Akvo FLow API

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1.1 Authentication

1. Get TOKEN

Request Method **POST** $\overline{\mathrm{URL}}$ https://akvofoundation.eu.authO.com/oauth/token

```
*Type
Body
           Value
username
           email
                                                           String
password
          your akvo flow password
                                                           String
           "password"
                                                           String
grant_{tvpe}
           "S6Pm0WF4LHONRPRKjepPXZoX1muXm1JS"
client_{id}
                                                           String
           "openid email"
scope
                                                           String
```

2. Response:

```
{
  "access_token": "eyJhbGciOiJkaXI...wzwagZJt8egc5kxGpxQBUw",
 "id_token": "eyJhbGciOiJSUz...fxQ9w4qZ4Z0A",
 "scope": "openid email",
 "expires_in": 86400,
  "token_type": "Bearer"
}
```

 $\mathbf{ID} \ \mathbf{TOKEN} : "eyJhbGciOiJSUz...fxQ9w4qZ4Z0A"$

1.2Request

Request Method \mathbf{GET}

URL https://api-auth0.akvo.org/flow/orgs/*instance*/*endpoint*"

${f Headers}$	Value	*Type
"Content-Type"	"application/json"	String
"Accept"	"application/vnd.akvo.flow.v2+json"	String
"Authorization"	"Bearer $\{\{id_{token}\}\}$ "	String

1. Example

```
curl -s "https://api-authO.akvo.org/flow/orgs/${instance}/${endpoint}" \
    -H "Content-Type: application/json" \
    -H "Accept: application/vnd.akvo.flow.v2+json" \
     -H "Authorization: Bearer ${id_token}"
```

1.3 List Folders

At the first entry point into the dashboard, we started by browsing the folder structure. The URL for accessing the folder structure starts with the root folder

1. Root Folder Endpoint:

```
"https://api.akvo.org/flow/orgs/{{instance}}/folders"
"https://api.akvo.org/flow/orgs/{{instance}}/folders?parentId=0"
```

2. Subfolder Endpoint:

```
"https://api.akvo.org/flow/orgs/{{instance}}/folders?parentId=<folder_id>"
```

3. Folder Endpoint Response:

```
{
    "folders": [
        {
            "id": "813484512",
            "name": "TRAINING - AKVO FLOW API",
            "parentId": "1",
            "createdAt": "2023-01-15T13:27:33.382Z",
            "modifiedAt": "2023-01-15T13:27:51.958Z",
            "surveysUrl": "https://api-authO.akvo.org/flow/orgs/{{instance}}/surveys?foit
            "foldersUrl": "https://api-authO.akvo.org/flow/orgs/{{instance}}/folders?pait
        }
    }
}
```

1.4 List Surveys

1. Surveys Endpoint:

Survey request URL is obtained from the key in the object folder named "surveysUrl" $\,$

"https://api-auth0.akvo.org/flow/orgs/{{instance}}/surveys?folder_id=813484512"

2. Surveys Endpoint Response:

```
{
    "surveys": [
        {
            "id": "806432680",
            "name": "TRAINING SURVEY",
            "folderId": "813484512",
            "createdAt": "2023-01-15T13:27:57.984Z",
            "modifiedAt": "2023-01-15T13:28:16.149Z",
            "surveyUrl": "https://api-authO.akvo.org/flow/orgs/{{instance}}/surveys/8064
     }
    ]
}
```

1.5 Survey and Forms Definition

1. Survey Endpoint:

Survey request URL is obtained from the key in the object folder named "surveys Url" $\,$

"https://api-auth0.akvo.org/flow/orgs/{{instance}}/surveys/806432680a"

2. Survey Endpoint Response:

survey.json

1.5.1 Surveys Element

Element	Type
id	Number
name	String
${\it registration} Form Id$	String
$\operatorname{created} \operatorname{At}$	String
$\operatorname{modifiedAt}$	String
forms	Array
dataPointsUrl	String

id: The id of this survey name: The name of the survey registrationFormId: The id of the registration form createdAt: the date of creation modifiedAt: the modification date of survey forms: An array of elements containing form definitions for this survey dataPointsUrl: The URL used to retrieve a list of datapoints associated with this survey

1.5.2 Form Element

id Number surveyId Number name String createdAt String modifiedAt String questionGroups Array formInstancesUrl String

question groups: An array in which each object corresponds to a group of questions as grouped by the survey designer form InstanceUrl: The URL used to retrieve form responses associated with this form

1.5.3 Question Groups Element

id Number
name String
isRepeatable Boolean
createdAt String
modifiedAt String
questions Array

questions: An array of objects representing questions contained in this question group isRepeatable: This indicates whether a question group has been defined as repeatable

1.5.4 Question Elements

id Number String name order Number variableName String createdAtString modifiedAt String $\mathrm{FREE}_{\mathrm{TEXT}}$ type NUMBER OPTION РНОТО GEO DATE BARCODE **GEOSHAPE SIGNATURE CADDISFLY**

Variable Name: The user defined identifier for a question Order: The order of question in a group Type: The question type, it can be used to define the form instances answer

1.6 Form Instances

1. Form Instances Endpoint:

Form Instance is the responses of Form Submission, it doesn't have any detail information about the form itself so it has to be mapped with form definition that served in Survey Endpoint Form Instance Endpoint URL is obtained from the key in the object folder named "formInstancesurl"

"https://api-auth0.akvo.org/flow/orgs/{{instance}}/form_instances?survey_id=80643

2. Form Instances Endpoint Response:

form instances.json

2 Code Explanation

2.1 Auth.java

FILE PATH: AkvoFlowExample/src/main/java/Auth.java

2.2 RequestBuilder.java

 $FILE\ PATH:\ AkvoFlowExample/src/main/java/RequestBuilder.java$

2.3 Main.java

FILE PATH: AkvoFlowExample/src/main/java/Main.java

3 Quiz