SHEL KARIUKI

LET YOUR SHINE:

Making shiny apps mobile responsive

Regional Sales Status
Regional Sales Breakdown
Conversion Events
Global Financial Performance
Production Up | Down Time 2013
Schedule Adherence (Past 30 Days)
Leads YTD
225K YTD
350K
Debt-to-Equity
Technical Support Dashboard
US States by the Year of Joining the Union

Case Example

bit.ly/mfano

1. Collapsible Menu

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

```
ui <- navbarPage(
  div(div(
    id = "nav_logo",
    img(src = "peng-logo.png")
  ), "Mfano"
  ),
  id = "tabs",
  tags$head(includeCSS("www/custom.css")),
  collapsible = TRUE,
  tabPanel("About",
           shiny::includeHTML("www/about.html")),
  tabPanel("Kwanza",
           fluidRow(style = "height: 2vh"),
           fluidRow(
             column(6, offset = 3 ,
                    highchartOutput("kwanza_graph"))
           )),
  tabPanel("Pili",
           fluidRow(
             id = "pili_output",
             column(5,
                    highchartOutput("pili_graph")),

             column(4, offset = 2,
                    DTOutput("pili_table"))
             )
           ),
  tabPanel("Tatu",
           column(6, offset = 3 ,
                  highchartOutput("tatu_graph"))),
  detect()
  )
```

bit.ly/mfano

2. Remove some objects

bit.ly/mfano

Removed

Mfano About Kwanza Pili Tatu

Removed

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

```
<body>

<section class="container">
  <div class="logo2">
      <img src="logo2b.png" alt="" style = "height: 50vh;">
  </div>

  <div>
    <h4> Welcome ! </h4>
    <p>
      Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim
veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate
velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim
id est laborum.
    </p>
    <p>
      Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim
veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate
velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim
id est laborum.
    </p>

    <button>Read More</button>
  </div>
</section>

</body>
```

```
@media (max-width: 480px){

.logo2{
  display: none;
}

.container {
        display:flex;
        padding: 1rem;
        flex-wrap: wrap;
}


p {
    text-align: justify;
    font-size: 1rem;
    line-height: 2.5;
}

}
```

Introduced

3. shinybrowser::detect()

{shinybrowser} lets you easily detect a user's web browser information in Shiny apps.

The width and height of the browser window are only reported once, when the detect() function is initially called.
If the user resizes the browser window, the new dimensions are not reported until the page is refreshed.

Reduce font-size

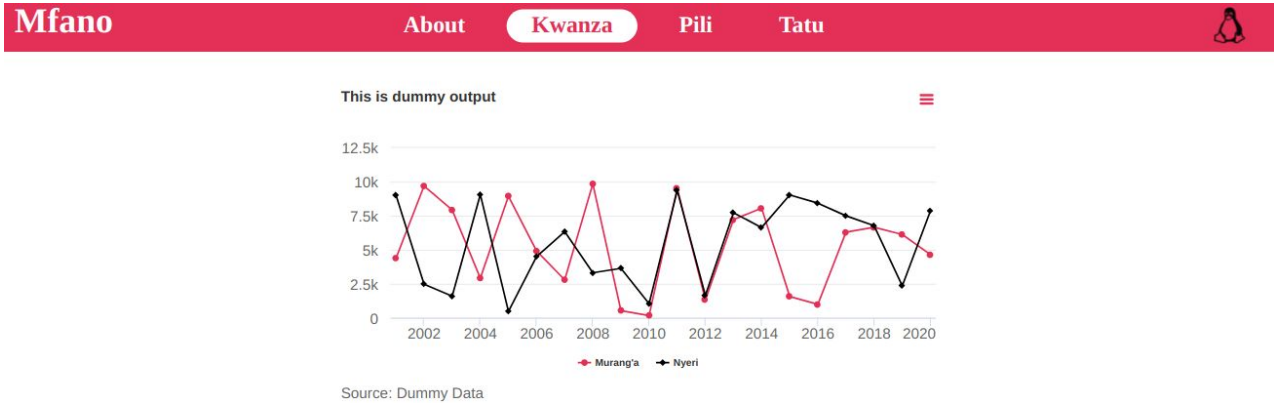
```
kwanza_graph_function <- function(type){

  if(type == "mobile"){
    dynamic_size = "10px"
    title_size = "14px"
  }else
    dynamic_size = "18px"
  title_size = "18px"

  kwanza_graph <- df %>%
    hchart('line', highcharter::hcaes(x = 'year', y = "value", group = "county")
    )%>%
    hc_colors(c("#e43057", "black")) %>%
    hc_yAxis(title = list(text = ""),
             labels = list(style =
                           list(fontSize = dynamic_size))
    ) %>%
    hc_xAxis(title = list(text = ""),
             labels = list(style =
                           list(fontSize = dynamic_size))
    ) %>%
    hc_title (text = "This is dummy output",
              align = "left",
              margin= 50,
              style = list(fontSize = title_size,
                           fontWeight = 'bold')) %>%
    ...
}
```

```
tatu_graph_function <- function(type){

  if(type == "mobile"){

    dynamic_size = "10px"
    title_size = "14px"

  }else{

    dynamic_size = "18px"
    title_size = "18px"

  }

  if(type == "mobile"){

    tatu_graph <- df2 %>%
      hchart('bar', highcharter::hcaes(x = 'xvals', y = "value"),
             color = "#e43057")
  }else{

    tatu_graph <- df2 %>%
      hchart('column', highcharter::hcaes(x = 'xvals', y = "value"),
             color = "#e43057")
  }

  ...

}
```

```
ui <- navbarPage(
  div(div(
    id = "nav_logo",
    img(src = "peng-logo.png")
  ), "Mfano"
  ),
  id = "tabs",
  tags$head(includeCSS("www/custom.css")),
  collapsible = TRUE,
  tabPanel("About",
           shiny::includeHTML("www/about.html")),
  tabPanel("Kwanza",
           fluidRow(style = "height: 2vh"),
           fluidRow(
             column(6, offset = 3 ,
                    highchartOutput("kwanza_graph"))
           )),
  tabPanel("Pili",
           fluidRow(
             id = "pili_output",
             column(5,
                    highchartOutput("pili_graph")),

             column(4, offset = 2,
                    DTOutput("pili_table"))
             )
           ),
  tabPanel("Tatu",
           column(6, offset = 3 ,
                  highchartOutput("tatu_graph"))),
  detect()
  )
```

```
shinyServer(function(input, output) {

  ## defining the viewport width cutoff
  device_reactive <- reactive({

    if(as.numeric(get_width()) <= 480){
      "mobile"
    }
    else{
      "comp"
    }

  })

    output$kwanza_graph <- renderHighchart({
      kwanza_graph_function(type = device_reactive())[[1]]

    })

    output$pili_graph <- renderHighchart({
      kwanza_graph_function(type = device_reactive())[[1]]

    })

    output$pili_table <- renderDataTable({
      DT::datatable(kwanza_graph_function(type = device_reactive())[[2]],
                    options = list(
                        dom = 'tp',
                        pageLength = 5,
                        scrollX = "400px"
                    ))
    })

    output$tatu_graph <- renderHighchart({
      tatu_graph_function(type = device_reactive())
    })

})
```

