### **BINBASH**

Perform GET and POST requests to play excel2016/binbash

### IMPORTANT CALLS

#### API:

- All response are in JSON format having status set to either Success or Failure.
- Example of a response { "status" : "Success" , "result" : "welcome to binbash" }
- If it is a **Success** then **result** has to be displayed to the binbash terminal as output.
- If the status is a Failure, an internal error occurred and its
  has reason parameter which shouldn't be displayed to
  terminal {its for debug}.
- Failure response dont have result value and therefore
  nothing should be shown to user. Only Success calls should be
  shown.

# 1st call: CREATING USER AND START BINBASH

• URL:

user id=username&create=true&name=username

Provide the username to user\_id and also set create=true to
create a user. If create=true is not provided, "status":
"Failure" occurs.

Also provide name as another GET parameter for computing ranklist.

### • Response:

```
{
     "status": "Success",
     "level": 1,
     "question": 1,
     "question info": "",
     "result": "Welcome to #!/bin/bash\r\n\r\nThe w
orld of programming is in a standstill. All open so
urce programing languages have been closed. \r\n\r\
nWell... All except bash. An organization has disma
ntled the entire GNU community and forced them to e
nforce proprietary ownership.\r\n \r\nYour task is
to help free the open source languages using bash s
cripting.\r\nEnter the command 'help' to understand
the rules of the game. \r\nFirst, let's test your
basic bash scripting.\r\nPress any key to begin..."
```

Just print the result to terminal.

#### **NOTE (DONT SKIP)**

1. A call to <a href="http://52.39.25.19:8000/request/?">http://52.39.25.19:8000/request/?</a>

user\_id=username&create=true&name=username must be made when a user logs in, even if the user has been already created. This call is necessary to store log-in time. So make the call with create=true set, and there wont be any user created but you will receive a Success reply with result and that result can be displyed to terminal initially.

# 2nd call: ALL COMMANDS THAT USER TYPES IN THE TERMINAL

- URL:
  - 1. <a href="http://52.39.25.19:8000/request/?">http://52.39.25.19:8000/request/?</a>
    user\_id=username&cmd=whoami
  - 2. <a href="http://52.39.25.19:8000/request/?">http://52.39.25.19:8000/request/?</a>
    user\_id=username&cmd=ls
  - 3. <a href="http://52.39.25.19:8000/request/?">http://52.39.25.19:8000/request/?</a>
    user id=username&cmd=cat question.txt
  - 4. <a href="http://52.39.25.19:8000/request/?">http://52.39.25.19:8000/request/?</a>
    user id=username&cmd=help

- 5. <a href="http://52.39.25.19:8000/request/?">http://52.39.25.19:8000/request/?</a>
  user\_id=username&cmd=scoreboard
- 6. <a href="http://52.39.25.19:8000/request/?">http://52.39.25.19:8000/request/?</a>
  user id=username&cmd=anything else

Must provide user\_id and cmd

- cmd is the command the user gives.
- Response:

```
"status": "Success",
    "result": "file.txt question.txt testcase.txt
answer.sh"
}
```

Print the result to terminal if status is Success

## 6\*. SCOREBOARD CALL HAS SPECIAL RESPONSE

- This call has only user\_id as there is no name in the backend.
   Response has user id and is in sorted order.
- URL:

http://52.39.25.19:8000/request/?
user id=username&cmd=scoreboard

• Response:

```
"status": "Success",
      "result count": 3,
      "result": "NAME\t\tLEVEL\t\tOUESTION\t\tLAST
CORRECT ANSWER TIME\ndoylefermi\t\t3\t\t2\t\t2016-0
9-24 18:59:34+00:00\ntestuser1\t\t1\t\t2\t\t2016-09
-23 21:51:40+00:00\nusername\t\t1\t\t2\t\t2016-09-2
4 18:40:46+00:00\n",
      "result json": {
          "0": ["name", "level no", "question_no",
"last submitted correct answers timestamp"],
          "1": ["doylefermi", 3, 2, "2016-09-24T18:
59:34Z"1,
          "2": ["testuser1", 1, 2, "2016-09-23T21:5
1:40Z"],
          "3": ["username", 1, 2, "2016-09-24T18:40
:46Z"]
      }
```

#### Notes:

- "result count" means "no of players".
- "result\_json" is another json with 0th element denoting contents in each column

# 3rd call: FILE SUBMISSION: A POST REQUEST WITH THE FILE

• URL:

52.39.25.19:8000/request/?user\_id=username&cmd=submit

Call is same as before with command being **submit** and the differnce being a **POST** call has to be made to that url only.

```
POST parameter :
1. file : uploaded file
```

Example of a successful call:

```
curl --form file=@/home/harish/anyname.sh http://
52.39.25.19:8000/request/?user_id=username\&cmd=sub
mit
```

• Response:

```
{
    "status": "Success",
    "result": "Success on test cases\nTestcase
input: 10\n\nYour output: 6\n",
    "md5": "f30039df1312661857e7b33297585010"
```

```
}
```

Display result as output to the terminal.

If testcases has failed, still the status will be Success and you can
display the result which test case failure details.

### 4th call: RANK OF A USER

• URL:

```
http://52.39.25.19:8000/rank/?user_id=doylefermi
```

• Response:

```
{"status": "Success", "result": 1}
```