (Required)	Integer

Note: Determining User ID for a user can be obtained by using GET /api/users

Response Messages

HTTP Status Code Reasons	
200	ОК
401	Unauthorized
404	Not Found

Sample Correct Input

Sample Outputs

Successful Individual User Fetch (200)

```
{
  "id": 1,
  "email": "example-1@example.com",
  "status": "approved",
  "permission": "manager"
}
```

Items API

ITEMS-1 Create tags association for an item

POST /api/items/{id}/create_tag_associations

Brief Description

Based on an inputted list of tag names, associates all tag names listed to a item.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer
tag_names	List of tag names (Optional)	Comma Deliminated Strings

Note: Determining Item ID for an item can be obtained by using GET /api/items

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Tag Item Creation (200)

ITEMS-2 Destroys tags association for an item

DELETE /api/items/{id}/destroy_tag_associations

Brief Description

Deletes either all tag associations for an item, or a specified list of tags. If tag_names is empty, then all tag associations are deleted.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer
tag_names	List of tag names (Optional)	Comma Deliminated Strings

Note: Determining Item ID for an item can be obtained by using GET /api/items

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Item-Tag association destruction (200)

```
{
  "name": "Resistor",
  "quantity": 82,
  "description": "Cognomen ut tantillus consectetur. Comedo voco vitae creo caelum vulpes corporis tempore.",
  "model_number": "183835",
  "tags": []
}
```

ITEMS-3 Updates the general attributes of an item

PUT/PATCH /api/items/{id}/update_general

Brief Description

Updates the general attributes of an item (item name, description, and model number). Each are optional to update, and if all fields are empty, the item just simply doesn't update.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer
item[unique_name]	Item Name (Optional)	String
item[description]	Item Description (Optional)	String
item[model_number]	Item Model Number (Optional)	String

Note: Determining Item ID for an item can be obtained by using $\emph{GET/api/items}$

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Item Update (200)

```
{
  "name": "Servo Motor",
  "quantity": 114,
```

```
"description": "It goes fast",
"model_number": "P90x",
"tags": [],
"requests": [
   "request_id": 79,
   "user_id": 8,
    "status": "outstanding"
  },
    "request_id": 77,
    "user_id": 9,
    "status": "outstanding"
 },
    "request_id": 62,
    "user_id": 14,
    "status": "outstanding"
  },
    "request_id": 46,
    "user_id": 29,
    "status": "cancelled"
    "request_id": 45,
    "user_id": 13,
    "status": "outstanding"
 },
    "request_id": 37,
    "user_id": 5,
   "status": "outstanding"
  },
    "request_id": 35,
   "user_id": 2,
    "status": "outstanding"
  }
],
"custom_fields": [
   "key": "modified_test_field_name",
   "value": null,
    "type": "short_text_type"
    "key": "location",
    "value": null,
    "type": "short_text_type"
 },
    "key": "restock_info",
    "value": null,
    "type": "long_text_type"
  },
    "key": "broken",
    "value": null,
    "type": "integer_type"
    "key": "# of times whatever",
    "value": null,
    "type": "integer_type"
]
```

ITEMS-4 Administrator fixes for item quantity

PUT/PATCH /api/items/{id}/fix_quantity

Brief Description

Allows administrators to fix general workflow errors associated with quantities of items.

Parameter	Description	Data Type
-----------	-------------	-----------

Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer
item[quantity]	Item Quantity (Required)	Integer

Note: Determining Item ID for an item can be obtained by using GET /api/items

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Quantity Fix (200)

```
{
 "name": "Resistor",
 "quantity": 9001,
 "description": "Cognomen ut tantillus consectetur. Comedo voco vitae creo caelum vulpes corporis tempore.",
 "model_number": "183835",
 "tags": [],
 "requests": [
   {
     "request_id": 81,
     "user_id": 18,
     "status": "approved"
   },
     "request_id": 73,
     "user_id": 4,
     "status": "outstanding"
   },
     "request_id": 72,
     "user_id": 10,
     "status": "outstanding"
   },
     "request_id": 71,
     "user_id": 1,
     "status": "outstanding"
     "request_id": 70,
     "user_id": 16,
     "status": "outstanding"
   },
     "request_id": 64,
     "user_id": 10,
     "status": "outstanding"
   },
     "request id": 63,
     "user_id": 19,
     "status": "outstanding"
     "request_id": 57,
     "user_id": 5,
     "status": "outstanding"
   },
     "request_id": 46,
```

```
"user_id": 29,
     "status": "cancelled"
   },
     "request_id": 40,
     "user_id": 24,
     "status": "outstanding"
     "request_id": 39,
     "user_id": 13,
     "status": "outstanding"
   }
  ],
  "custom_fields": [
     "key": "modified_test_field_name",
     "value": null,
     "type": "short_text_type"
     "key": "location",
     "value": null,
     "type": "short_text_type"
   },
     "key": "restock_info",
     "value": null,
     "type": "long_text_type"
   },
     "key": "broken",
     "value": null,
     "type": "integer_type"
   },
     "key": "# of times whatever",
     "value": null,
     "type": "integer_type"
 ]
}
```

