## **Test report**

| RESTful APIs testing report |   |  |  |  |
|-----------------------------|---|--|--|--|
| Purpose                     | 1.Survey what RESTful APIs can work normally in the backend system.       |  |  |  |
|                             | 2.Fix identified issues.  |  |  |  |
|                             | 3.Record the response of APIs by sending various http requests as output. |  |  |  |
| Tool                        | Postman   |  |  |  |
| Version (commit SHA)        | 6d2be04   |  |  |  |

| Title          | Definition   |
|----------------|--|
| Route URL      | The URL address where frond-end components should send to  |
| Request method | Indicating desired type of action to be formed for the API, such as GET, POST, PATCH, and DELETE |
| Result         | Whether the API passed the test, presents in three status showed below                           |
| Role           | Defined by auth_token in Http request header. It can be moderator, student, or administrator     |
| Input          | The parameters of Http request   |
| Output         | The response from the API  |

| PASSED  | = With proper input parameters, the route can respond with right response                                     |
|---------|---|
| PENDING | = Currently unable to perform test  |
| FAILED  | = Http response status code is not in range of 200-299 or API responds incorrect keys or values of parameters |

| Use | er Ro       | oute   |     |       |        |      |
|-----|-------------|--------|-----|-------|--------|------|
| Ro  | Requ        | Result | R   |       |        | NOTE |
| ute | est<br>meth |        | ole | input | output |      |
| URL | od          |        |     |       |        |      |

| user /ho me | GET | PASSED | M o d er at or | {     "success": true,     "user": {         "is_moderator": true,         "is_admin": true,         "subscribed_tools": [],         "subscribed_subjects": [],         "moderated_subjects": [],         "moderated_subjects": [],         "jid":         "sections": [],         "name": "Test",         "subject_code":         "TEST10001",         "description": "abcd",         "created_by":         "60532e8d7ba3514b576ebb23",         "v": 0         }         ],         "articles": [],         "images": [],         "jid":         "60532e8d7ba3514b576ebb23",         "account": "admin2",         "password": "\$2b\$10\$ /Dz5oh3ttr1j6r6 /ISHRMOsHbnV4YYPYAet9CN O0X1qAr679zG0.K",         "student_number":         "845462",         "student_number":         "845462",         "student_number":         "845462",         "student_number":         "845462",         "student_number":         "845462",         "student_number":         "student_number": |  |
|-------------|-----|--------|----------------|--|--|
|             |     |        |                | "student_number":  |  |

| user/<br>allU<br>sers | GET | PASSED  | M o d er at or                | {     "60532e8d7ba3514b576ebb23 " {         "is_moderator": true,         "is_admin": true,         "subscribed_tools": [],         "subscribed_subjects": [],         "moderated_subjects": []         "606083b87b65dc15d07f 941e" ],         "articles": [],         "images": [],         "jd":         "60532e8d7ba3514b576ebb23",         "account": "admin2",         "password": "\$2b\$10\$ /Dz5on3ttr1]6f6 //SHRMOsHbnV4YYPYAet9CN O0X1qAr679zG0.K",         "student_number":         "845462",         "V": 13         },          "608527c03670cb11b968d288 " {         "is_moderator": false,         "is_admin": false,         "subscribed_tools": [],         "moderated_subjects": [],         "moderated_subjects": [],         "mides": [],         "jd":         "608527c03670cb11b968d288",         "account": "Peter",         "password": "\$2b\$10\$ /GARDJulPmSkepDQ8UlAunIV wXFT7XesX.5FU7q. IOOL9ShskD7a",         "student_number": "Peter",         "V": 0         },          "6087e186772dbcda43307818",         "subscribed_subjects": [],         "moderated_subjects": [],         "articles": [],         "moderated_subjects": [],         "moderated_subjects": [],         "articles": [],         "moderated_subjects": [],         "articles": [],         "moderated_subjects": [],         "articles": [],         "subscribed_subjects": [],         "articles": [],         "articles": [],         "subscribed_subjects": [],         "moderated_subjects": [],         "articles": [],         "subscribed_subjects": [],         "articles": [],         "a |   |
|-----------------------|-----|---------|-------------------------------|--|---|
| user/<br>ima<br>ges   | GET | PENDING | M<br>o<br>d<br>er<br>at<br>or | {     "success": true,     "images": [] }  | Need to upload image first to test this func. |

| user/<br>add     | POST | PASSED  | M<br>o<br>d<br>er<br>at<br>or | {   "name":"   chaowei",   "account":"   ACCOUNT",   "username":   "USERNAME",   "password":"   a123",   "studentId":"   1136000" } | {     "success": true,     "user": {         "is_moderator": false,         "is_admin": false,         "subscribed_tools": [],         "subscribed_subjects": [],         "moderated_subjects": [],         "articles": [],         "images": [],         "_id":     "6088cf3c772dbcda4330781c",         "name": "chaowei",         "account": "a12345",         "password": "\$2b\$10\$5TFz /6lq9g9Az73Dx58ske3GVZVD85. nMs8H2jK/MT1Es/OTrXp8i",         "v": 0     } } |  |
|------------------|------|---------|-------------------------------|---|--|--|
| user/            | POST | PENDING |                               |   |  |  |
| ad               |      |         |                               |   |  |  |
| user/ com men ts | GET  | PASSED  | M o d er at or                |   | {     "success": true,     "comments": [   | author_name and user_avatar are set to be user's name and avatar, however these two parameter are not required. To avoid error, I assign them to be testName and testAvatar. Need to be fixed. |

| subs<br>cribe | СН | PASSED | M o d er at or | {     "subject_id":     "605337ea556 31157f25adde f" } | {     "success": true,     "user": {         "is_moderator": true,         "is_admin": true,         "subscribed_tools": [],         "subscribed_subjects": [         "605337ea55631157f25a  ddef"         ],         "moderated_subjects": [         "605337ea55631157f25a  ddef"],         "articles": [],         "images": [],         "images": [],         "jed": "60532e8d7ba3514b5  76ebb23",         "account": "admin2",         "password": "\$2b\$10\$  /DZ5oh3ttr1j6r6 /ISHRMOsHbnV4YYPYAet9CN OOX1qAr679zG0.K",         "student_number": "845462",          "v": 14 |  |
|---------------|----|--------|----------------|--|--|--|
|               |    |        |                |  | }  |  |

