

Viewing CSV Files I

Write an application to view CSV files on the console.¹ 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:²

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

```
N(next 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.

¹ 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.

² 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.