

# unknownR

**Helps you discover functions in R that you didn't know you didn't know.**

**Matthew Dowle**

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# Motivation

Very often we hear, for example :

- " I only recently discovered `with()` "
- " I didn't know `unlist()` "
- " I wish I knew `all.vars()` earlier "
- " I missed `vapply()` when it was added to R "
- " I never knew there were 8 apply functions! "

# Current tools

- Read R's documentation
- Cheat sheets and reference cards
- Looking at other people's code
- Asking others to review your code
- Training courses

How do you know you covered everything?

How do you keep up to date?

# You said 8 apply functions?

Yes.

```
> objects("package:base", pattern="apply")  
[1] "apply"    "eapply"  "lapply"  "mapply"  
[5] "rapply"  "sapply"  "tapply"  "vapply"
```

But, we knew we didn't know

i.e. we knew to search for pattern "apply"

# Bad news

```
> length(objects("package:base"))
```

```
[1] 1167
```

```
> length(objects("package:utils"))
```

```
[1] 183
```

1,350 is a lot of objects

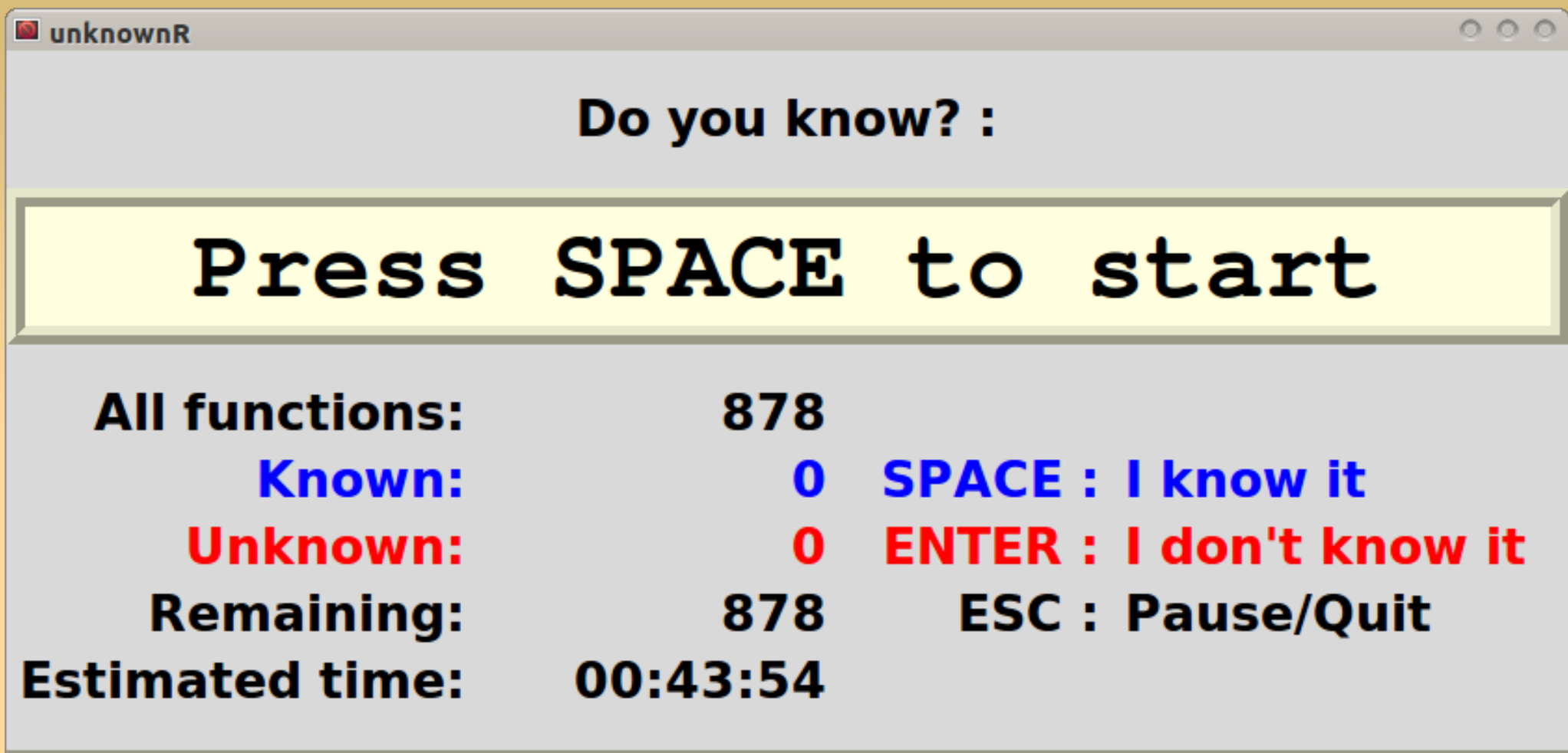
# Filter the 1,350

Remove :

- functions marked `.Defunct`
- `as.*` methods (111)
- other methods (e.g. `Summary.*`)
- assignment functions (e.g. `"names<-"`)

1,350 reduced to 878

# unk ( )



Estimate assumes 3 sec \* 878 (you may be faster!)

**Demo**



# ~/knowns.Rdata

- You don't have to complete `unk ( )` in one sitting e.g. take 10 minutes a day, for 4 days.
- When you upgrade (e.g. from **R** 2.12.1 to 2.12.2) run `unk ( )` again, only the new functions added to **R** will be presented.