## **Comment Route** Route Reque Result Role Note **Parameters** URL st input output method POST comment/ Modera PASSED tor add "author\_id":"60532e8d7ba3514b57 "success": true, 6ebb23", "comment": { "content":"comment\_test", "leaf\_comments": [], "section\_id":"6086627ca6d43bae8a "likes": [], 872d16" "\_id": "6088d18e772dbcda4330781e", "author\_id": "60532e8d7ba3514b576ebb23", "content": "comment\_test", "section\_id": "6086627ca6d43bae8a872d16" "create\_at": "2021-04-28T03:07:58.476Z", "update\_at": "2021-04-28T03:07:58.477Z", "author\_name": "testName", "user\_avatat": "testAvatar", "root\_comment\_id": "6088d18e772dbcda43 30781e", "\_\_v": 0 DELETE comment/ Modera {"\_id": "6088da2e772dbcda433078 PASSED tor delete "success": true, "comment": "Successfully delete the comment"

| comment/ | GET | PASSED | Modera        |   | {  |
|----------|-----|--------|---------------|---|--|
| all      |     | TAGGED | tor           |   | "success": true,   |
|          |     |        |               |   | "comments": [  |
|          |     |        |               |   | {  |
|          |     |        |               |   | "leaf_comments": [],   |
|          |     |        |               |   | "likes": [],   |
|          |     |        |               |   | "_id": "6088d18e772dbcda4330781e",   |
|          |     |        |               |   | "author_id": "60532e8d7ba3514b576ebb   |
|          |     |        |               |   | 23",   |
|          |     |        |               |   | "content": "comment_test",   |
|          |     |        |               |   | "section_id": "6086627ca6d43bae8a872d   16",   |
|          |     |        |               |   | "create_at": "2021-04-28T03:07:58.476Z",   |
|          |     |        |               |   | "update_at": "2021-04-28T03:07:58.477  |
|          |     |        |               |   | Z",  |
|          |     |        |               |   | "author_name": "testName",   |
|          |     |        |               |   | "user_avatat": "testAvatar",   |
|          |     |        |               |   | "root_comment_id": "6088d18e772dbcda 4330781e",  |
|          |     |        |               |   | "v": 0   |
|          |     |        |               |   | }  |
|          |     |        |               |   |  |
|          |     |        |               |   |  |
|          |     |        |               |   | ]  |
| comment/ | GET | PASSED | Modera        | {"_id": "6088d18e772dbcda433078         | ]<br>}<br>{  |
| comment/ | GET | PASSED | Modera<br>tor | {"_id": "6088d18e772dbcda433078<br>1e"} | ] {    "success": true,  |
| comment/ | GET | PASSED |               |   |  |
| comment/ | GET | PASSED |               |   | "success": true,   |
| comment/ | GET | PASSED |               |   | "success": <b>true</b> , "comment": {  |
| comment/ | GET | PASSED |               |   | "success": true, "comment": {  "leaf_comments": [],  |
| comment/ | GET | PASSED |               |   | "success": <b>true</b> ,  "comment": {  "leaf_comments": [],  "likes": [],   |
| comment/ | GET | PASSED |               |   | "success": <b>true</b> ,  "comment": {  "leaf_comments": [],  "likes": [],  "_id": "6088d18e772dbcda4330781e",   |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {      "leaf_comments": [],      "likes": [],      "_id": "6088d18e772dbcda4330781e",      "author_id": "60532e8d7ba3514b576ebb23",   |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {      "leaf_comments": [],      "likes": [],      "_id": "6088d18e772dbcda4330781e",      "author_id": "60532e8d7ba3514b576ebb23",      "content": "comment_test",      "section_id": "6086627ca6d43bae8a872d16"  ,  |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {      "leaf_comments": [],      "likes": [],      "_id": "6088d18e772dbcda4330781e",      "author_id": "60532e8d7ba3514b576ebb23",      "content": "comment_test",      "section_id": "6086627ca6d43bae8a872d16"  ,  "create_at": "2021-04-28T03:07:58.476Z",  |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {  "leaf_comments": [],  "likes": [],  "_id": "6088d18e772dbcda4330781e",  "author_id": "60532e8d7ba3514b576ebb23",  "content": "comment_test",  "section_id": "6086627ca6d43bae8a872d16"  ,  "create_at": "2021-04-28T03:07:58.476Z",  "update_at": "2021-04-28T03:07:58.477Z",  |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {  "leaf_comments": [],  "likes": [],  "_id": "6088d18e772dbcda4330781e",  "author_id": "60532e8d7ba3514b576ebb23",  "content": "comment_test",  "section_id": "6086627ca6d43bae8a872d16" ,  "create_at": "2021-04-28T03:07:58.476Z",  "update_at": "2021-04-28T03:07:58.477Z",  "author_name": "testName",   |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {      "leaf_comments": [],      "likes": [],      "_id": "6088d18e772dbcda4330781e",      "author_id": "60532e8d7ba3514b576ebb23",      "content": "comment_test",      "section_id": "6086627ca6d43bae8a872d16"  ,  "create_at": "2021-04-28T03:07:58.476Z",      "update_at": "2021-04-28T03:07:58.477Z",      "author_name": "testName",      "user_avatat": "testAvatar",  |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {  "leaf_comments": [],  "likes": [],  "_id": "6088d18e772dbcda4330781e",  "author_id": "60532e8d7ba3514b576ebb23",  "content": "comment_test",  "section_id": "6086627ca6d43bae8a872d16" ,  "create_at": "2021-04-28T03:07:58.476Z",  "update_at": "2021-04-28T03:07:58.477Z",  "author_name": "testName",   |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {  "leaf_comments": [],  "likes": [],  "_id": "6088d18e772dbcda4330781e",  "author_id": "60532e8d7ba3514b576ebb23",  "content": "comment_test",  "section_id": "6086627ca6d43bae8a872d16"  ,  "create_at": "2021-04-28T03:07:58.476Z",  "update_at": "2021-04-28T03:07:58.477Z",  "author_name": "testName",  "user_avatat": "testAvatar",  "root_comment_id": "6088d18e772dbcda43  |
| comment/ | GET | PASSED |               |   | "success": true,  "comment": {      "leaf_comments": [],      "likes": [],      "_id": "6088d18e772dbcda4330781e",      "author_id": "60532e8d7ba3514b576ebb23",      "content": "comment_test",      "section_id": "6086627ca6d43bae8a872d16"  ,      "create_at": "2021-04-28T03:07:58.476Z",      "update_at": "2021-04-28T03:07:58.477Z",      "author_name": "testName",      "user_avatat": "testAvatar",      "root_comment_id": "6088d18e772dbcda43 30781e", |

