

# Mobile Application Development

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Produced  
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# File Formats

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# Common Formats

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- Comma Separated Values (CSV)
- Name/Value Pairs
- YAML
- XML
- JSON

# CSV

[http://en.wikipedia.org/wiki/Comma-separated\\_values](http://en.wikipedia.org/wiki/Comma-separated_values)

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A **comma-separated values (CSV)** (also sometimes called *character-separated values*, because the separator character does not have to be a comma) file stores [tabular](#) data (numbers and text) in plain-text form. [Plain text](#) means that the file is a sequence of [characters](#), with no data that has to be interpreted instead, as binary numbers. A CSV file consists of any number of [records](#), separated by line breaks of some kind; each record consists of [fields](#), separated by some other character or string, most commonly a literal comma or [tab](#). Usually, all records have an identical sequence of fields.

```
"mocha", "costa", 2.0, 3.5, 0  
"americano", "costa", 3.0, 4.5, 1  
"cappuccino", "starbucks", 4.0, 1.5, 0
```

coffees.csv

# Name/Value Pairs

[http://en.wikipedia.org/wiki/Attribute-value\\_pair](http://en.wikipedia.org/wiki/Attribute-value_pair)

A **name–value pair**, **key–value pair**, **field–value pair** or **attribute–value pair** is a fundamental [data representation](#) in computing systems and applications. Designers often desire an open-ended [data structure](#) that allows for future extension without modifying existing code or data. In such situations, all or part of the [data model](#) may be expressed as a collection of [tuples](#) *<attribute name, value>*; each element is an attribute–value pair. Depending on the particular application and the implementation chosen by programmers, attribute names may or may not be unique.

```
db.url=jdbc:cloudbees://pacemaker
db.driver=com.mysql.jdbc.Driver
db.user=pacemaker
db.pass=pacemaker
jpa.ddl=create
```

application.conf

```
name="mocha"
shop="costa"
rating=3.5
price=2.0
favourite=0
id=1
```

coffees.conf

# YAML

<http://en.wikipedia.org/wiki/YAML>

**YAML** ([/ˈjæməl/](#), rhymes with *camel*) is a [human-readable data serialization](#) format that takes concepts from programming languages such as [C](#), [Perl](#), and [Python](#), and ideas from [XML](#) and the data format of electronic mail ([RFC 2822](#)). YAML was first proposed by Clark Evans in 2001, [\[1\]](#) who designed it together with Ingy döt Net [\[2\]](#) and Oren Ben-Kiki. [\[2\]](#) It is available for several programming languages. *YAML* is a [recursive acronym](#) for "YAML Ain't [Markup Language](#)". Early in its development, *YAML* was said to mean "[Yet Another](#) Markup Language", [\[3\]](#) but it was then reinterpreted ([backronyming](#) the original acronym) to distinguish its purpose as data-oriented, rather than document markup.

```
Coffee(c1):
```

```
  name      : mocha
  shop      : costa
  price     : 2.0
  rating    : 3.5
  favourite : 0
```

```
Coffee(c2):
```

```
  name      : americano
  shop      : costa
  price     : 3.0
  rating    : 4.5
  favourite : 1
```

```
Coffee(c3):
```

```
  name      : cappucino
  shop      : starbucks
  price     : 4.0
  rating    : 1.5
  favourite : 0
```

data.yaml

# XML

<http://en.wikipedia.org/wiki/XML>

**Extensible Markup Language (XML)** is a [markup language](#) that defines a set of rules for encoding documents in a [format](#) that is both [human-readable](#) and [machine-readable](#). It is defined in the XML 1.0 Specification[3] produced by the [W3C](#), and several other related specifications,[4] all free [open standards](#). [5]

The design goals of XML emphasize simplicity, generality, and usability over the [Internet](#). [6] It is a textual data format with strong support via [Unicode](#) for the languages of the world. Although the design of XML focuses on documents, it is widely used for the representation of arbitrary [data structures](#), for example in [web services](#).

Many [application programming interfaces](#) (APIs) have been developed to aid software developers with processing XML data, and several [schema systems](#) exist to aid in the definition of XML-based languages.

```
<?xml version="1.0"
encoding="UTF-8"?>

<coffee objname="c1">
  <name> mocha </name>
  <shop> costa </shop>
  <price> 2.0 </price>
  <rating> 3.5</rating>
  <favourite> 0 </favourite>
</coffee>

<coffee objname="c1">
  <name> americano </name>
  <shop> costa </shop>
  <price> 3.0 </price>
  <rating> 4.5 </rating>
  <favourite> 1 </favourite>
</coffee>

<coffee objname="c1">
  <name> cappuccino </name>
  <shop> starbucks </shop>
  <price> 4.0 </price>
  <rating> 1.5 </rating>
  <favourite> 0 </favourite>
</coffee>
```

# JSON

<http://en.wikipedia.org/wiki/JSON>

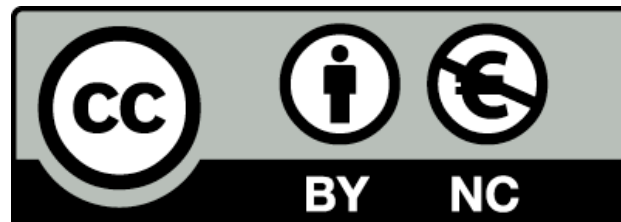
**JSON** ([/ˈdʒeɪsɪn/](#) ***jay-sawn***, [/ˈdʒeɪsən/](#) ***jay-sun***), or **JavaScript Object Notation**, is a text-based [open standard](#) designed for [human-readable](#) data interchange. Derived from the [JavaScript](#) scripting language, JSON is a language for representing simple [data structures](#) and [associative arrays](#), called objects. Despite its relationship to JavaScript, JSON is [language-independent](#), with parsers available for many languages.

The JSON format was originally specified by [Douglas Crockford](#), and is described in [RFC 4627](#). The official [Internet media type](#) for JSON is `application/json`. The JSON filename extension is `.json`.

The JSON format is often used for [serializing](#) and transmitting structured data over a network connection. It is used primarily to transmit data between a server and web application, serving as an alternative to [XML](#).

```
{
  "name": "mocha",
  "shop": "costa",
  "rating": 3.5,
  "price": 2.0,
  "favourite": 0,
  "id": 1
},
{
  "name": "americano",
  "shop": "costa",
  "rating": 4.5,
  "price": 3.0,
  "favourite": 1,
  "id": 2
},
{
  "name": "cappuccino lite",
  "shop": "starbucks",
  "rating": 1.5,
  "price": 4.0,
  "favourite": 1,
  "id": 3
}
```





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