# Homework 07 –API Testing Software Testing

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### 1. Introduction

This report documents the process of conducting API testing for the MentorUS platform, specifically version v0.5.4. The testing process began with an analysis of the API specifications, followed by the design and execution of test cases. The primary objective was to verify the correct functionality, data handling, and security of the APIs under test. The APIs tested in this assignment are:

Method	Route	Main feature	
POST	/api/messages/file	Send a file to a specific channel	
PATCH	/api/users/{userId}/profile	Update profile information	
POST	/api/users/avatar		
POST	/api/notes	Create a note	

# 2. Testing Environment

Test Tool: Katalon V9Test Environment:

o Server and Web-Admin: Hosted on localhost:8080

o Test Data: Excel file used for input data

Default Value:

Name	Convention (Use in test data)
Group ID	group1
Mentor ID	mentor (My own id)
Mentee ID	mentee1
List of mentees (userIds)	mentee1, mentee2
Default channel	default
UserId that do not belong to any channel	nonUser

# 3. API 1 - Send File to Specific Channel

### 3.1 API Description

### 3.1.1 Request Format

Attributes	Details	
Endpoint	POST/api/messag	ges/file
Content type	multipart/form-d	ata
Request body	id groupld senderld file	string string string \$tring \$tring

# 3.1.2 Response Format

# 3.1.2.1 Successful Response

Attributes	Details
Status Code	200
Response Body	string

# 3.1.2.2 Error Response

Attributes	Details
Unauthorized	Status code: 401
Forbidden	Status Code: 403

### 3.2 Field Constraint

Field	Туре	Required	Constraint
id string		Yes	Unique UIDv4
groupId	string	Yes	UIDv4 of a channel
senderId	string	Yes	UIDv4 of a user in group channel
file	\$binary	Yes	Accept file type: .doc, .docx, .xls, .xlsx, .ppt, .pptx, .pdf, .mp3, .mp4, .wav Maximum file size: 5MB

# 3.3 Domain Testing

# 3.3.1.1 Equivalence Partitions

Partition	Value	Lower boundary	Upper boundary	
1		One valid UIDv4		
2	id	One invalid UIDv4		
3		Empty		
4		UIDv4 of a channel		
5	groupId	UIDv4 of a non-existed channel		
6		Empty		
7		UIDv4 of a user in group channel	el	
8	senderId	UIDv4 of a non-existed user in channel		

9		UIDv4 of a non-existed user in DB		
10		Empty		
11	file	Accept file type: .doc, .docx, .xls, .xlsx, .ppt, .pptx, .pdf, .mp3, .mp4, .wav		
12		< 0 B ≥ 5MB		
13		Other file type		

# 3.3.1.2 Minimum Set of Test Case

Test	Partition		Expected			
case	tested	id	groupId	senderId	file	output
1	1,4,7, 11,12	Generated by code	default	mentor	test1.docx	200
2	1,4,7, 11,12	Generated by code	default	mentor	Test2.doc	200
3	1,4,7, 11,12	Generated by code	default	mentor	Test3.xls	200
4	1,4,7, 11,12	Generated by code	default	mentor	<u>Test4.xlsx</u>	200
5	1,4,7, 11,12	Generated by code	default	mentor	Test5.ppt	200
6	1,4,7, 11,12	Generated by code	default	mentor	Test6.pptx	200
7	1,4,7, 11,12	Generated by code	default	mentor	Test7.pdf	200
8	1,4,7, 11,12	Generated by code	default	mentor	mp3_1mb.mp3	200
9	1,4,7, 11,12	Generated by code	default	mentor	<u>mp4_3mb.mp4</u>	200
10	1,4,7, 11,12	Generated by code	default	mentor	wav 1mb.wav	200
11	3		default	mentor	test1.docx	400
12	5	Generated by code	Non-existed channel generated by code	mentor	test1.docx	400
13	6	Generated by code		mentor	test1.docx	400
14	8	Generated by code	default	nonUser	test1.docx	400
15	9	Generated by code	default	Non-existed user in DB generated by code	test1.docx	400
16	10	Generated by code	default		test1.docx	400
17	13	Generated by code	default	mentor	Test15.txt	415 Unsupported Media Type