| comment /patch | PATCH | PASSED | Modera | {"_id": "6088d18e772dbcda433078 1e", "content": "change content la"} | {     "success": true,     "comment": {         "leaf_comments": [],         "likes": [],         "_id": "6088d18e772dbcda4330781e",         "author_id": "60532e8d7ba3514b576ebb23",         "content": "change content la",         "section_id": "6086627ca6d43bae8a872d16",         "create_at": "2021-04-28T03:07:58.476Z",         "update_at": "2021-04-28T04:04:36.073Z",         "author_name": "testName",         "user_avatat": "testAvatar",         "root_comment_id": "6088d18e772dbcda43 30781e",         "v": 0 } |  |
|----------------|-------|--------|--------|--|--|--|
|                |       |        |        |  | }  |  |

| Section R          |         | Decult | Delc          | Dave   | um atara   | Nete |
|--------------------|---------|--------|---------------|--|--|------|
| Route URL          | Request | Result | Role          | Para   | nmeters  | Note |
|                    | method  |        |               | input  | output   |      |
| section/add        | POST    | PASSED | Moderat       | {"subject_code": "SUBJECT", "type":"tags", "owner": "605337ea55631157f25ad def", "name":"section_testing"} | {     "success": true,     "section": {         "tools": [],         "articles": [],         "comments": [],         "j,         "subject_code": "SUBJECT",         "type": "tags",         "owner": "605337ea55631157f25addef",         "name": "section_testing",         "v": 0     } } |      |
| section/<br>delete | DELETE  | PASSED | Moderat<br>or | {"_id": "6088e63ae11e6eefbfe4e04<br>4",<br>"subject_code": "SUBJECT"}                                      | {     "success": true,     "result": "Successfully delete the section"   |      |

| <b>Tool Rout</b> | е       |        |               |                                      |  |      |
|------------------|---------|--------|---------------|--------------------------------------|--|------|
| Route URL        | Request | Result | Role          | Para                                 | ameters                                | Note |
|                  | method  |        |               | input                                | output                                 |      |
| tool/add         | POST    | PASSED | Moderat<br>or | {"name":"tool_test"}                 | {                                      |      |
|                  |         |        | OI .          |                                      | "success": <b>true</b> ,               |      |
|                  |         |        |               |                                      | "tool": {                              |      |
|                  |         |        |               |                                      | "articles": [],                        |      |
|                  |         |        |               |                                      | "_id": "6088eb86e11e6eefbfe4e04<br>5", |      |
|                  |         |        |               |                                      | "name": "tool_test",                   |      |
|                  |         |        |               |                                      | "v": 0                                 |      |
|                  |         |        |               |                                      | }                                      |      |
|                  |         |        |               |                                      | }                                      |      |
| tool/delete      | DELETE  | PASSED | Moderat<br>or | {                                    | {                                      |      |
|                  |         |        | OI .          | "_id":"6088ebabe11e6eefbfe4e04<br>6" | "success": <b>true</b> ,               |      |
|                  |         |        |               | }                                    | "tool": "Successfully delete the tool" |      |
|                  |         |        |               | 1                                    | }                                      |      |
| tool/all         | GET     | PASSED | Moderat or    |                                      | {                                      |      |
|                  |         |        |               |                                      | "success": <b>true</b> ,               |      |
|                  |         |        |               |                                      | "tool": [                              |      |
|                  |         |        |               |                                      | {                                      |      |
|                  |         |        |               |                                      | "articles": [],                        |      |
|                  |         |        |               |                                      | "_id": "6088eb86e11e6eefbfe4e<br>045", |      |
|                  |         |        |               |                                      | "name": "tool_test",                   |      |
|                  |         |        |               |                                      | "v": 0                                 |      |
|                  |         |        |               |                                      | }                                      |      |
|                  |         |        |               |                                      | ]                                      |      |
|                  |         |        |               |                                      | }                                      |      |
| tool/search      | GET     | PASSED | Moderat<br>or | {"name": "tool_test"}                | {                                      |      |
|                  |         |        |               |                                      | "success": <b>true</b> ,               |      |
|                  |         |        |               |                                      | "tool": [                              |      |
|                  |         |        |               |                                      | {   articles": [],                     |      |
|                  |         |        |               |                                      | "_id": "6088eb86e11e6eefbfe4e          |      |
|                  |         |        |               |                                      | 045",                                  |      |
|                  |         |        |               |                                      | "name": "tool_test",                   |      |
|                  |         |        |               |                                      | "v": 0                                 |      |
|                  |         |        |               |                                      | }                                      |      |
|                  |         |        |               |                                      | ]                                      |      |
|                  |         |        |               |                                      | }                                      |      |

