# CCSIM API

User Manual

This document aims to explain the microservices developed for the interaction between users and CCSIM. By using the API, users can perform all the necessary tasks to execute projects in the tool and retrieve relevant information and logs.

It is mandatory to be registered in CCSIM with a user and API key for the use of API functionalities. Those who would like to be registered in the tool may send an email to slasom@unex.es.

The available endpoints are detailed below:

- **[POST] /upload/{project_name}:** this endpoint uploads the files to perform an execution. The project name is specified in the path.

  **Headers:**

  - 'accept: text/plain'
  - 'api_key: <API key value obtained at register>'
  - 'user_name: <User name at register>'
  - 'Content-Type: multipart/form-data'

  **Path:**

  - project_name: name of the project.

  **Body (form-data):**

  - 'file': the file to be uploaded. There can be multiple files, each specifying its MIME type.

  **Example Request:**

  - /upload/**project1-24**
  - Body:

    ```
    file= app-debug.apk;
    file= app-debug-androidTest.apk;
    file= CCSIM-environment-
    file.json;
    ```
  - Response:

    ```
    {"Upload successful!"
    }
    ```

- **[GET] /launch/{project_name}:** the launch endpoint performs an execution of a project in CCSIM, based on the name of the project, which is specified in the path. **Headers:**
  - accept: text/plain'
  - 'api_key: <API key value obtained at register>'
  - 'user_name: <Username at register>

  **Path:**

  - project_name: name of the project.

  **Example Request:**

  - /launch/**project1-24**
  - Response:

```
{
"Request accepted! CCSIM workflow execution will begin soon."
}
```

- **[GET] /database/projects/{user_name}:** this endpoint retrieves information about all the projects belonging to a concrete user. The username is specified in the path.

  **Headers:**

  - 'accept: application/json'
  - 'api_key: <API key value obtained at register>'
  - 'user_name: <User name at register>'

  **Path:**

  - user_name: name of the username.

  **Example Request:**

  - /database/projects/**tester**
  - Response:

```
[
  {
    "apk_file": "tester/ project1-24/data/app-debug.apk",
    "apk_test_file": "tester/ project1-24/data/app-debug-
  androidTest.apk",
    "creation_date": "21-3-2024-11:3:18:45",
    "json_config": "tester/ project1-24/data/json-config-new.json",
    "project_name": "project1-24",
    "user_name": "tester"
  },
```

```
  ...
]
```

- **[GET] /database/project/{project_name}:** this endpoint retrieves information about a specific project belonging to a user. The project name is specified in the path.

  **Headers:**

  - 'accept: application/json'
  - 'api_key: <API key value obtained at register>'
  - 'user_name: <User name at register>'

  **Path:**

  - project_name: name of the project.

  **Example Request:**

  - /database/project/**project1-24**
  - Response:

```
{
   "apk_file": "tester/ project1-24/data/app-debug.apk",
   "apk_test_file": "tester/ project1-24/data/app-debug-
   androidTest.apk",
   "creation_date": "21-3-2024-11:3:18:45",
   "json_config": "tester/ project1-24/data/json-config-new.json",
   "project_name": "project1-24",
   "user_name": "tester"
}
```

- **[GET] /database/executions/{user_name}:** this endpoint retrieves information about all the project executions belonging to a user. The username is specified in the path.

  **Headers:**

  - 'accept: application/json'
  - 'api_key: <API key value obtained at register>'
  - 'user_name: <User name at register>'

  **Path:**

  - project_name: name of the project.

  **Example Request:**

  - /database/executions/**tester**
  - Response:

```
[
   {
     "associated_cost": 2.67,
     "devices_logs": "tester/project1-24/project1-24-21-2-2024-10-8-48-
   709/logs",
```

```
    "execution_finished": 1,
    "execution_name": "project1-24-21-2-2024-10:8:48:709",
    "execution_state": "FINISHED",
    "ms_end_execution": 2012007,
    "ms_start_execution": 1144,
    "project_name": "project1-24"
  }, ...
]
```


- **[GET] /database/execution/{execution_name}:** this endpoint retrieves all the information associated with a specific project execution belonging to a user. The name of the execution is specified in the path.

  **Headers:**

  - 'accept: application/json'
  - 'api_key: <API key value obtained at register>'
  - 'user_name: <User name at register>'

  **Path:**

  - execution_name: name of the execution.

  **Example Request:**

  - /database/execution/**project1-24-21-2-2024-10:8:48:709**
  - Response:


```
{
  "associated_cost": 2.67,
  "devices_logs": "tester/project1-24/project1-24-21-2-2024-10-8-48-
709/logs",
  "execution_finished": 1,
  "execution_name": "project1-24-21-2-2024-10:8:48:709",
  "execution_state": "FINISHED",
  "ms_end_execution": 2012007,
  "ms_start_execution": 1144,
  "project_name": "project1-24"
}
```


- **[GET] /download/{execution_name}:** this endpoint allows the download of all log files generated by a project execution belonging to a user. This download will be done as a compressed zip file with all the files inside. The name of the execution is specified in the path.

  **Headers:**

  - 'accept: text/plain'
  - 'api_key: <API key value obtained at register>'
  - 'user_name: <User name at register>'
  - 'accept: application/zip'

  **Path:**

  - execution_name: name of the execution.

**Example Request:**

- /download/**project1-24-21-2-2024-10:8:48:709**
- Response:

The zip file is downloaded onto the user's computer. The list of files inside the zip are as follows:

- Local logs of the execution.
- A log file for each mobile device.
- A log file for each UI tests set performed in a mobile device.
- Standard error for the execution.
- Standard output for execution.
- Results of the Quality-of-Service tests performed.