

## Reactive Functions

Output function	creates
<code>htmlOutput</code>	raw HTML
<code>imageOutput</code>	image
<code>plotOutput</code>	plot
<code>tableOutput</code>	table
<code>textOutput</code>	text
<code>uiOutput</code>	raw HTML
<code>verbatimTextOutput</code>	text

## Rendering Functions

render function	creates
<code>renderImage</code>	images (saved as a link to a source file)
<code>renderPlot</code>	plots
<code>renderPrint</code>	any printed output
<code>renderTable</code>	data frame, matrix, other table like structures
<code>renderText</code>	character strings
<code>renderUI</code>	a Shiny tag object or HTML

## Rendering Functions - Examples

- `renderPlot` - Renders a reactive plot that is suitable for assigning to an output slot. `expr` is an expression that generates a plot.

```
renderPlot(expr, width = "auto", height = "auto",.....)
```

- `renderTable` - Creates a reactive table that is suitable for assigning to an output slot.

```
renderTable(expr, ..., .....)
```

## Communicating between Functions

- Output from `server.R` passed a list like object.
- Reactive Components of `ui.R` use this output

### `ui.R`

```
shinyUI(fluidPage(  
  titlePanel("censusVis"),  
  ....  
  mainPanel(  
    textOutput("text1")  
  )  
))  
....
```

### `server.R`

```
....  
shinyServer(  
  function(input, output) {  
  
    output$text1 <- renderText({  
      paste("You have selected", input$var)  
    })  
  
  }  
)  
....
```