# 3.3.1.3 Boundary Testing

Test	Partition		Expected			
case	tested	id	groupId	senderId	file	output
18	12	Generated by code	default	mentor	12 8KB.docx	200
19	12	Generated by code	default	mentor	4mb.pdf	200
20	12	Generated by code	default	mentor	5mb.pdf	200
21	12	Generated by code	default	mentor	6mb.pdf	400

# 3.4 Security and Authorization

Test		Input	Authorization	Expected		
case	id	groupId	senderId	file	Authorization	output
22	Generated	default	mentor	tost1 dosy	No Bearer	401
22	by code			test1.docx	Token	Unauthorized
23	Generated	default	mentor	tost1 dosy	Incorrect	401
	by code			test1.docx	Bearer Token	Unauthorized

# 4. API 2 - Update Profile

# 4.1 Upload avatar

# 4.1.1 API Description

# 4.1.1.1 Request Format

Attributes	Details
Endpoint	POST/api/users/avatar
Content type	multipart/form-data
Request body	file (string)

# 4.1.1.2 Response Format

# 4.1.1.2.1 Successful Response

Attributes	Details
Status Code	200
Response Body	<pre>"success": true,   "message": "string",   "data": "string",   "returnCode": 0 }</pre>

### 4.1.1.2.2 Error Response

Attributes	<b>Details</b>
------------	----------------

Unauthorized Status code: 401
Forbidden Status Code: 403

### 4.1.2 Field Constraint

Field	Туре	Required	Constraint	
file	string	No	Accepted file: .jpg, .jpeg, .jpe, .jif, .jfif, .jfi, .png, .gif, .webp, .tiff, .heif, .heic	
THC .	String 140		Maximum File Size: 5MB	
			The file cannot be empty (0 bytes).	

# 4.1.3 Domain Testing

# 4.1.3.1 Equivalence Partitions

Partition	Value	Lower boundary	Upper boundary	
1		Accepted file: .jpg, .jpeg, .jpe, .jif, .jfif, .jfi, .png, .gif, .webp, .tiff, .tif, .heic		
2		Other file type		
3		< 0 B	≥ 5MB	

### 4.1.3.2 Minimum Set of Test Case

Test	Partition tested	Input	F and a stand
case		file	Expected output
1	1,3	Test1.jpg	200
2	1	Test2.jpeg	200
3	1	Test3.jpe	200
4	1	Test4.jif	200
5	1	Test5.jfif	200
6	1	Test6.jfi	200
7	1	Test7.png	200
8	1	Test8.gif	200
9	1	Test10.webp	200
10	1	Test11.tiff	200
11	1	Test12.tif	200
12	1	Test13.heif	200
13	1	Test14.heic	200
14	2	Test15.txt	415 Unsupported Media Type

# 4.1.3.3 Boundary Testing

Test	Partition tested	Input	Francisco di cretarente
case		file	Expected output
15	4	OB.png	400 Bad request
16	3	82B.png	200
17	3	4-9MB.jpg	200
18	3	5MB.jpg	200
19	3	5-1MB.jpg	400 Bad request

# 4.1.4 Security and Authorization

Test	Input	Authorization	Expected output
case	file	Authorization	
20	Test1.jpg	No Bearer Token	401 Unauthorized

### 4.2 Update information

### 4.2.1 API Description

### 4.2.1.1 Request Format

```
Endpoint PATCH /api/users/{userId}/profile

Content type application/json

Request body {
    "name": "string",
    "imageUrl": "string",
    "phone": "string",
    "birthDate": "2024-08-23T09:24:12.537Z",
    "personalEmail": "string",
    "gender": "FEMALE"
}
```

