Table of Contents
Sample wiki page with R code and chart generated

```r
require(gvis)
M <- gvisMotionChart(Fruits, "Fruit", "Year", options = list(width = 550, height = 450))
print(M, "chart()"
```

Simple syntax highlighted & preview

Note: Remember that this is only a preview, and has not yet been saved!

1. Text output

This code:

```r
(1:10)
```

Produces:

```
[1]  1  2  3  4  5  6  7  8  9 10
```
Escaping Wiki syntax

```r
{{!(wikisyntax==0)}}\cat{__hello__}{{/r}}
```

**hello**

```
{{!(wikisyntax==1)}}\cat{__hello__}{{/r}}
```

**hello**

```
{{!(wikisyntax==1)}}\cat{__hello__}{{/r}}
```

Parsing Wiki Syntax

**Simple Interface: list runs/datasets**

<table>
<thead>
<tr>
<th>Summary</th>
<th>Description</th>
<th>From user</th>
<th>Dataset file</th>
<th>Minimum value for axis X</th>
<th>Maximum value for axis X</th>
<th>LastModif</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample dataset</td>
<td>This dataset was created as part of the sample data for r.test.</td>
<td>admin</td>
<td></td>
<td>1</td>
<td>10</td>
<td>2013-08-30 17:37</td>
</tr>
<tr>
<td>We are working on this dataset</td>
<td>This will soon be changed</td>
<td>admin</td>
<td></td>
<td>21</td>
<td>30</td>
<td>2012-05-11 16:57</td>
</tr>
<tr>
<td>A really old dataset</td>
<td>This dataset is outdated.</td>
<td>admin</td>
<td></td>
<td>100</td>
<td>110</td>
<td>2012-05-11 16:57</td>
</tr>
</tbody>
</table>
Simple interface: Results for one run/dataset

Results

Values for X:
min: 1
max: 10

Those are the results:

Results from $1 \cdot 10$: 10
No attachment to display in this raw dataset

Graph with $x_{min}$ 1 & $x_{max}$ 10 and $y=x^2$

Simple templates for custom output

Describe the change you made:

Monitor this page:
Flexible databases in Trackers to hold run parameters

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Type</th>
<th>List Title Search</th>
<th>Public</th>
<th>Mandatory</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Summary</td>
<td>Text Field</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>Description</td>
<td>Text Area</td>
<td>✓</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>From user</td>
<td>User Selector</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>Dataset file</td>
<td>Attachment</td>
<td>✓</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>Minimum value for axis X</td>
<td>Text Field</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>6</td>
<td>Maximum value for axis X</td>
<td>Text Field</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Save All ▼ Go

Add Field

Optional pop up helpers to edit plugin calls based on GUI

1. Basic imaging

RR (R syntax also)

- echo: Shows a code block with the R commands to be run before running them (similar to the echo command)
- wikisyntax: Choose whether the output should be parsed as wiki syntax (Optional). Options: 0 (no parsing, default), 1 (parse)
- LoadAndSave: Load a previous R user session (.RData, if any) for the same wiki page so that R object will be used while you are working. If you choose to load an R session and you have multiple trackers on this wiki page, only the first tracker will be loaded.

R Code

```r
1 if(require(Cairo)){
2
3 }
4
```

Install.packages("Cairo", repos="http://ftp.heanet.ie/mirrors/cran.r-project.org")}
Nice word clouds from just a few lines of R code

Custom maps with GoogleVis

```r
G5 <- gvisGeoMap(CiudadPopular, locationvar="Ciudad", numvar="Popular",
                  options=list(region="ES", height=350,
                                 dataMode="markers",
                                 colors=[0xFF8747, 0xFFB551, 0x006000]))

# plot(G5)
print(G5, "chart")
```

Spanish city popularity after UseR!2013 ;-)
Embedded plot.ly charts

Fun with the Lognormal distribution

Embedded plot.ly charts: Heatmaps

x: Wednesday
y: Afternoon
z: 50
Custom output for higher control on figure results (pdf)

```r
device.height = convertHeight(sum(g[["heights"]]), "in", valueOnly=TRUE)
pdf("testr.pdf", height = device.height)
grid.draw(g)
invisible(dev.off())
```

Mobile display mode when needed

rCharts

rCharts is an R package to create, customize and publish interactive javascript visualizations from R using a familiar lattice style plotting interface. It has been created by Ramanth Vaidyanathan. See more here: [http://rcharts.io/](http://rcharts.io/)

Below you will find a series of examples of nice charts using rcharts and the corresponding javascript library used in each case.

Page contents:

- Introduction
- Examples
- Credits
- License
rCharts Interactive figures: NYT 512 Paths to White House

Obama has 106 ways to win
83% of paths

Romney has 18 ways to win
14% of paths

If Obama wins North Carolina... and Wisconsin...
Obama wins.

rCharts: show data on hover & control vars. displayed

Toggle display of variables by clicking on them in legend
rCharts: Easy creation of georeferenced custom maps

```r
map3 <- Leaflet$new()
map3$setView(c(51.505, -0.09), zoom = 13)
map3$marker(c(51.5, -0.09), bindPopup = "Hi, I am a popup!")
map3$marker(c(51.495, -0.063), bindPopup = "Hi, I am another popup!")
map3$addScript("http://r.tiki.org/rcharts_libraries/leaflet")
map3$save("map3.html")
```

rCharts: Interactive magnification of figure regions

```r
n2 <- nPlot(Sepal.Length ~ Sepal.Width, data = sepal, type = "scatterChart",
group = "Species")
n2$xAxis(axisLabel = "Sepal.Width") # add x axis label
n2$yAxis(axisLabel = "Sepal.Length")
#n2$print("nvd3Scatter")

n2$Lib2 <- "http://r.tiki.org/rcharts_libraries/nvd3"
n2$save("n2.html")
```
rCharts: Select time range on X and vars on Y

move slider ends on X axis to filter on new time frame and toggle variables clicking on legend

Clickme: Interactive filtering charts by point names

Show names (500)

Groups Show one
- A (168)
- B (165)
- C (167)
Clickme: highlight data points with partial filter match

Animation in time-based charts

Violent Crime Rate in Decade 1961-1970

- CrimeRate: Low, Medium, High
Ecoengine: distribution maps based on database records

Ecoengine: Photo viewer based on remote ecological data