| tool/:name | GET   | PASSED | Moderat<br>or | Path Variables                     | {     "success": true,                 |
|------------|-------|--------|---------------|------------------------------------|--|
|            |       |        |               | name tool_test                     | "tool": [                              |
|            |       |        |               | name tool_test                     | {                                      |
|            |       |        |               |                                    | "articles": [],                        |
|            |       |        |               |                                    | "_id": "6088eb86e11e6eefbfe4e          |
|            |       |        |               |                                    | 045",                                  |
|            |       |        |               |                                    | "name": "tool_test",                   |
|            |       |        |               |                                    | "v": 0                                 |
|            |       |        |               |                                    | }                                      |
|            |       |        |               |                                    | ]                                      |
|            |       |        |               |                                    | }                                      |
| tool/      | GET   | PASSED | Moderat<br>or | {"_id": "6088eb86e11e6eefb<br>45"} |  |
|            |       |        |               |                                    | "success": true,                       |
|            |       |        |               |                                    | "tool": {                              |
|            |       |        |               |                                    | "articles": [],                        |
|            |       |        |               |                                    | "_id": "6088eb86e11e6eefbfe4e04 5",    |
|            |       |        |               |                                    | "name": "tool_test",                   |
|            |       |        |               |                                    | "v": 0                                 |
|            |       |        |               |                                    | }                                      |
|            |       |        |               |                                    | }                                      |
| tool/patch | PATCH | PASSED | Moderat<br>or | {"_id": "6088eb86e11e6eefb         | fe4e0 {                                |
|            |       |        | Oi            | 45", "name":"tool_test_change_n    | "success": true,                       |
|            |       |        |               | name . tooi_test_change_n          | "tool": {                              |
|            |       |        |               |                                    | "articles": [],                        |
|            |       |        |               |                                    | "_id": "6088eb86e11e6eefbfe4e04<br>5", |
|            |       |        |               |                                    | "name": "tool_test_change_name",       |
|            |       |        |               |                                    | name: tool_test_change_name; "v": 0    |
|            |       |        |               |                                    |  |
|            |       |        |               |                                    | }                                      |
|            |       |        |               |                                    | }                                      |

| Subject R | Subject Route    |  |  |       |           |    |  |  |  |
|-----------|------------------|--|--|-------|-----------|----|--|--|--|
| Route URL | Neque Nesult     |  |  |       | Parameter |    |  |  |  |
|           | st<br>metho<br>d |  |  | input | output    | te |  |  |  |

| subject/add    | POST   | PASSED | Moder<br>ator | {     "sections": [],     "name": "test_subj",     "subject_code": "comp90 Otest",     "description": "test_conte nt"     } | <pre>{   "success": true,   "subject": {     "sections": [],     "_id": "6088f1ffe11e6eefbfe4e047",     "name": "test_subj",     "subject_code": "COMP900TEST",     "description": "test_content",     "created_by": "60532e8d7ba3514b576ebb23",     "v": 0   } }</pre>  |
|----------------|--------|--------|---------------|---|--|
| subject/delete | DELETE | PASSED | Moder<br>ator | {     "_id": "6088f234e11e6eef bfe4e048" }  | {   "success": true }  |
| subject/all    | GET    | PASSED | Moder<br>ator |   | [ {     "sections": [         "608661d7a6d43bae8a872d15",         "6086627ca6d43bae8a872d16",         "6088e5e7e11e6eefbfe4e043",         "6088e63ae11e6eefbfe4e044"     ],     "_id": "605337ea55631157f25addef",     "name": "231451",     "subject_code": "SUBJECT",     "description": "15151",     "created_by": "60532e8d7ba3514b576ebb23",     "v": 4     } } |

| subject/                  | GET | PASSED | Moder<br>ator | {"name": "test_subj"} | {  |
|---------------------------|-----|--------|---------------|-----------------------|--|
| search                    |     |        |               |                       | "success": <b>true</b> ,                     |
|                           |     |        |               |                       | "subjects": [                                |
|                           |     |        |               |                       | {  |
|                           |     |        |               |                       | "sections": [],                              |
|                           |     |        |               |                       | "_id": "6088f1ffe11e6eefbfe4e047",           |
|                           |     |        |               |                       | "name": "test_subj",                         |
|                           |     |        |               |                       | "subject_code": "COMP900TEST",               |
|                           |     |        |               |                       | "description": "test_content",               |
|                           |     |        |               |                       | "created_by": "60532e8d7ba3514b576ebb2       |
|                           |     |        |               |                       | 3",  |
|                           |     |        |               |                       | "v": 0                                       |
|                           |     |        |               |                       | }  |
|                           |     |        |               |                       | 1  |
|                           |     |        |               |                       | }  |
| subject/:<br>subject_code | GET | PASSED | Moder<br>ator | Path Variables        | {  |
|                           |     |        |               | key value             | "success": true,                             |
|                           |     |        |               | subject_code SUBJECT  | "subject": {                                 |
|                           |     |        |               |                       | "sections": [                                |
|                           |     |        |               |                       | {  |
|                           |     |        |               |                       | "tools": [],                                 |
|                           |     |        |               |                       | "articles": [],                              |
|                           |     |        |               |                       | "comments": [                                |
|                           |     |        |               |                       | {  |
|                           |     |        |               |                       | "leaf_comments": [],                         |
|                           |     |        |               |                       | "likes": [],                                 |
|                           |     |        |               |                       | "_id": "6088d18e772dbcda4330781e"            |
|                           |     |        |               |                       | ,  |
|                           |     |        |               |                       | "author_id": "60532e8d7ba3514b57   6ebb23",  |
|                           |     |        |               |                       | "content": "change content la",              |
|                           |     |        |               |                       | "section_id": "6086627ca6d43bae8a            |
|                           |     |        |               |                       | 872d16",                                     |
|                           |     |        |               |                       | "create_at": "2021-04-28T03:07: 58.476Z",    |
|                           |     |        |               |                       | "update_at": "2021-04-28T04:04:<br>36.073Z", |
|                           |     |        |               |                       | "author_name": "testName",                   |
|                           |     |        |               |                       | "user_avatat": "testAvatar",                 |
|                           |     |        |               |                       | "root_comment_id": "6088d18e772d             |
|                           |     |        |               |                       | bcda4330781e",                               |
|                           |     |        |               |                       | "v": 0                                       |
|                           |     |        |               |                       | }  |
|                           |     |        |               |                       | 1,   |
|                           |     |        |               |                       | "_id": "6086627ca6d43bae8a872d16",           |
|                           |     |        |               |                       | "subject_code": "SUBJECT",                   |

