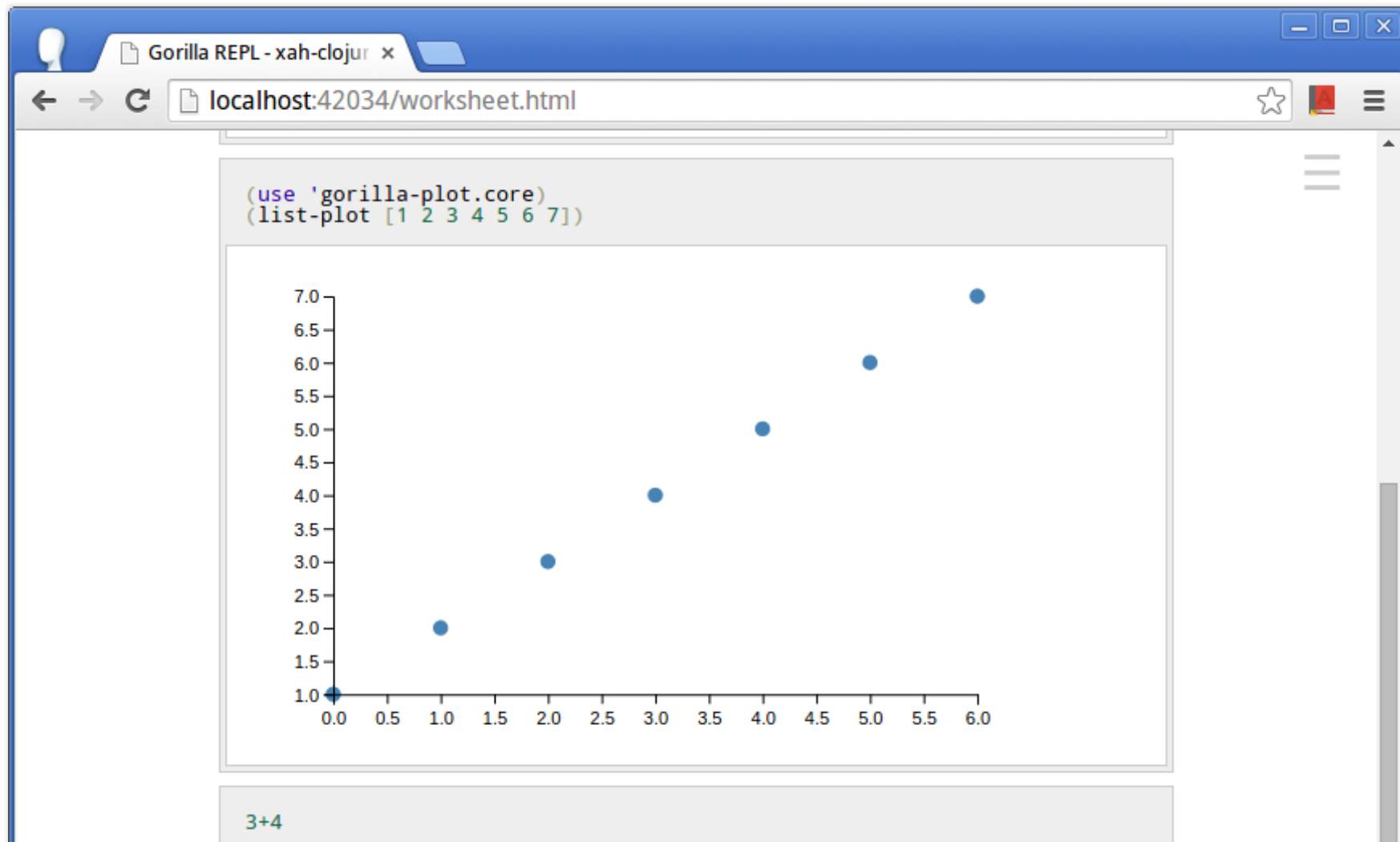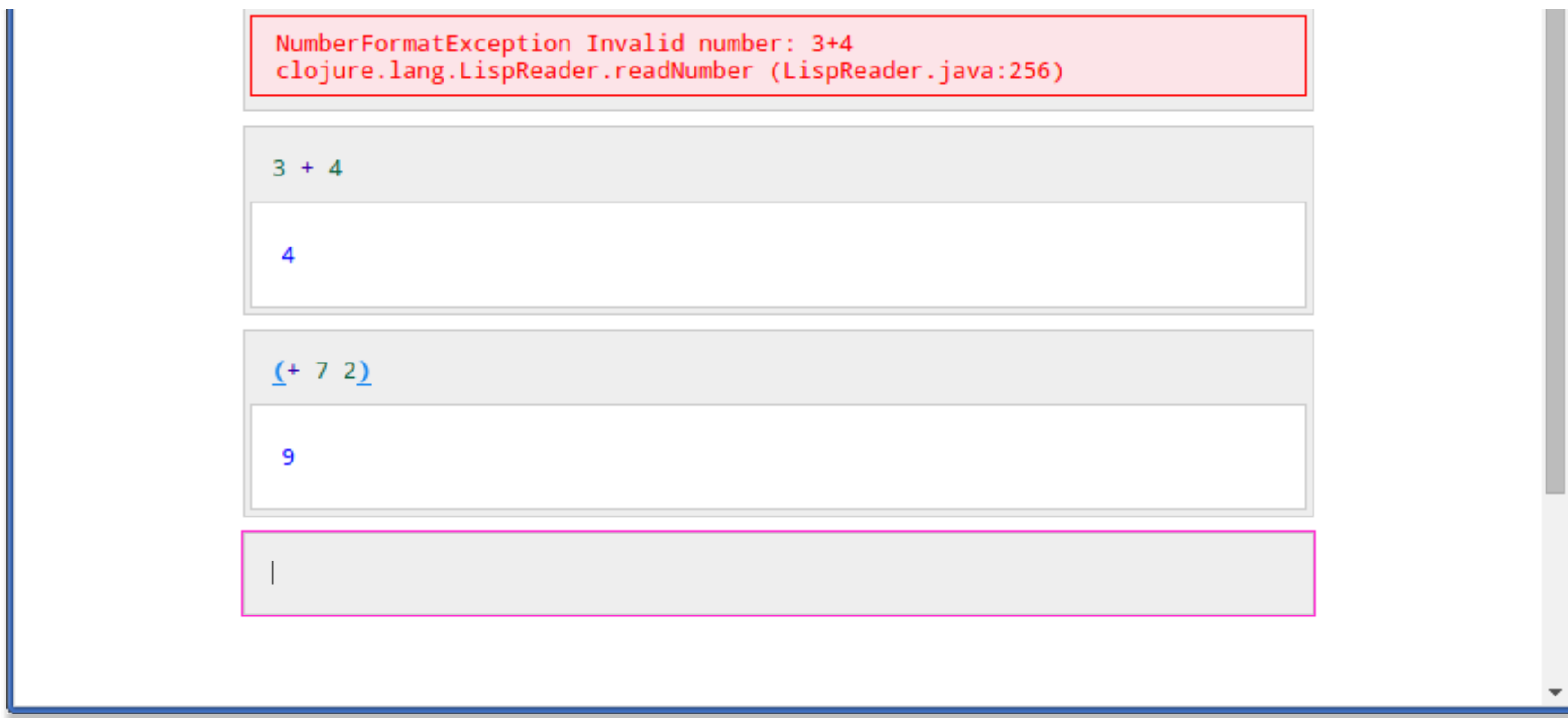# Interactive Clojure Notebook: gorilla-repl