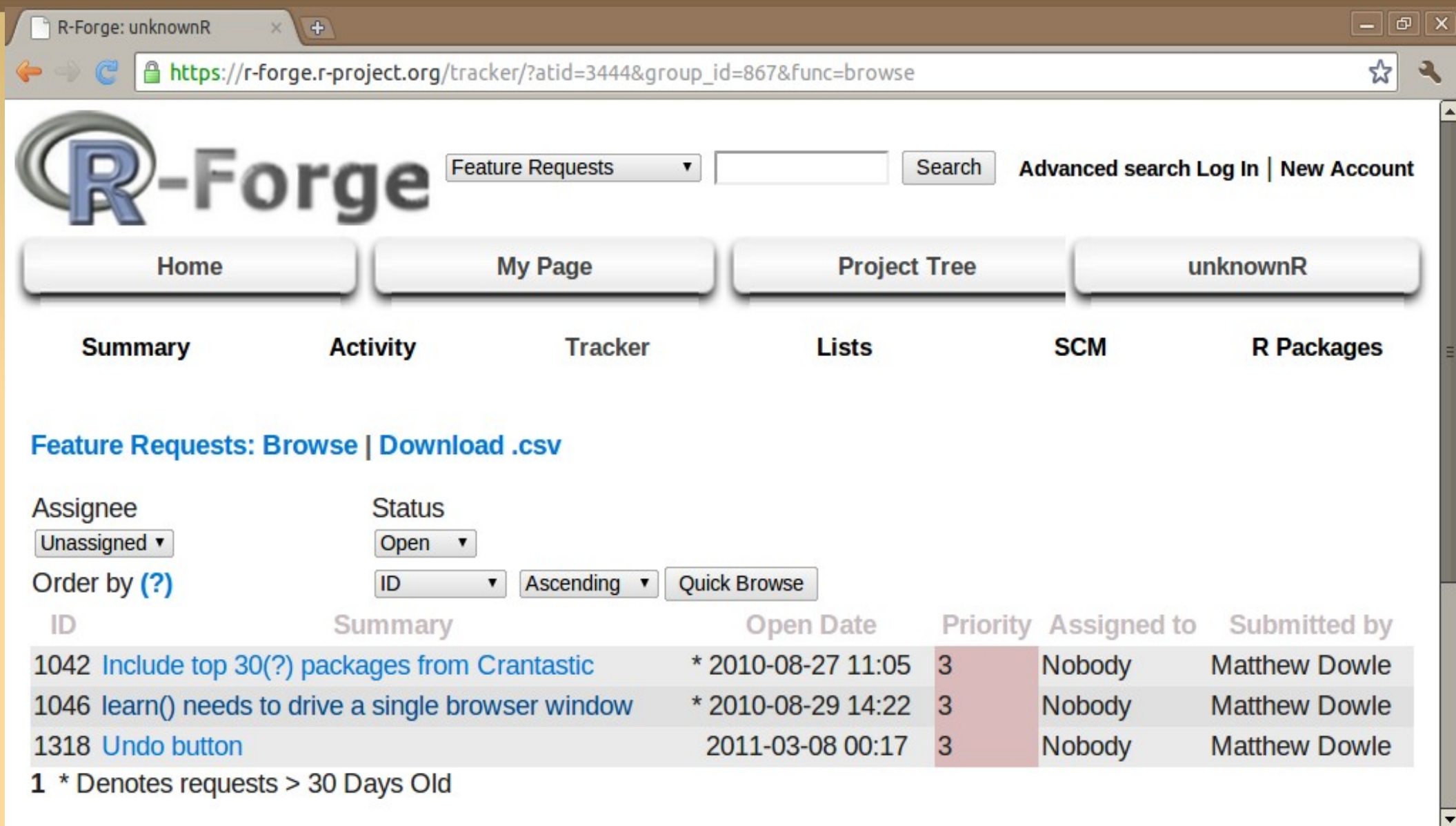
# learn()

- `unk()` is supposed to be **quick**. Don't dwell on each function (however intriguing it might look!)
- Output : character vector `tolearn`
- Then run `learn()` to display `help()` for each function. Press ENTER to view next page.
- Rerun `unk()` when you know them.

# Cross platform

- Of course!
- Just Tcl/Tk in standard R
- Linux, Mac and Windows

# Feedback please, thank you



The screenshot shows the R-Forge tracker interface for the 'unknownR' project. The browser address bar shows the URL: [https://r-forge.r-project.org/tracker/?atid=3444&group\\_id=867&func=browse](https://r-forge.r-project.org/tracker/?atid=3444&group_id=867&func=browse). The page features the R-Forge logo, a search bar with a dropdown menu set to 'Feature Requests', and navigation buttons for 'Home', 'My Page', 'Project Tree', and 'unknownR'. Below these are tabs for 'Summary', 'Activity', 'Tracker', 'Lists', 'SCM', and 'R Packages'. The main content area displays 'Feature Requests: Browse | Download .csv' and includes filters for 'Assignee' (Unassigned), 'Status' (Open), and 'Order by' (ID, Ascending). A table of feature requests is shown with columns for ID, Summary, Open Date, Priority, Assigned to, and Submitted by. A legend indicates that an asterisk (\*) denotes requests older than 30 days.

Feature Requests: Browse | Download .csv

Assignee: Unassigned | Status: Open | Order by: ID | Ascending | Quick Browse

| ID   | Summary  | Open Date          | Priority | Assigned to | Submitted by  |
|------|--|--------------------|----------|-------------|---------------|
| 1042 | <a href="#">Include top 30(?) packages from Crantastic</a>     | * 2010-08-27 11:05 | 3        | Nobody      | Matthew Dowle |
| 1046 | <a href="#">learn() needs to drive a single browser window</a> | * 2010-08-29 14:22 | 3        | Nobody      | Matthew Dowle |
| 1318 | <a href="#">Undo button</a>                                    | 2011-03-08 00:17   | 3        | Nobody      | Matthew Dowle |

1 \* Denotes requests > 30 Days Old