IT-314 : Software Engineering
API Testing

Group : 12

CHAT APPLICATION

API Endpoint

https://api.cloudinary.com/v1_1/daayhy7z8/image/upload

Objectives

To verify the functionality, reliability, and performance of the Cloudinary image upload API endpoint.

1. Successful Image Upload (TC_API_001)

Objective: Verify that the API successfully uploads an image and returns the expected response.

Steps:
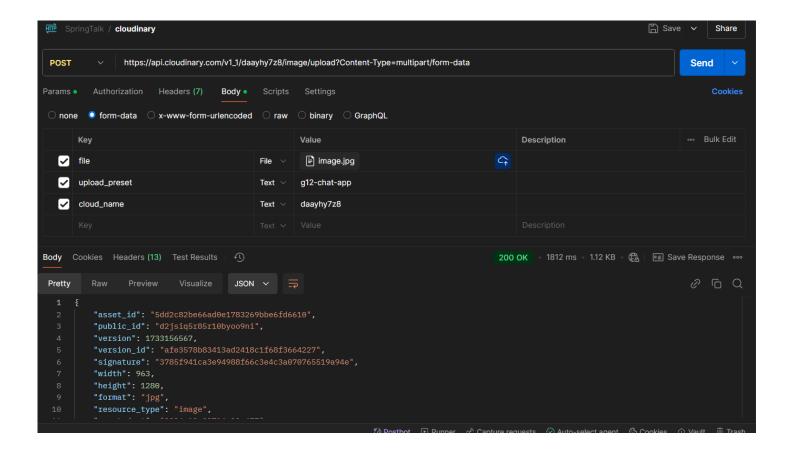
1. Prepare a valid image file
2. Set up the request with correct parameters:
   - Method: POST
   - Content-Type: multipart/form-data
   - Body:
     - file: [image file]
     - upload_preset: g12-chat-app
     - cloud_name: daayhy7z8
3. Send the request to the API endpoint
4. Verify the response

Expected Result:

- Status Code: 200 OK
- Response body contains:
  - asset_id
  - public_id
  - version
  - version_id
  - signature
  - width
  - height
  - format
  - resource_type
  - created_at
  - tags
  - bytes
  - type
  - etag
  - placeholder
  - url
  - secure_url

- asset_folder
- display_name
- access_mode
- original_filename

Actual Result:

Pass/Fail: Pass

2. Invalid File Type Upload (TC_API_002)

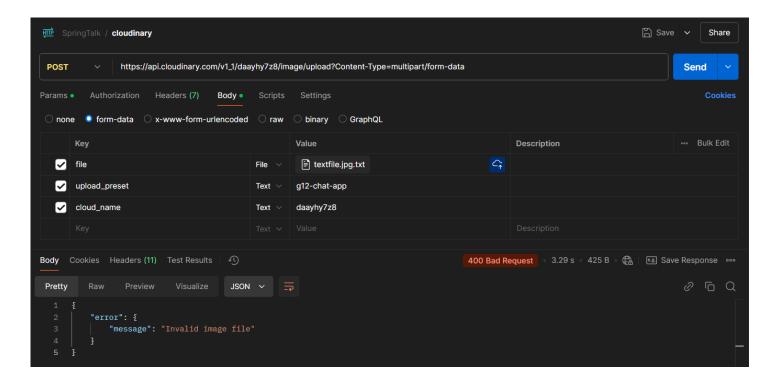Objective: Verify that the API correctly handles attempts to upload invalid file types.

Steps:

1. Prepare an invalid file (e.g., a text file with .jpg extension)
2. Set up the request with the same parameters as TC_API_001
3. Send the request to the API endpoint
4. Verify the response

Expected Result:

- Status Code: 400 Bad Request

- Response body contains an error message indicating invalid file type

Actual Result:

Pass/Fail: Pass

3. Missing Required Parameters (TC_API_003)

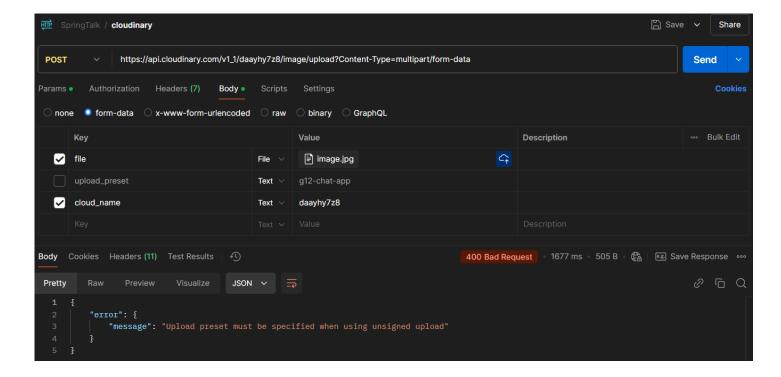Objective: Verify that the API correctly handles requests with missing required parameters.