By Xah Lee. Date: 2014-11-08

gorilla-repl plot

"gorilla-repl" is a tool that lets you have notebook-style interface in a web browser, instead of linear command line interface in terminal.

gorilla-repl home page is http://gorilla-repl.org/index.html

install

You'll need to install Leiningen first. Clojure Leiningen Tutorial

Just run the lein install shell script.

Then, run

```bash
# create a new Clojure project dir structure named xyz
lein new app xyz
```

Then, in dir "xyz", you'll find a file `project.clj`. Add this line:

```
:plugins [ [lein-gorilla "0.3.3"] ]
```

start gorilla

Then, run `lein gorilla`. (cd to the directory first if not already)

Then, you'll see this:

```
~/git/xyz $ lein gorilla
Gorilla-REPL: 0.3.3
Started nREPL server on port 38714
Running at http://localhost:42034/worksheet.html .
Ctrl+C to exit.
```

Now, go to your browser `http://localhost:42034/worksheet.html`

You'll see this:

gorilla-repl

now, press 【 Shift + Enter 】 to evaluate the current cell.

now, you can start to type Clojure expressions.

now, try `(+ 3 4)`

Note: gorilla-repl is basically a notebook interface to Clojure (similar to Mathematica). So, everything you type should still mostly be valid Clojure code.

gorilla-repl does add some nice things. Try `3 + 4`. Note: you need the spaces.

Now, try a plot.

```Clojure
(use 'gorilla-plot.core)
(list-plot [1 2 3 4 5 6 7])
```

You can edit and eval any cell.

Gorilla-REPL Keyboard Shortcuts

The following are for Linux and Microsoft Windows. For Mac, use Alt intead.

【 Shift + Enter 】 → eval current cell.

【 Alt + Shift + Enter 】 → eval all cells.

【 Ctrl + Space 】 or 【 Alt + g Alt + a 】 → show completion for current word.

【 Alt + g Alt + c 】 → lookup documentation of the symbol under cursor, in http://clojuredocs.org/ site.

working with cells

【 Alt + g Alt + x 】 → delete current cell.

【 Alt + g Alt + m 】 → make current cell inactive as notes. You can type anything, such as title, instruction, explanations, description, notes etc. Markdown format is supported.

【 Alt + g Alt + j 】 → change current cell to active.

【 Alt + g Alt + n 】 → create a new cell below.

【 Alt + g Alt + b 】 → create a new cell above.

【 Alt + g Alt + u 】 → move current cell up.

【 Alt + g Alt + d 】 → move current cell down.

worksheet

【 Alt + g Alt + l 】 → load worksheet.

【 Alt + g Alt + s 】 → save worksheet.

【 Alt + g Alt + e 】 → save worksheet with new filename.

【 Alt + g Alt + g 】 → show all keyboard shortcuts. (or Click on the menu icon on upper right corner).

Save Worksheet

You can save a worksheet.

【 Alt + g Alt + s 】 → save current file to disk.

It'll be saved at the directory gorilla-repl is started.

gorilla-repl worksheets should end in `.clj` or `.cljw`

gorilla-repl worksheets are Clojure files with magic comments.

viewing Clojure doc

first, import it

```Clojure
(use 'clojure.repl)
```

then in gorilla worksheet, you can type `(doc list)` see its doc, or `(source list)`

Important gorilla-repl Startup Options

```bash
# start with a specified port
lein gorilla :port 8999
```

- `:port` *number*
- `:ip` *ip_address*
- `:nrepl-port` *number*

[Wikipedia List of TCP and UDP port numbers]

Ask me question on patreon

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