# Akvo FLow API

# Deden Bangkit

## January 19, 2023

# Contents

1	Diff	ferences and Similarities: Registration and Monioring	
	Dat	$oldsymbol{a}$	1
	1.1	Similarity	1
	1.2	One to Many	1
<b>2</b>	Data Transformation		
	2.1	Basic Transformation	2
	2.2	Example	2
			2
		2.2.2 Recursive Download of All the Pagination Links	2
	2.3	Case Study	3
1	$\mathbf{D}$	ifferences and Similarities: Registration and Me	o
	ni	oring Data	

# 1.1 Similarity

Both Registration and Monitoring has similar json structure

because they are obtained from the same endpoint, even though with different parameters, of course there is no different between the object structure the only different object is in the responses

## 1.2 One to Many

the link between a registration form instances and monitoring form instances is the datapoint id

## 2 Data Transformation

#### 2.1 Basic Transformation

DATA RESPONSE is in the **form instance** API endpoint FORM DEFINITION is in the **surveys** API endpoint

the response structure of the form instances doesn't provide enough information to know the question shape so to get clear information about this response at least a simple data transformation is required

## 2.2 Example

Generating CSV FILE with FORM DEFINITION as Headers and DATA RESPONSE as row values

#### 2.2.1 Download the latest Zip File

as ususall, import the code from today's folder

#### 2.2.2 Recursive Download of All the Pagination Links

End the request once the formInstances length is empty

```
{
    "formInstances": []
}
```

as we explained earlier, that form instances endpoints have limitation on the amount of data retrieved you can imagine if we provide thousands of data at once, the server will respond more slowly to your request

## 2.3 Case Study

We want to merge the cascade questions in the registration into our data monitoring form. after that we want to do aggregation based on the region stated in the cascade question

As stated by Mr. Innousa yesterday, MAEP wants to pivot between the registration and the monitoring form from this explanation

we conclude that this transformation is not something that can be quickly written in the Java programming language

but we can show how to do this in other programming languages