### 4.2.1.2 Response Format

### 4.2.1.2.1 Successful Response

```
Attributes Details

Status Code 200

Response Body {
    "returnCode": 0,
    "message": "string",
    "data": {}
}
```

### 4.2.1.2.2 Error Response

Attributes	Details
Unauthorized	Status code: 401
Forbidden	Status Code: 403

#### 4.2.2 Field Constraint

Field	Туре	Required	Constraint	
userId	string	Yes	36 characters (UUID format).	
name	string	Yes	<ul> <li>1 - 50 characters.</li> <li>Accepts Vietnamese and English characters.</li> <li>Allows whitespace.</li> <li>No special characters or numbers.</li> </ul>	
imageurl	string	No	Tested in 3.1, just empty this field	
phone	string	No	<ul><li>10 digits.</li><li>Only numeric characters allowed.</li></ul>	

			Must start with '0'.
birthdate	string	No	<ul><li>String of time (ISO format)</li><li>Must not be in the future</li></ul>
personalEmail	string	No	<ul> <li>1 - 100 characters. Must follow the email format with the following rules:</li> <li>Allowed Characters: Letters (a-z, A-Z), digits (0-9), periods (.), and the at symbol (@).</li> <li>Must contain exactly one @ symbol, which cannot be at the beginning or end of the email.</li> <li>Periods (.) cannot be consecutive, at the beginning, or at the end of the email address.</li> <li>No special characters other than @ and period (.).</li> <li>The email address must not already exist in the database.</li> </ul>
gender	string	No	Must be one of 'MALE', 'FEMALE'

# 4.2.3 Domain Testing

# 4.2.3.1 Equivalence Partitions

Partition	Value	Lower boundary	Upper boundary			
1		UIDv4 of a user				
2	userId	UIDv4 of a non-existed user				
3		Empty				
4		≥ 1 character	≤ 50 characters			
5		Vietnamese or English chara	acters			
6	name	Numeric characters				
7		Other special characters not	Other special characters not allowed in name e.g, @, +,?			
8		Empty field				
9		Numeric characters (0-9)	Numeric characters (0-9)			
10		Exactly 10 digits				
11		The first digit is 0	The first digit is 0			
12		The first digit is not 0	The first digit is not 0			
13	phone	Without whitespace				
14		With whitespace				
15		Alphabetic string				
16		Other special characters e.g	, @,?,/			
17		Empty field	Empty field			

18		ISO string of date		
19		A future date		
20		A past date		
21	birthDate	Invalid date		
22		Today date		
23		Empty field		
			< 100 ab a va ata va	
24		≥ 1 character	≤ 100 characters	
25		Characters are in A-Z, a-z, 0-9	and period	
26		Must have one @		
27		@ is not at first or at last		
28		Periods are not consecutive		
29		Periods are not at first or at last		
30		Empty		
31		There is a period at first		
32	personalEmail	There is a period at last		
33		Contains consecutively periods		
34		Don't have any period.		
35		There is a @ at first		
36		There is a @ at last		
37		There isn't any @		
38		There are more than one @		
39		Contains special character, ex	cept @ and period.	
40		The email has already existed	in database.	
41		Must be 'FEMALE', 'MALE', 'O	THERS'	
42	gender	Other value		
43	genuei -	Empty field		
		стіріу пеш		

# 4.2.3.2 Minimum Set of Test Case

Test	Partition				Input			Expecte
Cas e	Tested	userId	name	phone	birthDate	personalEmail	gender	d Output
1	1,4,5,9,10 , 11,13,18,	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	200