|          |     |        |               | "type": "tag",   |
|----------|-----|--------|---------------|--|
| subject/ | GET | PASSED | Moder<br>ator | {     "success": true,     "subject": {         "sections": [],         "_id": "6088f1ffe11e6eefbfe4e047",         "name": "test_subj",         "subject_code": "COMP900TEST",         "description": "test_content",         "created_by": "60532e8d7ba3514b576ebb23",         "v": 0     } } |

| subject/patch | PATCH | PASSED | Moder<br>ator | {                                      | {   |
|---------------|-------|--------|---------------|--|---|
|               |       |        |               | "_id": "6088f1ffe11e6eefbf<br>e4e047", | "success": true,                          |
|               |       |        |               | "name": "new_subject_na                | "subject": {                              |
|               |       |        |               | me",                                   | "sections": [],                           |
|               |       |        |               | "subject_code": "SUBJEC T NEW"         | "_id": "6088f1ffe11e6eefbfe4e047",        |
|               |       |        |               | 1_14_44                                | "name": "new_subject_name",               |
|               |       |        |               | }                                      | "subject_code": "SUBJECT_NEW",            |
|               |       |        |               |  | "description": "test_content",            |
|               |       |        |               |  | "created_by": "60532e8d7ba3514b576ebb23", |
|               |       |        |               |  | "v": 0                                    |
|               |       |        |               |  | }   |
|               |       |        |               |  | }   |

| Article Route   |            |        |             |  |   |   |
|-----------------|------------|--------|-------------|--|---|---|
| Route URL       | Req        | Result | Ro          | Para   | meters  | Note  |
|                 | uest       | le     | input       | output   |   |   |
|                 | meth<br>od |        |             |  |   |   |
| article/publish | POST       | PASSED | mod erat or | {   "title":"TEST_ARTICLE",   "author_id":"60532e8d7ba35 14b576ebb23",   "tools":[],   "tags":"test_tags",   "content":"TEST CONTENT",   "subjects": "SUBJECT" }       | {     "success": true,     "error_info": null,     "article_id": "6088ff73e11e6e     efbfe4e049",     "auth_token":     "eyJhbGciOiJIUzI1NilsInR5cCI 6lkpXVCJ9.eyJ     faWQiOiI2MDUzMmU4ZDdiYT M1MTRiNTc2Z     WJiMjMiLCJfbW9kZXJhdG9ylj p0cnVILCJfYW     RtaW4iOmZhbHNILCJpYXQiOjE 2MTk1MTY1N     zF9.G7o6EpqtuCXHUDfLskq5 6odtyt01774XI_p     ur97PkWE"     } | Article is pending if the publisher is not mod. |
|                 |            |        |             | "title":"TEST_ARTICLE_PEN DING",  "author_id":"607e3dc93142f 800904978b8",  "tools":[],  "tags":"SUBJECT_NEW",  "content":"TEST CONTENT",  "subjects": "SUBJECT_NEW" } | "success": true,  "error_info": null,  "article_id": "6089092fcd68cc f5631df16e"  }   |   |

| article/create | GET | PASSED | mod<br>erat | {   |  |
|----------------|-----|--------|-------------|---|--|
|                |     |        | or          | "success": <b>true</b> ,                      |  |
|                |     |        |             | "is_exist": <b>false</b> ,                    |  |
|                |     |        |             | "tagsForSubjects": [                          |  |
|                |     |        |             | "SUBJECT",                                    |  |
|                |     |        |             | "TEST10001",                                  |  |
|                |     |        |             | "COMP90030",                                  |  |
|                |     |        |             | "COMP90011",                                  |  |
|                |     |        |             | "COMP90015",                                  |  |
|                |     |        |             | "SWEN90016",                                  |  |
|                |     |        |             | "SUBJECT_NEW"                                 |  |
|                |     |        |             | ],  |  |
|                |     |        |             | "auth_token":                                 |  |
|                |     |        |             | "eyJhbGciOiJIUzI1NiIsInR5cCl<br>6lkpXVCJ9.eyJ |  |
|                |     |        |             | faWQiOiI2MDUzMmU4ZDdiYT<br>M1MTRiNTc2Z        |  |
|                |     |        |             | WJiMjMiLCJfbW9kZXJhdG9ylj<br>p0cnVlLCJfYW     |  |
|                |     |        |             | RtaW4iOmZhbHNILCJpYXQiOjE<br>2MTk1MTY1N       |  |
|                |     |        |             | zF9.G7o6EpqtuCXHUDfLskq5<br>6odtyt01774XI_p   |  |
|                |     |        |             | ur97PkWE"                                     |  |
|                |     |        |             | }   |  |

