

2. De-reference reactive exprs using !!

Besides inlining *values*, unquoting has a second essential function: inlining *meta-reactive objects* as code

```
> downloads <- metaReactive({  
+   cranlogs::cran_downloads(!!input$package,  
+   from = Sys.Date() - 365, to = Sys.Date())  
+ })
```

```
> downloads_rolling <- metaReactive({  
+   !!downloads() %>% mutate(  
+     count = zoo::rollapply(count, 7, mean, fill =  
+     "extend"))  
+ })
```

Bang bang!

```
> withMetaMode(downloads_rolling())  
{  
  cranlogs::cran_downloads("ggplot2",  
    from = Sys.Date() - 365, to = Sys.Date())  
} %>% mutate(  
  count = zoo::rollapply(count, 7, mean, fill = "extend"))
```

Shinymeta app (...almost)

```
downloads <- metaReactive2({
  req(input$packages)
  metaExpr(cranlogs::cran_downloads(input$packages,
    from = Sys.Date() - 365, to = Sys.Date()))
})

downloads_rolling <- metaReactive({
  downloads() %>%
    mutate(count = zoo::rollapply(count, 7, mean, fill = "extend"))
})

output$plot <- metaRender(renderPlot, {
  ggplot(downloads_rolling(), aes(date, count)) +
    geom_line() +
    ggtitle("Seven day rolling average")
})
```