	20.22							
	20,22,							
	25,26,27,							
	28,29,30, 41							
	41	Non- existed					FEMAL E	
2	2	user in DB generat ed by code	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	L	400
3	3		Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
4	6	mentor	Fa Ngoc67 Uyen5 Nhi	094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
5	7	mentor	Fa Ngoc@ Uyen Nhi	094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
6	8	mentor		094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
7	12	mentor	Fa Ngọc Uyển Nhi	949278790	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
8	14	mentor	Fa Ngọc Uyển Nhi	0949 278 790	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
9	15	mentor	Fa Ngọc Uyển Nhi	abc	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
10	16	mentor	Fa Ngọc Uyển Nhi	09@@	2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
11	17	mentor	Fa Ngọc Uyển Nhi		2003-09-15	fnunhi21@clc.fitus.edu .vn	FEMAL E	200
12	19	mentor	Fa Ngọc Uyển Nhi	094927879 0	2025-15-09	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
13	21	mentor	Fa Ngọc Uyển Nhi	094927879 0	2023-29-02	fnunhi21@clc.fitus.edu .vn	FEMAL E	400
14	22	mentor	Fa Ngọc Uyển Nhi	094927879 0	Now	fnunhi21@clc.fitus.edu .vn	FEMAL E	200
15	23	mentor	Fa Ngọc Uyển Nhi	094927879 0		fnunhi21@clc.fitus.edu .vn	FEMAL E	200
16	30	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15		FEMAL E	200
17	31	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	.example@gmail.com	FEMAL E	400
18	32	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	example@gmail.com.	FEMAL E	400
19	33	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	example@gmailcom	FEMAL E	400
20	34	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	example@gmailcom	FEMAL E	400

21	35	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	@examplegmail.com	FEMAL E	400
22	36	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	Examplegmail.com@	FEMAL E	400
23	37	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	Examplegmail.com	FEMAL E	400
24	38	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	Example@gmail@.com	FEMAL E	400
25	39	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	Example!gmail@.com	FEMAL E	400
26	40	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	An existed email in database	FEMAL E	400
27	42	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	MALE	200
28	42	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	OTHER S	200
29	43	mentor	Fa Ngọc Uyển Nhi	094927879 0	2003-09-15	fnunhi21@clc.fitus.edu .vn	ВОҮ	400

# 4.2.3.3 Boundary Testing

Test	Partition			lı	nput		Expected
Case	se Tested userId nam		name	phone	birthDate	personalEmail	Output
30	4	mentor	N	0949278790	2003-09-15	fnunhi21@clc.fitus.edu.vn	200
31	4	mentor	Na	0949278790	2003-09-15	fnunhi21@clc.fitus.edu.vn	200
32	4	mentor	Nguyễn Văn A B C D E F G H I J K L M N O P Q R SA	0949278790	2003-09-15	fnunhi21@clc.fitus.edu.vn	200
33	4	mentor	Nguyễn Văn A B C D E F G H I J K L M N O P Q R SAN	0949278790	2003-09-15	fnunhi21@clc.fitus.edu.vn	200
34	4	mentor	Nguyễn Văn A B C D E F G H I J K L M N O P Q R SANA	0949278790	2003-09-15	fnunhi21@clc.fitus.edu.vn	400
35	9	mentor	Fa Ngọc Uyển Nhi	0949/78790	2003-09-15	fnunhi21@clc.fitus.edu.vn	400
36	9	mentor	Fa Ngọc Uyển Nhi	0949:78790	2003-09-15	fnunhi21@clc.fitus.edu.vn	400
37	10	mentor	Fa Ngọc Uyển Nhi	012345678	2003-09-15	fnunhi21@clc.fitus.edu.vn	400