ITEMS-5 Destroys custom fields associated with an item

PUT /api/items/{id}/clear_field_entries

Brief Description

Deletes either all custom field entries for an item, or a specified list of custom fields. If custom field names is empty, then all custom field associations are cleared.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer
custom_field_names	List of custom field names (Optional)	Comma Deliminated Strings

Note: Determining Item ID for an item can be obtained by using GET /api/items

HTTP Status Code	Reasons
200	OK
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Successful Custom Field Clear (204)

no content

ITEMS-6 Fill in custom field content for a particular item

PUT /api/items/{id}/update_field_entry

Brief Description

Updates custom field content for a custom field (found by custom field name) and item (found by item id) association.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer
custom_field_name	Custom Field to be Updated (Required)	String
custom_field_content	Custom Field Content (Required)	Depends

Note: Determining Item ID for an item can be obtained by using $\emph{GET/api/items}$

Response Messages

HTTP Status Code	Reasons
200	OK
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Custom Field Update (204)

no content

ITEMS-7 Import a bulk amount of items

POST /api/items/{id}/bulk_import

Brief Description

Adds a general number of items (including their tag associations and custom field associations).

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
items_as_json	Items JSON format (Required)	JSON

HTTP Status Code	Reasons
204	OK

404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Custom Field Update (204)

no content

ITEMS-8 Finds all personal outstanding requests for a specific item

GET /api/items/{id}/self_outstanding_requests

Brief Description

Finds all personal outstanding requests for a specific item.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer

Note: Determining Item ID for an item can be obtained by using GET /api/items

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

7

Sample Outputs

Successful Personal Outstanding Requests Fetch (200)

[]

ITEMS-9 Finds all personal loans for a specific item

GET /api/items/{id}/self_loans

Brief Description

Finds all personal loans for a specific item.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer

Note: Determining Item ID for an item can be obtained by using GET /api/items

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Personal Loans Fetch (200)

ITEMS-10 Item Search

GET /api/items

Brief Description

Search items based on query params

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
search	Fuzzy Item Search (Optional)	String
model_search	Strict Item Model Filter (Optional)	String
required_tag_names	Item Search for required tags (Optional)	String
excluded_tag_names	Item Filter out excluded tags (Optional)	String

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Item Search (200)

ITEMS-11 Single Item Creation

POST /api/items

Brief Description

Creates single items based on input params

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
item[unique_name]	Item Name (Required)	String
item[quantity]	Item Starting Quantity (Required)	Integer
item[description]	Item Description (Optional)	String
item[model_number]	Item Model Number (Optional)	String

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Single Item Creation (200)

```
"id": 28,
    "unique_name": "sample-item",
    "quantity": 3292,
    "description": "Sample Item for demonstration",
    "model_number": "492thk",
    "status": "active",
    "last_action": "created",
    "quantity_on_loan": 0
}
```

ITEMS-12 Single Item Deletion

DELETE /api/items/{id}

Brief Description

Delete a single item based on its item ID.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer

Note: Determining Item ID for an item can be obtained by using $\emph{GET/api/items}$

Response Messages

HTTP Status Code	Reasons
204	ОК
401	Unauthorized
404	Not Found

Sample Correct Input

Sample Outputs

Successful Single Item Deletion (204)

```
no content
```

ITEMS-13 Single Item Fetch

GET /api/items/{id}

Brief Description

Fetches a single item based on its item ID.