| article/get/:id | GET |        | mod  | Dath | Variables                    | 1   |
|-----------------|-----|--------|------|------|------------------------------|---|
| artiolo/gev.id  | OLI | PASSED | erat |      |                              | success": true,                               |
|                 |     |        | J.   |      | value                        | "returnValuesForArticle": {                   |
|                 |     |        |      | id   | 6088ff73e11e6eefbfe<br>4e049 | "subjects": [                                 |
|                 |     |        |      |      |                              | "SUBJECT"                                     |
|                 |     |        |      |      |                              | ],  |
|                 |     |        |      |      |                              | "tools": [],                                  |
|                 |     |        |      |      |                              | "tags": [                                     |
|                 |     |        |      |      |                              | "SUBJECT"                                     |
|                 |     |        |      |      |                              | ],  |
|                 |     |        |      |      |                              | "is_pending": false,                          |
|                 |     |        |      |      |                              | "likes": [],                                  |
|                 |     |        |      |      |                              | "_id": "6088ff73e11e6eefbf<br>e4e049",        |
|                 |     |        |      |      |                              | "create_at": "2021-04-<br>28T06:23:47.835Z",  |
|                 |     |        |      |      |                              | "title": "TEST_ARTICLE",                      |
|                 |     |        |      |      |                              | "author_id": "60532e8d7ba<br>3514b576ebb23",  |
|                 |     |        |      |      |                              | "content": "TEST<br>CONTENT",                 |
|                 |     |        |      |      |                              | "comment_section": {                          |
|                 |     |        |      |      |                              | "tools": [],                                  |
|                 |     |        |      |      |                              | "articles": [],                               |
|                 |     |        |      |      |                              | "comments": [],                               |
|                 |     |        |      |      |                              | "_id": "6088ff73e11e6ee<br>fbfe4e04a",        |
|                 |     |        |      |      |                              | "name": "Comment",                            |
|                 |     |        |      |      |                              | "type": "Comment",                            |
|                 |     |        |      |      |                              | "owner": "6088ff73e11e<br>6eefbfe4e049",      |
|                 |     |        |      |      |                              | "v": 0  |
|                 |     |        |      |      |                              | },  |
|                 |     |        |      |      |                              | "v": 0  |
|                 |     |        |      |      |                              | },  |
|                 |     |        |      |      |                              | "auth_token":                                 |
|                 |     |        |      |      |                              | "eyJhbGciOiJIUzI1NiIsInR5cCI<br>6lkpXVCJ9.eyJ |
|                 |     |        |      |      |                              | faWQiOil2MDUzMmU4ZDdiYT<br>M1MTRiNTc2Z        |
|                 |     |        |      |      |                              | WJiMjMiLCJfbW9kZXJhdG9ylj<br>p0cnVlLCJfYW     |
|                 |     |        |      |      |                              | RtaW4iOmZhbHNILCJpYXQiOjE<br>2MTk1MTY1N       |
|                 |     |        |      |      |                              | zF9.G7o6EpqtuCXHUDfLskq5<br>6odtyt01774XI_p   |
|                 |     |        |      |      |                              | ur97PkWE"                                     |
|                 |     |        |      |      |                              | }   |

| article/delete/:id | GET | PASSED | mod<br>erat | Path | n Variables                  | {   |
|--------------------|-----|--------|-------------|------|------------------------------|---|
|                    |     |        | or          | k    | value                        | "success": true,                              |
|                    |     |        |             | еу   |                              | "reason": "success",                          |
|                    |     |        |             | id   | 608900bee11e6eefbf<br>e4e04b | "auth_token":                                 |
|                    |     |        |             |      |                              | "eyJhbGciOiJIUzI1NilsInR5cCI<br>6lkpXVCJ9.eyJ |
|                    |     |        |             |      |                              | faWQiOil2MDUzMmU4ZDdiYT<br>M1MTRiNTc2Z        |
|                    |     |        |             |      |                              | WJiMjMiLCJfbW9kZXJhdG9yIj<br>p0cnVILCJfYW     |
|                    |     |        |             |      |                              | RtaW4iOmZhbHNILCJpYXQiOjE<br>2MTk1MTY1N       |
|                    |     |        |             |      |                              | zF9.G7o6EpqtuCXHUDfLskq5<br>6odtyt01774XI_p   |
|                    |     |        |             |      |                              | ur97PkWE"                                     |
|                    |     |        |             |      |                              | }   |