38	10	mentor	Fa Ngọc Uyển Nhi	01234567890	2003-09-15	fnunhi21@clc.fitus.edu.vn	400
39	22	mentor	Fa Ngọc Uyển Nhi	0949278790	Today's date - 1	fnunhi21@clc.fitus.edu.vn	200
40	22	mentor	Fa Ngọc Uyển Nhi	0949278790	Today's date + 1	fnunhi21@clc.fitus.edu.vn	200
41	24	mentor	Fa Ngọc Uyển Nhi	0949278790	2003-09-15	abcdefghijklmnowuyzwla p.PQRSTUVWXYZ1234567 890.pqrstuvwxyzABCDEF GHIJKLMNO12345@exam ple.domainnam.com	200
42	24	mentor	Fa Ngọc Uyển Nhi	0949278790	2003-09-15	abcdefghijklmnowuyzwla p.PQRSTUVWXYZ1234567 890.pqrstuvwxyzABCDEF GHIJKLMNO12345@exam ple.domainname.com	200
43	24	mentor	Fa Ngọc Uyển Nhi	0949278790	2003-09-15	abcdefghijklmnowuyzwla p.PQRSTUVWXYZ1234567 890.pqrstuvwxyzABCDEF GHIJKLMNO12345@exam ple.domainnam1.com	400

# 4.2.4 Security and Authorization

Test				Authorization	Expected		
Case	userId	name	phone	birthDate	personalEmail	Authorization	Output
44	mentor	Fa Ngọc Uyển Nhi	0949278790	2003-09-15	fnunhi21@clc.fitus.edu.vn	No Bearer Token	401
45	mentor	Fa Ngọc Uyển Nhi	0949278790	2003-09-15	fnunhi21@clc.fitus.edu.vn	Incorrect Bearer Token	401

# 5. API 3 - Create Note

# **5.1 API Description**

# 5.1.1 Request Format

Attributes	Details
Endpoint	POST /api/notes
Content type	application/json
Request body	<pre>"title": "string",   "content": "string",   "userIds": [     "string" ]</pre>

}

### 5.1.2 Response Format

### 5.1.2.1 Successful Response

#### **Attributes**

#### **Details**

#### **Status Code**

200

#### **Response Body**

```
"id": "string",
"title": "string",
"content": "string",
"shareType": "PUBLIC",
"creator": {
  "id": "string",
  "name": "string",
  "email": "string",
  "imageUrl": "string",
  "totalNotes": 0
},
"updatedBy": {
  "id": "string",
  "name": "string",
  "email": "string",
  "imageUrl": "string",
  "totalNotes": 0
},
"owner": {
  "id": "string",
  "name": "string",
  "email": "string",
  "imageUrl": "string",
  "totalNotes": 0
},
"createdDate": "2024-08-23T05:58:02.197Z",
"updatedDate": "2024-08-23T05:58:02.197Z",
"noteHistories": [
    "id": "string",
    "title": "string",
    "content": "string",
    "updatedBy": {
      "id": "string",
      "name": "string",
      "email": "string",
      "imageUrl": "string",
      "totalNotes": 0
    "createdDate": "2024-08-23T05:58:02.197Z",
    "updatedDate": "2024-08-23T05:58:02.197Z"
],
"users": [
  {
```

```
"id": "string",
    "name": "string",
    "email": "string",
    "imageUrl": "string",
    "totalNotes": 0
  }
],
"userAccesses": [
    "user": {
      "id": "string",
      "name": "string",
"email": "string",
      "imageUrl": "string",
      "totalNotes": 0
    "notePermission": "VIEW"
],
"editable": true
```

### 5.1.2.2 Error Response

Attributes

**Details** 

Unauthorized

Status code: 401

Forbidden

Status Code: 403

### 5.2 Field Constrant

Field	Туре	Required	Constraint
tiitle	String	Yes	None
content	String	Yes	None
userIds	Array	Yes	List of unique UIDv4 of users, all users in this list must be mentees of the mentor who is creating the note

### 5.3 Domain Testing

### 5.3.1 Equivalence Partitions

Parition	Value	Lower Boundary Upper Boundary			
1	title	≥ 1 character	Large number of Characters (e.g., 65000 characters)		
2	titie	Empty field			
3	content	≥ 1 character	Large number of Characters (e.g., 65000 characters)		
4	33	Empty field			

