

# Data Fluency : Exploring & Describing the Data

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# Data Types

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1.

## Qualitative Data

Text/Descriptive Data

Observation Notes

Semi-structured interviews

Open-ended survey

Participant diaries or journals

Portfolios of evidence

Case Studies

2.

## Quantitative Data

Numerical Data

- Revenue
- Price
- Quantity
- Age in Months or years
- Experimental results

# File formats of Source Data

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- CSV- Comma Separated Values
- TXT
- XLSX
- HTML
- JSON
- PDF

# File formats of Source Data

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- CSV- Comma Separated Values

```
ORDERNUMBER,QUANTITYORDERED,PRICEEACH,ORDERLINENUMBER,SALES,ORDERDATE,DAYS_SINCE_LASTORDER,STATUS,PRODUCTLINE,MSRP,PRODUCTCODE,CUSTOMERNAME,PHONE,ADDRESS1,CITY,POSTALCODE,COUNTRY,CONTACTLASTNAME,CONTACTFIRSTNAME,DEALSIZE
10107,30,95.70,2,2871,24/02/2018,828,Shipped,Motorcycles,95,S10_1678,Land of Toys Inc.,2125557818,897 Long Airport Avenue,NYC,10022,USA,Yu,Kwai,Small
10121,34,81.35,5,2765.9,07/05/2018,757,Shipped,Motorcycles,95,S10_1678,Reims Collectables,26.47.1555,59 rue de
l'Abbaye,Reims,51100,France,Henriot,Paul,Small
10134,41,94.74,2,3884.34,01/07/2018,703,Shipped,Motorcycles,95,S10_1678,Lyon Souvenirs,+33 1 46 62 7555,27 rue du Colonel Pierre Avia,Paris,75508,France,Cunha,Daniel,Medium
10145,45,83.26,6,3746.7,25/08/2018,649,Shipped,Motorcycles,95,S10_1678,Toys4GrownUps.com,6265557265,78934 Hillside Dr.,Pasadena,90003,USA,Young,Julie,Medium
10168,36,96.66,1,3479.76,28/10/2018,586,Shipped,Motorcycles,95,S10_1678,Technics Stores Inc.,6505556809,9408 Furth
Circle,Burlingame,94217,USA,Hirano,Juri,Medium
10180,29,86.13,9,2497.77,11/11/2018,573,Shipped,Motorcycles,95,S10_1678,Daedalus Designs Imports,20.16.1555,"184, chausse de
Tournai",Lille,59000,France,Rance,Martine,Small
10188,48,114.84,1,5512.32,18/11/2018,567,Shipped,Motorcycles,95,S10_1678,Herkku Gifts,+47 2267 3215,"Drammen 121, PR 744 Sentrum",Bergen,Norway,Oeztan,Veysel,Medium
10211,41,114.84,14,4708.44,15/01/2019,510,Shipped,Motorcycles,95,S10_1678,Auto Canal Petit,(1) 47.55.6555,"25, rue
```

# File formats of Source Data

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- JSON

Example 1:

```
{
  "fruit": "Apple",
  "size": "Large",
  "color": "Red"
}
```

Example 2:

```
{
  "quiz": {
    "sport": {
      "q1": {
        "question": "Which one is correct team name in NBA?",
        "options": [
          "New York Bulls",
          "Los Angeles Kings",
          "Golden State Warriros",
          "Huston Rocket"
        ],
        "answer": "Huston Rocket"
      }
    }
  },
}
```

# File formats of Source Data

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- HTML

```
<!DOCTYPE html>
<html>
<style>
table, th, td {
  border:1px solid black;
}
</style>
<body>

<h2>A basic HTML table</h2>

<table style="width:100%">
  <tr>
    <th>Company</th>
    <th>Contact</th>
    <th>Country</th>
  </tr>
  <tr>
    <td>Alfreds Futterkiste</td>
    <td>Maria Anders</td>
    <td>Germany</td>
  </tr>
  <tr>
```

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico