

Integrative Software Engineering - Specifications for RESTful API - sprint 2

Users related API

Description	HTTP Method	URL	Input	Output
Create a new user	POST	/iob/users	New User Boundary	User Boundary
Login valid user and retrieve user details	GET	/iob/users/login/{userDomain}/{userEmail}	---	User Boundary
Update user details	PUT	/iob/users/{userDomain}/{userEmail}	User Boundary	---

Instances API

Description	HTTP Method	URL	Input	Output
Create an instance	POST	/iob/instances/{userDomain}/{userEmail}	Instance Boundary with no instanceId	Instance Boundary
Update an instance	PUT	/iob/instances/{userDomain}/{userEmail}/{instanceDomain}/{instanceId}	Instance Boundary	---
Retrieve instance	GET	/iob/instances/{userDomain}/{userEmail}/{instanceDomain}/{instanceId}	---	Instance Boundary
Get all instances	GET	/iob/instances/{userDomain}/{userEmail}	---	Array of Instance Boundary

Activities API

Description	HTTP Method	URL	Input	Output
Invoke an instance activity	POST	/iob/activities	Activity Boundary with null activityId	Any JSON Object

Note Admin API on the next page...

Admin API

Description	HTTP Method	URL	Input	Output
Delete all users in the domain	DELETE	/iob/admin/users/{userDomain}/{userEmail}	---	---
Delete all instances in the domain	DELETE	/iob/admin/instances/{userDomain}/{userEmail}	---	---
Delete all activities in the domain	DELETE	/iob/admin/activities/{userDomain}/{userEmail}	---	---
Export all users	GET	/iob/admin/users/{userDomain}/{userEmail}	---	Array of User Boundaries
Export all activities	GET	/iob/admin/activities/{userDomain}/{userEmail}	----	Array of Activity Boundaries

Note the Boundary samples on the following pages...

Sample JSON Boundaries

NewUserBoundary sample JSON:

```
{
  "email": "user@demo.com",
  "role": "PLAYER",
  "username": "Demo User",
  "avatar": "J"
}
```

UserBoundary sample JSON:

```
{
  "userId": {
    "domain": "2022a.demo",
    "email": "user@demo.com"
  },
  "role": "PLAYER",
  "username": "Demo User",
  "avatar": "J"
}
```

InstanceBoundary sample JSON

```
{
  "instanceId":{
    "domain":"2022a.demo",
    "id":"352"
  },
  "type":"dummyInstanceType",
  "name":"demo instance",
  "active":true,
  "createdTimestamp":"2021-10-24T19:55:05.248+0000",
  "createdBy":{
    "userId":{
      "domain":"2022a.demo",
      "email":"user2@demo.com"
    }
  },
  "location":{
    "lat":32.115139,
    "lng":34.817804
  },
  "instanceAttributes":{
    "key1":"can be set to any value you wish",
    "key2":"you can also name the attributes any name you like",
    "key3":6.2,
    "key4":false
  }
}
```

ActivityBoundary sample JSON:

```
{
  "activityId":{
    "domain":"2022a.demo",
    "id":"112"
  },
  "type":"demoActivityType",
  "instance":{
    "instanceId":{
      "domain":"2022a.demo",
      "id":"352"
    }
  },
  "createdTimestamp":"2021-10-24T19:57:23.114+0000",
  "invokedBy":{
    "userId":{
      "domain":"2022a.demo",
      "email":"user3@demo.com"
    }
  },
  "activityAttributes":{
    "key1":"can be set to any value you wish",
    "key2":{
      "key2Subkey1":"can be nested json"
    }
  }
}
```