Steps:

1. Prepare a valid image file
2. Set up the request, intentionally omitting the 'upload_preset' parameter
3. Send the request to the API endpoint
4. Verify the response

Expected Result:

- Status Code: 400 Bad Request
- Response body contains an error message indicating missing required parameter

Actual Result:

Pass/Fail: Pass

4. Large File Upload (TC_API_004)

Objective: Verify that the API can handle large file uploads within Cloudinary's size limits.

Steps:

1. Prepare a large image file (e.g., 10MB)
2. Set up the request with correct parameters
3. Send the request to the API endpoint
4. Verify the response and measure the upload time

Expected Result:

- Status Code: 200 OK
- Response similar to TC_API_001
- Upload time within acceptable limits (e.g., < 30 seconds)

Actual Result:

Pass/Fail: Pass

5. Invalid Authentication (TC_API_005)

Objective: Verify that the API correctly handles requests with invalid authentication.
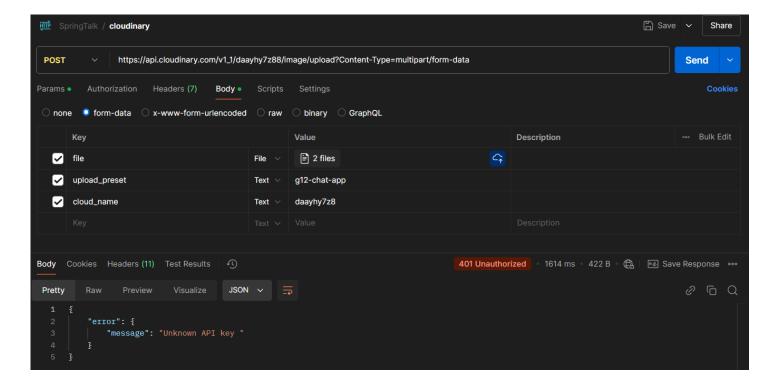
Steps:

1. Prepare a valid image file
2. Set up the request with correct parameters, but use an invalid API key or secret
3. Send the request to the API endpoint
4. Verify the response

Expected Result:

- Status Code: 401 Unauthorized
- Response body contains an error message indicating authentication failure

Actual Result:

SpringTalk / cloudinary

POST | https://api.cloudinary.com/v1_1/daayhy7z88/image/upload?Content-Type=multipart/form-data | Send

Params • | Authorization | Headers (7) | Body • | Scripts | Settings | Cookies

○ none ● form-data ○ x-www-form-urlencoded ○ raw ○ binary ○ GraphQL

	Key		Value		Description		Bulk Edit
☑	file	File ∨	📄 2 files	☁			
☑	upload_preset	Text ∨	g12-chat-app				
☑	cloud_name	Text ∨	daayhy7z8				
	Key	Text ∨	Value		Description		

Body   Cookies   Headers (11)   Test Results   401 Unauthorized • 1614 ms • 422 B   Save Response

Pretty   Raw   Preview   Visualize   JSON ∨

```
1  {
2      "error": {
3          "message": "Unknown API key "
4      }
5  }
```

