Online Applications with Rpad

www.Rpad.org

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What is Rpad?

- Browser-based interface to R.

- Easy way to make web-based front-ends to analytical applications.

- AJAX-style interface – all updates are done within the page dynamically – no browser refreshes.

- R code is embedded in the HTML and can be displayed to the user (use view page source to see the HTML and R code).

- End user doesn't need R installed.

Server installation

- Works with Apache or other web server.
  - Perl backend based on Statistics-R by Graciliano Monteiro Passos.
  - Use CGI or mod_perl.

- Runs a separate R process for each web page.
  - Good isolation between pages and processes but a resource hog.

- Some security issues.

Local installation

- Runs a mini-web server in a local copy of R.

- http://127.0.0.1:8079/

- Mini-web server is in tcl.

- Use the R command prompt and the browser interface.

- Good for testing and developing Rpad pages.

HTML with Inline R

```
<p>Data frames
</p>
<pre dojoType="Rpad" rpadType="R">
data(iris)
HTMLon()
HTML(head(iris))
</pre>
```

HTML Generation

```
<pre dojoType="Rpad" rpadType="R">
HTMLon()
H("div",id="mainTabSet", dojoType="TabPane",
        style="width: 50%; height: 10em;",
  H("div", dojoType="ContentPane", label="Tab 1",
    HTMLselect("mystate", state.name, default=3),
    BR,
    HTMLinput("myvar", value = 3),
    BR,
    HTMLcheckbox("isAL", text = "Alabama"),
    HTMLcheckbox("isWY", text = "Wyoming"),
    HTMLcheckbox("isMT", text = "Montana")),
  H("div", dojoType="ContentPane", label="Tab 2",
    "here's another tab",
    HTMLradio("AL", commonName = "myState", text = "Alabama"),
    HTMLradio("WY", commonName = "myState", text = "Wyoming"),
    HTMLradio("MT", commonName = "myState", text = "Montana")))
</pre>
```