**Sample Output**

The main task is writing the controller code. The functionalities can be summarized in table below:

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl no** | **URL** | **HTTP request** | **Input** | **Output (successful)** | **Error Codes to be handled** | **Error scenarios to be handled** | **Notes** |
| 1 | / | GET | Nil | Shows list of above URLs and quick help | 400 | Does any request other than GET | Home page |
| 2 | /user/ | POST | { "token":"f186fe629b",  “name”: “Jill”  } | {"status":200,"errmsg":"","new\_user":10005, "token":"d5b24f6adc" } | 400, 500, 403, 507 | •Database full, cannot create user  • The token is not valid hexadecimal or not that of admin user | Only admin (id 10000) can create users, output shows the new user id created and associated token |
| 3 | /user/ | DELETE | { "token":"f186fe629b", "user\_id":10004 } | {"status":200,"errmsg":""} | 400, 500, 403, 507 | • User ID does not exist or is not active  • Trying to delete admin, i.e. User ID is that of admin (10000)  • The token is not valid hexadecimal or not that of admin user | Only admin (id 10000) can delete existing users |
| 4 | /question/ | POST | {"question":"Who is the king of jungle?","choice1":"Lion","choice2":"Monkey","choice3":"Tiger","choice4":"Panda","key":"1","marks":"1","token":"f186fe629b"} | {"status":200,"errmsg":"",  "ques\_id":10005} | 400, 500, 403, 507 | • Database full, cannot add questions  • The token is not valid hexadecimal or not that of admin user | Only admin (id 10000) can insert into questions table, output shows the new question\_id created |
| 5 | /question/ | DELETE | {  "token":"f186fe629b",  "ques\_id":1002  } | {"status":200,  "errmsg":""} | 400, 500, 403, 507 | • Quiz ID does not exist or is not active  • The token is not valid hexadecimal or not that of admin user | Only admin (id 10000) can delete existing questions |
| 6 | /quiz/ | GET | {  "token":"50f59a4f3a", "quiz\_id":501  } | {  "q1":{"question":"Who is the king of jungle?","choice1":"Lion","choice2":"Monkey","choice3":"Tiger","choice4":"Panda","marks":"1"},  "q2":{"question":"Bangalore is in which country ?","choice1":"USA","choice2":"China","choice3":"India","choice4":"France","marks":"2"},  } | 400, 500 | • The quiz\_id is not valid or token is not hexadecimal or not found in database or inferred user not active | Returns the quiz assigned to user 10001 |
| 7 | /quiz/ | POST | {  "token":"50f59a4f3a",  "quiz\_id":501,  "answerkeys":[1,2] ,  "num\_of\_questions": 5,  "marks": 2  } | {"score":1,"result":[1,0], "status":200,"errmsg":""} | 400, 500 | • quiz\_id, user\_id does not exist or was not associated with the user  • answerkeys size more than number of questions asked in quiz (if lesser then the remaining options are assumed unanswered) | Returns total score, result list indicating individual score for each of the question answered |