```
server <- function(input, output, session) {</pre>
 downloads <- metaReactive({</pre>
   cranlogs::cran downloads(
     input$package,
     from = Sys.Date() - 365,
     to = Sys.Date()
 })
 downloads rolling <- metaReactive2({</pre>
   validate(need(sum(downloads()$count) > 0, "Input a valid package name"))
   metaExpr({
     downloads() %>%
       mutate(count = zoo::rollapply(count, 7, mean, fill = "extend"))
   })
 })
output$plot <- metaRender(renderPlot, {
   ggplot(downloads rolling(), aes(date, count)) + geom line()
 })
```

Step 1: Capture domain logic

reactive becomes metaReactive

render functions must be wrapped in metaRender

Step 1: Capture domain logic

```
server <- function(input, output, session) {</pre>
 downloads <- metaReactive({</pre>
   cranlogs::cran downloads(
                                        reactive becomes
     input$package,
                                          metaReactive
     from = Sys.Date() - 365,
     to = Sys.Date()
 })
 downloads rolling <- metaReactive2({</pre>
   validate(need(sum(downloads()$count) > 0, "Input a valid package name"))
   metaExpr({
     downloads() %>%
       mutate(count = zoo::rollapply(count, 7, mean, fill = "extend"))
   })
 })
 output$plot <- metaRender(renderPlot, {</pre>
   ggplot(downloads_rolling(), aes(date, count)) + geom_line()
 })
                                render functions
                               must be wrapped in
                                  metaRender
```

Step 1: Capture domain logic

```
server <- function(input, output, session) {</pre>
 downloads <- metaReactive({</pre>
   cranlogs::cran downloads(
                                   Capture domain logic
     input$package,
     from = Sys.Date() - 365,
                                    with metaExpr inside
     to = Sys.Date()
                                     meta***2 variants
 })
 downloads rolling metaReactive2({
   validate(need(sum(downloads()$count) > 0, "Input a valid package name"))
   metaExpr({
     downloads() %>%
       mutate(count = zoo::rollapply(count, 7, mean, fill = "extend"))
   })
 })
 output$plot <- metaRender(renderPlot, {</pre>
   ggplot(downloads rolling(), aes(date, count)) + geom line()
 })
```