5		1 user ID	Large number of user IDs (e.g., 1000 IDs)
6	userlds	Empty field	
7	aserras	User is not the mentees of the mentor who	o is creating the note
8		My own UserID	

# 5.3.2 Minimum Set of Test Case

Test	Partition Tested	Input			Funcated Output	C
Case		title	content	userlds	Expected Output	Success
1	1, 3, 5	Valid Title	Valid Content	"mentee1", "mentee2"	200	True
2	2		Valid Content	"mentee1", "mentee2"	400 Bad Request - Error: "Title is required."	False
3	4	Valid Title		"mentee1", "mentee2"	400 Bad Request - Error: "Content is required."	False
4	6	Valid Title	Valid Content		400 Bad Request - Error: "Users are required."	False
5	7	Valid Title	Valid Content	"nonUser"	403 Forbidden	False
6	8	Valid Title	Valid Content	"mentor"	403 Forbidden	False

# 5.3.3 Boundary Testing

Test	Partition	Input			From a stand Oroton ot	Curana
Case	Tested	title	content	userlds	Expected Output	Success
7	1	N	Valid Content	"mentee1", "mentee2"	200	True
8	1	65000 characters	Valid Content	"mentee1", "mentee2"	200	True
9	3	Valid Title	N	"mentee1", "mentee2"	200	True
10	3	Valid Title	65000 characters	"mentee1", "mentee2"	200	True
11	5	Valid Title	Valid Content	"mentee1"	200	True

# 5.4 Security and Authorization

Test		Input		- Authorization	Expected Output	Success
Case	title	content	userlds	Authorization	Expected Output	Juccess
12	Valid Title	Valid Content	"mentee1", "mentee2"	No Bearer Token	401 Unauthorized	False

13	Valid Title	Valid Content	"mentee1", "mentee2"	Incorrect Bearer Token	401 Unauthorized	False	
----	-------------	---------------	-------------------------	---------------------------	------------------	-------	--

# 6. Result and analysis

### 6.1 Summary test execution

API	Total execution	Pass	Failed
/api/messages/file	22	16	6
/api/users/avatar		20	20
/api/users/{userId}/profile	66	30	36
/api/note	13	13	0

• Analysis: /api/users/{userId}/profile: During testing of the API – Update Profile endpoint (/api/users/{userId}/profile), it was found that the personalEmail field does not update at all. Out of 36 test cases that check how the email is updated, 13 of them failed because of this issue.

### 6.2 Issues reported

#### 6.2.1 AP1 - Send File

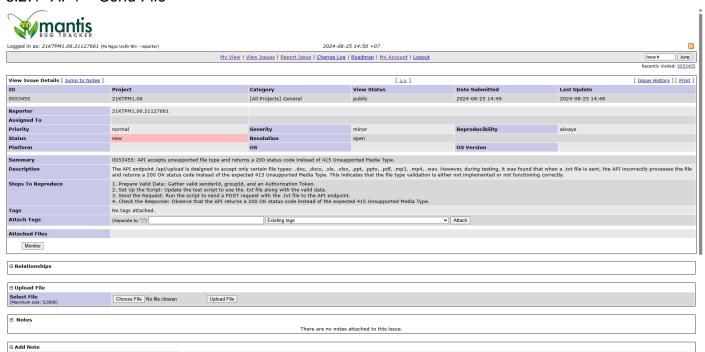


Figure 1. API accepts unsupported file type



Figure 2. [API] returns a 500 Internal Server Error instead of 400 when file size exceeds the maximum limit