| article/edit/:id | GET |        | mod               | Doth | Variables                    |   |
|------------------|-----|--------|-------------------|------|------------------------------|---|
| article/eut/.lu  | GEI | PASSED | mod<br>erat<br>or | rain | Variables                    | {<br>   |
|                  |     |        | Oi                | key  | value                        | "success": true,                              |
|                  |     |        |                   | id   | 6088ff73e11e6eefbfe<br>4e049 | "tagsForSubjects": [                          |
|                  |     |        |                   |      |                              | "SUBJECT",                                    |
|                  |     |        |                   |      |                              | "WQFRQF",                                     |
|                  |     |        |                   |      |                              | "TEST10001",                                  |
|                  |     |        |                   |      |                              | "12345",                                      |
|                  |     |        |                   |      |                              | "COMP90030",                                  |
|                  |     |        |                   |      |                              | "SDSD",                                       |
|                  |     |        |                   |      |                              | "COMP90011",                                  |
|                  |     |        |                   |      |                              | "COMP90015",                                  |
|                  |     |        |                   |      |                              | "SWEN90016",                                  |
|                  |     |        |                   |      |                              | "00001",                                      |
|                  |     |        |                   |      |                              | "E234567",                                    |
|                  |     |        |                   |      |                              | "SUBJECT_NEW"                                 |
|                  |     |        |                   |      |                              | ],  |
|                  |     |        |                   |      |                              | "tagsForTools": [                             |
|                  |     |        |                   |      |                              | "tool_test_change_name"                       |
|                  |     |        |                   |      |                              | ],  |
|                  |     |        |                   |      |                              | "returnValuesForArticle": {                   |
|                  |     |        |                   |      |                              | "title": "TEST_ARTICLE",                      |
|                  |     |        |                   |      |                              | "content": "TEST<br>CONTENT",                 |
|                  |     |        |                   |      |                              | "id": "6088ff73e11e6eefbfe<br>4e049"          |
|                  |     |        |                   |      |                              | },  |
|                  |     |        |                   |      |                              | "auth_token":                                 |
|                  |     |        |                   |      |                              | "eyJhbGciOiJIUzI1NiIsInR5cCI<br>6lkpXVCJ9.eyJ |
|                  |     |        |                   |      |                              | faWQiOil2MDUzMmU4ZDdiYT<br>M1MTRiNTc2Z        |
|                  |     |        |                   |      |                              | WJiMjMiLCJfbW9kZXJhdG9ylj<br>p0cnVILCJfyW     |
|                  |     |        |                   |      |                              | RtaW4iOmZhbHNILCJpYXQiOjE<br>2MTk1MTY1N       |
|                  |     |        |                   |      |                              | zF9.G7o6EpqtuCXHUDfLskq5<br>6odtyt01774XI_p   |
|                  |     |        |                   |      |                              | ur97PkWE"                                     |
|                  |     |        |                   |      |                              | }   |
|                  |     |        |                   |      |                              |   |

| article/editPendingArticle/:  | GET | PASSED | stud        | Path Variables                |                 | {   |  |
|-------------------------------|-----|--------|-------------|-------------------------------|-----------------|---|--|
| id                            |     |        | ent         | key value                     |                 | "success": <b>true</b> ,                        |  |
|                               |     |        |             | id 6089092fcd                 | 68ccf563        | "returnValuesForArticle": {                     |  |
|                               |     |        |             | 1df16e                        |                 | "title": "TEST_ARTICLE_P<br>ENDING",            |  |
|                               |     |        |             |                               |                 | "content": "TEST<br>CONTENT",                   |  |
|                               |     |        |             |                               |                 | "id": "6089092fcd68ccf563<br>1df16e"            |  |
|                               |     |        |             |                               |                 | },  |  |
|                               |     |        |             |                               |                 | "auth_token":                                   |  |
|                               |     |        |             |                               |                 | "eyJhbGciOiJIUzI1NiIsInR5cCI<br>6lkpXVCJ9.eyJfa |  |
|                               |     |        |             |                               |                 | WQiOil2MDdlM2RjOTMxNDJm<br>ODAwOTA0OTc4         |  |
|                               |     |        |             |                               |                 | YjgiLCJfbW9kZXJhdG9yljpmY<br>WxzZSwiX2FkbW      |  |
|                               |     |        |             |                               |                 | luljpmYWxzZSwiaWF0IjoxNjE5<br>NTkzNDU0fQ.d9_    |  |
|                               |     |        |             |                               |                 | WrSCG4EuF80SbVfrLeicOEKj<br>FFIP4HiCqjS4YMUA"   |  |
|                               |     |        |             |                               |                 | }   |  |
| article/getNamesOfArticles    | GET | PASSED | mod<br>erat | Path Variables                |                 | {   |  |
| /:<br>subject_code_Or_Tool_na |     |        | or          | key                           | value           | "success": <b>true</b> ,                        |  |
| me                            |     |        |             | subject_code_<br>Or_Tool_name | SUBJE<br>CT_NEW | "articles": [                                   |  |
|                               |     |        |             |                               |                 | {   |  |
|                               |     |        |             |                               |                 | "name": "TEST_ARTICL<br>E_new",                 |  |
|                               |     |        |             |                               |                 | "id": "60890394e11e6ee<br>fbfe4e04d"            |  |
|                               |     |        |             |                               |                 | }   |  |
|                               |     |        |             |                               |                 | ],  |  |
|                               |     |        |             |                               |                 | "auth_token":                                   |  |
|                               |     |        |             |                               |                 | "eyJhbGciOiJIUzI1NiIsInR5cCI<br>6lkpXVCJ9.eyJ   |  |
|                               |     |        |             |                               |                 | faWQiOiI2MDUzMmU4ZDdiYT<br>M1MTRiNTc2Z          |  |
|                               |     |        |             |                               |                 | WJiMjMiLCJfbW9kZXJhdG9ylj<br>p0cnVlLCJfYW       |  |
|                               |     |        |             |                               |                 | RtaW4iOmZhbHNILCJpYXQiOjE<br>2MTk1MTY1N         |  |
|                               |     |        |             |                               |                 | zF9.G7o6EpqtuCXHUDfLskq5<br>6odtyt01774XI_p     |  |
|                               |     |        |             |                               |                 | ur97PkWE"                                       |  |
|                               |     |        |             |                               |                 | }   |  |

| article/pendingArticle<br>/reject/:pending_id | GET | PASSED | mod<br>erat | Path   | Variables                                     | {   |
|---|-----|--------|-------------|--------|---|---|
|   |     |        | or          | key    | value   | "success": true,                            |
|   |     |        |             | id     |   | "auth_token":                               |
|   |     |        |             | 1df16e | "eyJhbGciOiJIUzI1NiIsInR5cCI<br>6lkpXVCJ9.eyJ |   |
|   |     |        |             |        |   | faWQiOil2MDUzMmU4ZDdiYT<br>M1MTRiNTc2Z      |
|   |     |        |             |        |   | WJiMjMiLCJfbW9kZXJhdG9ylj<br>p0cnVlLCJfYW   |
|   |     |        |             |        |   | RtaW4iOmZhbHNILCJpYXQiOjE<br>2MTk1MTY1N     |
|   |     |        |             |        |   | zF9.G7o6EpqtuCXHUDfLskq5<br>6odtyt01774XI_p |
|   |     |        |             |        |   | ur97PkWE"                                   |
|   |     |        |             |        |   | }   |

