

Back to our Example Data



The example data



	A	B	C	D	E
1	t	ax	ay	az	scr
2	0	0.3931848	-0.1593144	-0.4178079	0
3	0.01	0.3957354	-0.15696	-0.4242825	0
4	0.04	0.4138839	-0.1547037	-0.429678	0
5	0.05	0.4415481	-0.1512702	-0.4325229	0
6	0.06	0.4741173	-0.1488177	-0.434583	0
7	0.08	0.5021739	-0.1521531	-0.4285008	0
8	0.1	0.5247369	-0.1669662	-0.420849	0
9	0.11	0.5421987	-0.1813869	-0.4160421	0
10	0.14	0.5506353	-0.1947285	-0.4094694	0
11	0.15	0.5538726	-0.203067	-0.4057416	0
12	0.16	0.5534802	-0.2035575	-0.4056435	0
13	0.17	0.5527935	-0.1961019	-0.4098618	0
14	0.2	0.558189	-0.1908045	-0.4121181	0
15	0.21	0.5764356	-0.1865862	-0.4162383	0
16	0.22	0.589581	-0.18639	-0.4258521	0
17	0.25	0.6049827	-0.1941399	-0.4243806	0
18	0.26	0.619992	-0.206991	-0.4192794	0
19	0.27	0.6320583	-0.2191554	-0.4092732	0
20	0.3	0.6392196	-0.2279844	-0.3975993	0
21	0.31	0.6465771	-0.2317122	-0.3908304	0
22	0.32	0.6583491	-0.2291616	-0.3950487	0
23	0.34	0.6725736	-0.2220984	-0.4050549	0

What we know now about all data objects in the collaboration



Meaning of the variables

	A	B	C	D	E
1	<u>t</u>	<u>ax</u>	<u>ay</u>	<u>az</u>	<u>scr</u>
2	0	0.3931848	-0.1593144	-0.4178079	0
3	0.01	0.3957354	-0.15696	-0.4242825	0
4	0.04	0.4138839	-0.1547037	-0.429678	0
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22	0.32	0.6583491	-0.2291616	-0.3950487	0
23	0.34	0.6725736	-0.2220984	-0.4050549	0

What we know now about all data objects in the collaboration



Meaning of the variables

Who recorded the data
and when it was
recorded

```
"date": "2022-02-28",  
"creator": [  
  {  
    "creatorName": "Bruce Wayne",  
    "creatorAffiliation": "Institute for  
      Vigilance and  
      Nightly Motion -  
      Justice League"  
  },  
  {  
    "creatorName": "Selina Kyle",  
    "creatorAffiliation": "Institute for  
      Vigilance and  
      Nightly Motion -  
      Justice League"  
  }  
]
```

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"date": "2022-02-28",
"creator": [
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    "creatorName": "Bruce Wayne",
    "creatorAffiliation": "Institute for
      Vigilance and
      Nightly Motion -
      Justice League"
  },
  {
    "creatorName": "Selina Kyle",
    "creatorAffiliation": "Institute for
      Vigilance and
      Nightly Motion -
      Justice League"
  }
]
```

How the data was
recorded

```
"experimentalParameters": {
  "testRide": {
    "rideName": "Flight of the Bat",
    "location": "Gotham City, New Jersey",
    "rideType": "roller coaster"
  },
  "testPerson": {
    "sex": "male",
    "height": 180
  },
  "recording": {
    "testDevice": "iPhone X",
    "testDeviceFixture": "left upper arm",
    "testApp": "Physics Toolbox Suite by
      Vieyra Software"
  }
}
```

Find information



	A	B	C	D	E
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5	0.05	0.4415481	-0.1512702	-0.4325229	0
6	0.06	0.4741173	-0.1488177	-0.434583	0
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10	0.14	0.5506353	-0.1947285	-0.4094694	0
11	0.15	0.5538726	-0.203067	-0.4057416	0
12	0.16	0.5534802	-0.2035575	-0.4056435	0
13	0.17	0.5527935	-0.1961019	-0.4098618	0
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Find information – Machine readability - Interoperability



trainingObject.csv		
1	t	ax
2	0	0.3931848
3	0.01	0.3957354
4	0.04	0.4138839
5	0.05	0.4415481
6	0.06	0.4741173
7	0.08	0.5021739
8	0.1	0.5247369
9	0.11	0.5421987
10	0.14	0.5506353
11	0.15	0.5538726
12	0.16	0.5534802
13	0.17	0.5527935
14	0.2	0.558189
15	0.21	0.5764356
16	0.22	0.589581
17	0.25	0.6049827
18	0.26	0.619992
19	0.27	0.6320583
20	0.3	0.6392196
21	0.31	0.6465771
22	0.32	0.6583491
23	0.34	0.6725736