Pass/Fail: Pass

Postman Collection JSON

```
{
  "info": {
    "_postman_id": "cda90073-ae99-4a55-bfd1-4ec00a9b0b50",
    "name": "SpringTalk API Testing",
    "schema": "https://schema.getpostman.com/json/collection/v2.1.0/collection.json",
    "_exporter_id": "39795315"
  },
  "item": [
    {
      "name": "TC_API_001 (Successful Image Upload)",
      "request": {
        "method": "POST",
        "header": [],
        "body": {
          "mode": "formdata",
          "formdata": [
            {
              "key": "file",
              "type": "file",
              "src": "DWkqrRDAH/image.jpg"
            },
            {
              "key": "upload_preset",
              "value": "g12-chat-app",
              "type": "text"
```

```json
                },
                {
                    "key": "cloud_name",
                    "value": "daayhy7z8",
                    "type": "text"
                }
            ]
        },
        "url": {
            "raw":
"https://api.cloudinary.com/v1_1/daayhy7z8/image/upload?Content-Type=multipart/form-data",
            "protocol": "https",
            "host": ["api", "cloudinary", "com"],
            "path": ["v1_1", "daayhy7z8", "image", "upload"],
            "query": [
                {
                    "key": "Content-Type",
                    "value": "multipart/form-data"
                }
            ]
        }
    },
    "response": []
},
{
    "name": "Invalid File Type Upload (TC_API_002)",
    "request": {
        "method": "POST",
        "header": [],
        "body": {
            "mode": "formdata",
            "formdata": [
                {
                    "key": "file",
                    "type": "file",
                    "src": "dgo3VHVu4/textfile.jpg.txt"
                },
                {
                    "key": "upload_preset",
                    "value": "g12-chat-app",
                    "type": "text"
                },
                {
                    "key": "cloud_name",
                    "value": "daayhy7z8",
                    "type": "text"
                }
            ]
        },
        "url": {
            "raw":
"https://api.cloudinary.com/v1_1/daayhy7z8/image/upload?Content-Type=multipart/form-data",
```

```json
        "protocol": "https",
        "host": ["api", "cloudinary", "com"],
        "path": ["v1_1", "daayhy7z8", "image", "upload"],
        "query": [
          {
            "key": "Content-Type",
            "value": "multipart/form-data"
          }
        ]
      }
    },
    "response": []
  },
  {
    "name": "Missing Required Parameters (TC_API_003)",
    "request": {
      "method": "POST",
      "header": [],
      "body": {
        "mode": "formdata",
        "formdata": [
          {
            "key": "file",
            "type": "file",
            "src": "WogyPrzzJ/image.jpg"
          },
          {
            "key": "upload_preset",
            "value": "g12-chat-app",
            "type": "text",
            "disabled": true
          },
          {
            "key": "cloud_name",
            "value": "daayhy7z8",
            "type": "text"
          }
        ]
      },
      "url": {
        "raw":
"https://api.cloudinary.com/v1_1/daayhy7z8/image/upload?Content-Type=multipart/form-data",
        "protocol": "https",
        "host": ["api", "cloudinary", "com"],
        "path": ["v1_1", "daayhy7z8", "image", "upload"],
        "query": [
          {
            "key": "Content-Type",
            "value": "multipart/form-data"
          }
        ]
      }
```

```json
    },
    "response": []
},
{
    "name": "Large File Upload (TC_API_004)",
    "request": {
        "method": "POST",
        "header": [],
        "body": {
            "mode": "formdata",
            "formdata": [
                {
                    "key": "file",
                    "type": "file",
                    "src": "aXSf6EC8_/largeImage.jpg"
                },
                {
                    "key": "upload_preset",
                    "value": "g12-chat-app",
                    "type": "text"
                },
                {
                    "key": "cloud_name",
                    "value": "daayhy7z8",
                    "type": "text"
                }
            ]
        },
        "url": {
            "raw":
"https://api.cloudinary.com/v1_1/daayhy7z8/image/upload?Content-Type=multipart/form-data",
            "protocol": "https",
            "host": ["api", "cloudinary", "com"],
            "path": ["v1_1", "daayhy7z8", "image", "upload"],
            "query": [
                {
                    "key": "Content-Type",
                    "value": "multipart/form-data"
                }
            ]
        }
    },
    "response": []
},
{
    "name": "Invalid Authentication (TC_API_005)",
    "request": {
        "method": "POST",
        "header": [],
        "body": {
            "mode": "formdata",
            "formdata": [
```

```
            {
              "key": "file",
              "type": "file",
              "src": ["IrN12YJgJ/image.jpg", "IrN12YJgJ/image2.jpg"]
            },
            {
              "key": "upload_preset",
              "value": "g12-chat-app",
              "type": "text"
            },
            {
              "key": "cloud_name",
              "value": "daayhy7z8",
              "type": "text"
            }
          ]
        },
        "url": {
          "raw":
"https://api.cloudinary.com/v1_1/daayhy7z88/image/upload?Content-Type=multipart/form-data",
          "protocol": "https",
          "host": ["api", "cloudinary", "com"],
          "path": ["v1_1", "daayhy7z88", "image", "upload"],
          "query": [
            {
              "key": "Content-Type",
              "value": "multipart/form-data"
            }
          ]
        }
      },
      "response": []
    }
  ]
}
```