| article/pendingArticle | GET | PASSED  | mod  | Path | Variables                    | {  |
|------------------------|-----|---------|------|------|------------------------------|--|
| /approve/:pending_id   |     | T ASSED | erat |      |                              | "success": true,                                   |
|                        |     |         |      | -    | value                        | "article": {                                       |
|                        |     |         |      | id   | 60890c77cd68ccf563<br>1df16f | "subjects": [                                      |
|                        |     |         |      |      |                              | "SUBJECT_NEW"                                      |
|                        |     |         |      |      |                              | ],   |
|                        |     |         |      |      |                              | "tools": [],                                       |
|                        |     |         |      |      |                              | "tags": [  |
|                        |     |         |      |      |                              | "SUBJECT_NEW"                                      |
|                        |     |         |      |      |                              |  |
|                        |     |         |      |      |                              | ],   |
|                        |     |         |      |      |                              | "is_pending": false,                               |
|                        |     |         |      |      |                              | "likes": [],                                       |
|                        |     |         |      |      |                              | "_id": "60890e49c5953ff7e<br>a5fdb1b",             |
|                        |     |         |      |      |                              | "create_at": "2021-04-<br>28T07:27:05.590Z",       |
|                        |     |         |      |      |                              | "title": "TEST_ARTICLE_P<br>ENDING_v2",            |
|                        |     |         |      |      |                              | "author_id": "607e3dc9314<br>2f800904978b8",       |
|                        |     |         |      |      |                              | "content": "TEST<br>CONTENT",                      |
|                        |     |         |      |      |                              | "comment_section": "6089<br>0e49c5953ff7ea5fdb1c", |
|                        |     |         |      |      |                              | "v": 0   |
|                        |     |         |      |      |                              | },   |
|                        |     |         |      |      |                              | "auth_token":                                      |
|                        |     |         |      |      |                              | "eyJhbGciOiJIUzI1NilsInR5cCI<br>6IkpXVCJ9.eyJ      |
|                        |     |         |      |      |                              | faWQiOiI2MDUzMmU4ZDdiYT<br>M1MTRiNTc2Z             |
|                        |     |         |      |      |                              | WJiMjMiLCJfbW9kZXJhdG9ylj<br>p0cnVILCJfYW          |
|                        |     |         |      |      |                              | RtaW4iOmZhbHNILCJpYXQiOjE<br>2MTk1MTY1N            |
|                        |     |         |      |      |                              | zF9.G7o6EpqtuCXHUDfLskq5<br>6odtyt01774XI_p        |
|                        |     |         |      |      |                              | ur97PkWE"  |
|                        |     |         |      |      |                              | }  |

| article/getPendingArticle/:id | GET | PASSED | mod        | Path Variables                  | {  |
|-------------------------------|-----|--------|------------|---------------------------------|--|
|                               |     |        | erat<br>or | key value                       | "success": true,   |
|                               |     |        |            | id 6089092fcd68ccf563<br>1df16e | "returnValuesForArticle": {  "title": "TEST_ARTICLE_P ENDING", |
|                               |     |        |            |                                 | "date": "2021-04-28T07:05:<br>19.005Z",                        |
|                               |     |        |            |                                 | "content": "TEST<br>CONTENT",                                  |
|                               |     |        |            |                                 | "id": "6089092fcd68ccf563<br>1df16e",                          |
|                               |     |        |            |                                 | "tools": [],   |
|                               |     |        |            |                                 | "tags": [  |
|                               |     |        |            |                                 | "SUBJECT_NEW"  |
|                               |     |        |            |                                 | 1  |
|                               |     |        |            |                                 | },   |
|                               |     |        |            |                                 | "auth_token":  |
|                               |     |        |            |                                 | "eyJhbGciOiJIUzI1NiIsInR5cCI<br>6lkpXVCJ9.eyJ                  |
|                               |     |        |            |                                 | faWQiOil2MDUzMmU4ZDdiYT<br>M1MTRiNTc2Z                         |
|                               |     |        |            |                                 | WJiMjMiLCJfbW9kZXJhdG9yIj<br>p0cnVILCJfYW                      |
|                               |     |        |            |                                 | RtaW4iOmZhbHNILCJpYXQiOjE<br>2MTk1MTY1N                        |
|                               |     |        |            |                                 | zF9.G7o6EpqtuCXHUDfLskq5<br>6odtyt01774XI_p                    |
|                               |     |        |            |                                 | ur97PkWE"  |
|                               |     |        |            |                                 | }  |

| article<br>/getNamesOfPendingArticl | GET | PASSED | mod<br>erat | Path Variables |                 | {   |
|-------------------------------------|-----|--------|-------------|----------------|-----------------|---|
| es/                                 |     |        | or          | key            | value           | "success": true,                              |
| :<br>subject_code_Or_Tool_na        |     |        |             | subject_code_  | SUBJE<br>CT NEW | "articles": [                                 |
| me                                  |     |        |             | Or_Tool_name   | CI_NEVV         | {   |
|                                     |     |        |             |                |                 | "name": "TEST_ARTICL   E_PENDING",            |
|                                     |     |        |             |                |                 | "id": "6089092fcd68ccf5<br>631df16e"          |
|                                     |     |        |             |                |                 | }   |
|                                     |     |        |             |                |                 | ],  |
|                                     |     |        |             |                |                 | "auth_token":                                 |
|                                     |     |        |             |                |                 | "eyJhbGciOiJIUzI1NiIsInR5cCI<br>6lkpXVCJ9.eyJ |
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