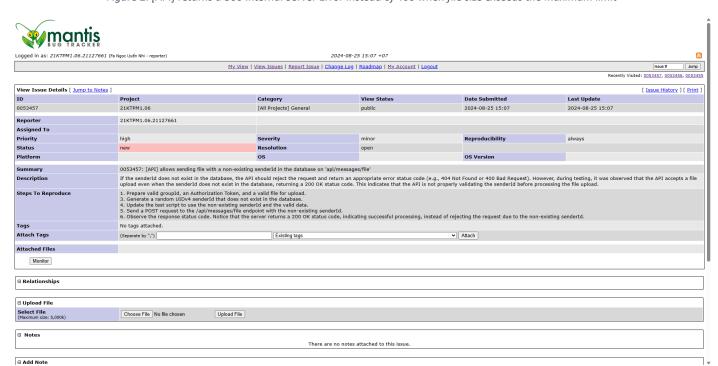


Figure 3. [API] allows sending file with a non-existing senderld in the database



Figure 4. [API] allows sending file even when id or senderId is empty

### 6.2.2 API - Update Profile

For this api, the personalEmail is not update for all test case so it contain 12/36 test case failed for the domain of emal



Figure 5. [API] allows invalid name values: special characters, over 100 characters, and empty values



Figure 6. [API] does not update the personalEmail field



Figure 7. [API] accepts invalid phone numbers: non-numeric characters and strings exceeding 10 characters



Figure 8. [API] accepts invalid dates and future dates in the birthDate field

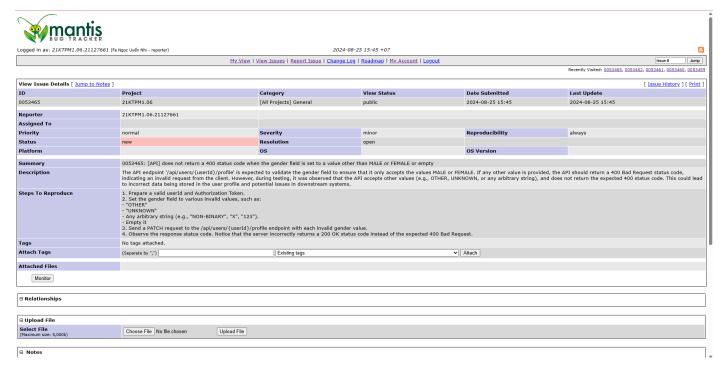


Figure 9. [API] does not return a 400 status code when the gender field is set to a value other than MALE or FEMALE or empty



Figure 10. [API] allows profile to be updated successfully even when userId is empty



Figure 11. [API] allows uploading of 0-byte files and unsupported file types for the avatar

#### 6.2.3 API - Create Note

For this API, I found the issue of UI in the new note with a long title

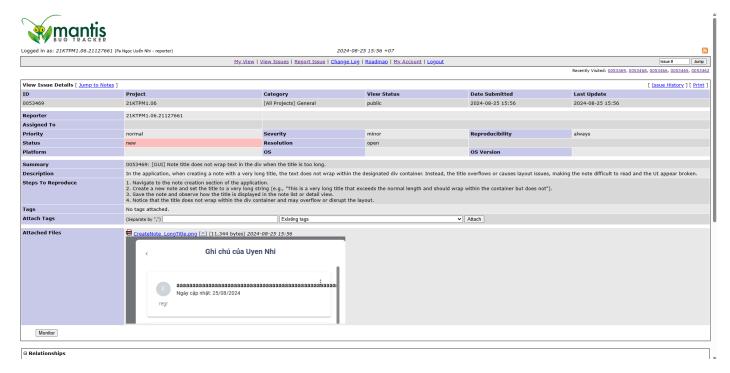


Figure 12. Note title does not wrap text in the div when the title is too long.

### 7. Self-Assessment

#### Self-Assessment Report

Criteria	Outcomes (Brief description about what you get/trouble from each requirement)	Grade	Self-Assessment Grade
1	API 1	3	3
2	API 2 During testing of the API – Update Profile endpoint (/api/users/{userId}/profile), it was found that the personalEmail field does not update at all. Out of 36 test cases that check how the email is updated, 13 of them failed because of this issue	3	3
3	API 3	3	3
4	Style, format of the report	1	1
	Total	10	10