

# Viewing CSV Files I

---

Write an application to **view** CSV files on the console.<sup>1</sup> It's supposed to be a very simple program: just call it from the command line like this

```
C:\>csvviewer.exe persons.csv
```

...and it will display the file's content in a page wise manner like that:<sup>2</sup>

```
Name |Age|City      |
-----+-----+-----+
Peter|42 |New York|
Paul |57 |London  |
Mary |35 |Munich  |
```

N(ext page, P(revious page, F(irst page, L(ast page, eX(it

**Pages** of **data records** are **displayed** as a **table** with a **header line** and **cell borders** like depicted. The corresponding file looks like follows; when assuming a page length of 3 data records it would be displayed as three pages:

```
Name;Age;City
Peter;42;New York
Paul;57;London
Mary;35;Munich
Jaques;66;Paris
Yuri;23;Moscow
Stephanie;47;Stockholm
Nadia;29;Madrid
```

Each **line** contains a **data record**; the first line contains the column names; columns are separated by ";". The data record fields' content is simple: no line breaks, no field separators, no need to process values put in "". The encoding of the CSV text files is UTF-8.

The **page length** should have a reasonable default for your platform's console windows, but it also can be set by passing it to the application like this:

```
C:\>csvviewer.exe persons.csv 40
```

The **page table** should have **fixed width columns** matching the longest value for each column within a page.

---

<sup>1</sup> A console frontend is used for this exercise because that's the least common denominator in terms of frontend for all platforms. Whether you're doing Ruby or C# or Java you should be able to put a console frontend on top of any business logic. Sure a GUI would be more stylish, but it also would distract from the main challenges of the exercise.

<sup>2</sup> Assume all CSV files to contain only lines of a length fitting a display line; no horizontal scrolling needed. Very likely all lines are of different length, though.