```
{
  "fileName": "trainingObject.csv",
  "abstract": "The data describes the biomechanical acceleration and screams data",
  "format": "text/csv",
  "date": "2022-02-28",
  "creator": [
    {
      "creatorName": "Bruce Wayne",
      "creatorAffiliation": "Institute for Vigilance and Nightly Motion - Justice"
    },
    {
      "creatorName": "Selina Kyle",
      "creatorAffiliation": "Institute for Vigilance and Nightly Motion - Justice"
    }
  ],
  "experimentalParameters": {
    "testRide": {
      "rideName": "Flight of the Bat",
      "location": "Gotham City, New Jersey",
      "rideType": "roller coaster"
    },
    "testPerson": {
      "sex": "male",
      "height": 180
    },
    "recording": {
      "rideName": "Flight of the Bat",
      "location": "Gotham City, New Jersey",
      "rideType": "roller coaster"
    }
  }
}
```

Enforcing metadata records with JSON schema



```
1 {  
2   "title": "Sample JSON schema title",  
3   "description": "Sample description. Schema validates a JSON object entry for the DC shared universe repository.",  
4   "type": "object",  
5   "required": [  
6     "fileName",  
7     "abstract",  
8     "format",  
9     "creator",  
10    "date",  
11    "experimentalConditions",  
12    "columns"  
13  ],  
14  "properties": {  
15    "fileName": {  
16      "description": "Name of the described data file or set.",  
17      "type": "string",  
18      "minLength": 1  
19    },  
20    "abstract": {  
21      "description": "A free text abstract of the experimental setup.",  
22      "type": "string",  
23      "minLength": 24  
24    },  
25    "format": {  
26      "description": "The Internet Media Type of the resource, MIME Type.",  
27      "type": "string",  
28      "enum": [  
29        "text/csv",  
30        "video/mp4",  
31        "text/markdown",  
32        "image/png",  
33        "other"  
34      ]  
29  }  
30  }  
31  }
```



Sample JSON schema title

Sample description. Schema validates a JSON object entry for the DC shared universe repository.

fileName*

Name of the described data file or set.

abstract*

A free text abstract of the experimental setup.

format*

The Internet Media Type of the resource, MIME Type.

creator*

An array of people (1-n) primarily responsible for making the resource.

creatorName

The name of the creator, a person.

creatorAffiliation

The name of the institute the creator is working for.

Tools to help you enforce your metadata



DirSchema


DirSchema is a directory structure and metadata linter based on JSON Schema



Metador

Metador is a “metadata-aware mailbox” – it helps you to create and share structured metadata alongside your data

But what about other peoples data?



The image shows a purple circle containing a code editor on the left and a data table on the right. The code editor displays a JSON schema for a file named 'Sample JSON schema title'. The table displays a dataset with columns labeled A through E, and rows numbered 1 through 23. The table data is as follows:

	A	B	C	D	E
1	0	0.3931848	-0.1593144	-0.4178079	0
2	0.01	0.3957354	-0.15696	-0.4242825	0
3	0.04	0.4138839	-0.1547037	-0.429678	0
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9	0.14	0.5506353	-0.1947285	-0.4094694	0
10	0.15	0.5538726	-0.203067	-0.4057416	0
11	0.16	0.5534802	-0.2035575	-0.4056435	0
12	0.17	0.5527935	-0.1961019	-0.4098618	0
13	0.2	0.558189	-0.1908045	-0.4121181	0
14	0.21	0.5764356	-0.1865862	-0.4162383	0
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19	0.3	0.6392196	-0.2279844	-0.3975993	0
20	0.31	0.6465771	-0.2317122	-0.3908304	0
21	0.32	0.6583491	-0.2291616	-0.3950487	0
22	0.34	0.6725736	-0.2220984	-0.4050549	0
23					

data in your collaboration

But what about other peoples data?