Parameter	Description	Data Type
Authorization	Authorization Token (Required)	Header/String
id	Item ID (Required)	Integer

Note: Determining Item ID for an item can be obtained by using GET /api/items

Response Messages

HTTP Status Code	Reasons
200	ОК
401	Unauthorized
404	Not Found
422	Unprocessable Entity

Sample Correct Input

Sample Outputs

Successful Single Item Show

```
{
    "name": "Resistor",
    "quantity": 9001,
    "description": "Cognomen ut tantillus consectetur. Comedo voco vitae creo caelum vulpes corporis tempore.",
    "model_number": "183835",
    "tags": [
    {
```

```
"id": 1,
    "name": "ECE110",
    "created_at": "2017-03-27T18:12:05.934-04:00",
    "updated_at": "2017-03-27T18:12:05.934-04:00"
 }
],
"requests": [
 {
   "request_id": 81,
   "user_id": 18,
   "status": "approved"
 },
   "request id": 73,
   "user_id": 4,
   "status": "outstanding"
  },
    "request_id": 72,
    "user_id": 10,
   "status": "outstanding"
 },
 {
   "request_id": 71,
   "user_id": 1,
   "status": "outstanding"
 },
   "request_id": 70,
    "user_id": 16,
   "status": "outstanding"
    "request_id": 64,
    "user_id": 10,
   "status": "outstanding"
  },
   "request_id": 63,
   "user_id": 19,
    "status": "outstanding"
  },
   "request_id": 57,
   "user_id": 5,
    "status": "outstanding"
 },
   "request_id": 46,
    "user_id": 29,
   "status": "cancelled"
 },
   "request_id": 40,
   "user_id": 24,
    "status": "outstanding"
   "request_id": 39,
   "user_id": 13,
    "status": "outstanding"
 }
],
"custom_fields": [
   "key": "modified_test_field_name",
   "value": null,
   "type": "short_text_type"
 },
   "key": "restock_info",
    "value": null,
   "type": "long_text_type"
 },
   "key": "broken",
   "value": null,
    "type": "integer_type"
```

```
"key": "location",
    "value": "CIEMAS",
    "type": "short_text_type"
},
{
    "key": "# of times whatever",
    "value": null,
    "type": "integer_type"
}
]
```

Requests API

ITEMS-1 Managers making decisions on requests

PUT/PATCH /api/requests/{id}/decision

Brief Description

Allows managers to make a decision on whether or not to approve a request.

Sample Correct Input

Sample Outputs

```
"user": "exampleapproved-6@example.com",
"reason": "Benigne molestiae traho architecto cursim ut. Nesciunt ustilo socius distinctio voluptas tenax ater adsidue.",
"status": "approved",
"requested_for": "tyrell konopelski",
"request_type": "mixed",
"sub_requests": [
    "item": "Capacitor FOR A WHILE",
   "quantity_on_loan": 13,
    "quantity_disbursed": 21,
    "quantity_returned": 32,
   "subrequest_type": "mixed"
 },
   "item": "Capacitor FOR A WHILE",
   "quantity_on_loan": 43,
   "quantity_disbursed": 13,
    "quantity_returned": 49,
    "subrequest_type": "mixed"
 },
   "item": "RED_LED",
    "quantity_on_loan": 47,
   "quantity_disbursed": 15,
    "quantity_returned": 18,
    "subrequest_type": "mixed"
 }
]
```

ITEMS-2 Create Subrequests for Existing Requests

POST /api/requests/{id}/create_req_items

Brief Description

Allows users to append to existing requests before a manager has made a decision whether to approve the request or not.

Sample Correct Input

Sample Outputs

```
"user": "example-1@example.com",
 "reason": null,
  "status": "cart",
  "requested_for": "dr. rosina stark",
 "request_type": "mixed",
 "sub_requests": [
     "item": "Resistor",
     "quantity_on_loan": 15,
     "quantity_disbursed": 13,
     "quantity_returned": 0,
     "subrequest_type": "mixed"
     "item": "Transistor",
     "quantity_on_loan": 0,
     "quantity_disbursed": 12,
     "quantity returned": 0,
     "subrequest_type": "disbursement"
   }
 ]
}
```

ITEMS-3 Destroy Subrequests for Existing Requests

DELETE /api/requests/{id}/destroy_req_items

Brief Description

Allows users to delete portions of a requests before a manager has made a decision whether to approve the request or not.

Sample Correct Input

Sample Outputs

```
{
  "user": "example-1@example.com",
  "reason": null,
  "status": "cart",
  "requested_for": "dr. rosina stark",
  "request_type": "indeterminate",
  "sub_requests": []
}
```

ITEMS-4 Update Request Reason

PUT/PATCH /api/requests/{id}/update_general

Brief Description

Allows users to modify the reason for making a request while it is still outstanding.

Sample Correct Input

ITEMS-5 Update Subrequests for Existing Requests

PUT/PATCH /api/requests/{id}/update_req_items

Brief Description

Allows users to modify subrequests from a request while it is still outstanding.

```
"user": "adminusername@example.com",
"reason": "Sample reason",
"status": "approved",
"requested_for": "admin",
"request_type": "mixed",
"sub_requests": [
   "item": "Resistor",
    "quantity_on_loan": 25,
    "quantity_disbursed": 0,
   "quantity_returned": 0,
    "subrequest_type": "loan"
  },
    "item": "Transistor",
    "quantity_on_loan": 35,
    "quantity_disbursed": 25,
   "quantity_returned": 0,
    "subrequest_type": "mixed"
```

ITEMS-6 Returning Loaned Items

PUT/PATCH /api/requests/{id}/return_req_items

Brief Description

Allows users to return items corresponding to a specific request.

Sample Correct Input

Sample Outputs

```
"user": "adminusername@example.com",
"reason": "Sample reason",
"status": "approved",
"requested_for": "admin",
"request_type": "mixed",
"sub_requests": [
 {
    "item": "Transistor",
    "con": 3
    "quantity_on_loan": 35,
   "quantity_disbursed": 25,
   "quantity_returned": 0,
    "subrequest_type": "mixed"
  },
   "item": "Resistor",
   "quantity_on_loan": 1,
    "quantity_disbursed": 0,
   "quantity_returned": 24,
    "subrequest_type": "loan"
```

ITEMS-7 Shows Specific Subrequests

GET /api/requests/{id}/index_subrequests

Brief Description

Allows users to view subrequests and their details.

ITEMS-8 Shows All Requests (or a subset for students)

GET /api/requests

Brief Description

Allows users to view requests

Sample Correct Input

Sample Outputs

```
"id": 84,
  "user": "adminusername@example.com",
  "reason": "Sample reason",
  "status": "approved",
  "response": null,
  "request_initiator": 25,
  "request_type": "mixed",
  "sub_requests": [
     "item": "Transistor",
     "quantity_on_loan": 35,
     "quantity_disbursed": 25,
      "quantity_returned": 0,
      "subrequest_type": "mixed"
      "item": "Resistor",
      "quantity_on_loan": 1,
     "quantity_disbursed": 0,
      "quantity_returned": 24,
      "subrequest_type": "loan"
},
```

ITEMS-9 Creates new Requests

POST /api/requests

Brief Description

Placing requests

```
"user": "adminusername@example.com",
"reason": "Sample reason",
"status": "approved",
"requested_for": "admin",
"request_type": "mixed",
"sub_requests": [
   "item": "Resistor",
    "quantity_on_loan": 25,
    "quantity_disbursed": 0,
   "quantity_returned": 0,
    "subrequest_type": "loan"
 },
   "item": "Transistor",
    "quantity_on_loan": 35,
    "quantity_disbursed": 25,
   "quantity_returned": 0,
   "subrequest_type": "mixed"
```

ITEMS-10 Showing a Specific Request and its details

GET /api/requests/{id}

Brief Description

Shows a specific request by ID.

Sample Correct Input

Sample Outputs

```
{
  "user": "example-1@example.com",
  "reason": null,
  "status": "cart",
  "requested_for": "dr. rosina stark",
  "request_type": "indeterminate",
  "sub_requests": []
}
```

Logs API

0

Settings API

SETTINGS-1 Modifying Email Subject

PUT/PATCH /api/settings/{id}/modify_email_subject

Brief Description

Modify subject line for loans reminder emails

Sample Correct Input

Sample Outputs

```
{
    "email_subject": "Hello All!",
    "email_body": "Here is the prepended text that will edited",
    "email_dates": "03/31/17"
}
```

SETTINGS-2 Modifying Email Body

PUT/PATCH /api/settings/{id}/modify_email_body

Brief Description

Modify email body for loans reminder emails

Sample Correct Input

Sample Outputs

```
{
    "email_body": "This is a sample email body.",
    "email_subject": "Hello All!",
    "email_dates": "03/31/17"
}
```

SETTINGS-3 Modifying Email Dates

PUT/PATCH /api/settings/{id}/modify_email_dates

Brief Description

Modify dates loans reminder emails are sent

Sample Correct Input

Sample Outputs

```
{
  "email_body": "This is a sample email body.",
  "email_dates": "04/15/1995,06/07/1995",
  "email_subject": "Hello All!"
}
```

Subscribers API