```
1 {
2   "title": "Sample JSON schema title",
3   "description": "Sample description. Schema validates a JSON object ent",
4   "type": "object",
5   "required": [
6     "filename",
7     "abstract",
8     "format",
9     "creator",
10    "date",
11    "experimental",
12    "columns",
13  ],
14  "properties": {
15    "filename": {
16      "type": "str",
17      "minLength": 7,
18    },
19    "abstract": {
20      "type": "str",
21      "minLength": 8,
22    },
23    "format": {
24      "type": "str",
25      "minLength": 10,
26    },
27    "creator": {
28      "type": "str",
29      "minLength": 14,
30    },
31    "date": {
32      "type": "str",
33      "minLength": 10,
34    },
35    "experimental": {
36      "type": "str",
37      "minLength": 10,
38    },
39    "columns": {
40      "type": "str",
41      "minLength": 10,
42    },
43  },
44}
```

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data in your collaboration

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data from another group

But what about other peoples data?



data in your collaboration

community-wide
metadata schema

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22	0.34	0.6725736	-0.2220984	-0.4050549	0				

t	A	ax	B	ay	C	az	D	Scr	E
1	0	0.3931848	-0.1593144	-0.4178079	0				
2	0.01	0.3957354	-0.15696	-0.4242825	0				
3	0.04	0.4138839	-0.1547037	-0.429678	0				
4	0.05	0.4415481	-0.1512702	-0.4325229	0				
5	0.06	0.4741173	-0.1488177	-0.434583	0				
6	0.08	0.5021739	-0.1521531	-0.4285008	0				
7	0.1	0.5247369	-0.1669662	-0.420849	0				
8	0.11	0.5421987	-0.1813869	-0.4160421	0				
9	0.14	0.5906353	-0.1947285	-0.4094694	0				
10	0.15	0.5538726	-0.203067	-0.4057416	0				
11	0.16	0.5534802	-0.2035575	-0.4056435	0				
12	0.17	0.5527935	-0.1961019	-0.4098618	0				
13	0.2	0.558189	-0.1908045	-0.4121181	0				
14	0.21	0.5764356	-0.1865862	-0.4162383	0				
15	0.22	0.589581	-0.18639	-0.4258521	0				
16	0.25	0.6049827	-0.1941399	-0.4243806	0				
17	0.26	0.619992	-0.206991	-0.4192794	0				
18	0.27	0.6320583	-0.2191554	-0.4092732	0				
19	0.3	0.6392196	-0.2279844	-0.3975993	0				
20	0.31	0.6465771	-0.2317122	-0.3908304	0				
21	0.32	0.6583491	-0.2291616	-0.3950487	0				
22	0.34	0.6725736	-0.2220984	-0.4050549	0				

```
1 {
2   "title": "Sample JSON schema title",
3   "description": "Sample description. Schema validates a JSON object ent",
4   "type": "object",
5   "required": [
6     "filename",
7     "abstract",
8     "format",
9     "creator",
10    "data",
11    "experimentalConditions",
12    "columns"
13  ],
14  "properties": {
15    "filename": {
16      "description": "Name of the described data file or set.",
17      "type": "string",
18      "minLength": 1
19    },
20    "abstract": {
21      "description": "A free text abstract of the experimental setup.",
22      "type": "string",
23      "minLength": 24
24    },
25    "format": {
26      "description": "The Internet Media Type of the resource, MIME Type",
27      "type": "string",
28      "enum": [
29        "text/csv",
30        "video/mp4",
31        "text/markdown",
32        "image/png",
33        "other"
34      ]
35    }
36  }
37 }
```

data from another group