bit.ly/mfano


Mfano
About
Kwanza
Pili
Tatu
This is dummy output
12.5k
10k
7.5k
5k
2.5k
0
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
Murang'a
Nyeri
Source: Dummy Data

Mfano
This is dummy output
Murang'a
Nyeri
Source: Dummy Data

Change type of graph

```
kwanza_graph_function <- function(type){

  if(type == "mobile"){
    dynamic_size = "10px"
    title_size = "14px"
  }else
    dynamic_size = "18px"
  title_size = "18px"

  kwanza_graph <- df %>%
    hchart('line', highcharter::hcaes(x = 'year', y = "value", group = "county")
    )%>%
    hc_colors(c("#e43057", "black")) %>%
    hc_yAxis(title = list(text = ""),
             labels = list(style =
                           list(fontSize = dynamic_size))
    ) %>%
    hc_xAxis(title = list(text = ""),
             labels = list(style =
                           list(fontSize = dynamic_size))
    ) %>%
    hc_title (text = "This is dummy output",
              align = "left",
              margin= 50,
              style = list(fontSize = title_size,
                           fontWeight = 'bold')) %>%
    ...
}
```

```
tatu_graph_function <- function(type){

  if(type == "mobile"){

    dynamic_size = "10px"
    title_size = "14px"

  }else{

    dynamic_size = "18px"
    title_size = "18px"

  }

  if(type == "mobile"){

    tatu_graph <- df2 %>%
      hchart('bar', highcharter::hcaes(x = 'xvals', y = "value"),
             color = "#e43057")
  }else{

    tatu_graph <- df2 %>%
      hchart('column', highcharter::hcaes(x = 'xvals', y = "value"),
             color = "#e43057")
  }

  ...

}
```

```
ui <- navbarPage(
  div(div(
    id = "nav_logo",
    img(src = "peng-logo.png")
  ), "Mfano"
  ),
  id = "tabs",
  tags$head(includeCSS("www/custom.css")),
  collapsible = TRUE,
  tabPanel("About",
           shiny::includeHTML("www/about.html")),
  tabPanel("Kwanza",
           fluidRow(style = "height: 2vh"),
           fluidRow(
             column(6, offset = 3 ,
                    highchartOutput("kwanza_graph"))
           )),
  tabPanel("Pili",
           fluidRow(
             id = "pili_output",
             column(5,
                    highchartOutput("pili_graph")),

             column(4, offset = 2,
                    DTOutput("pili_table"))
             )
           ),
  tabPanel("Tatu",
           column(6, offset = 3 ,
                  highchartOutput("tatu_graph"))),
  detect()
  )
```

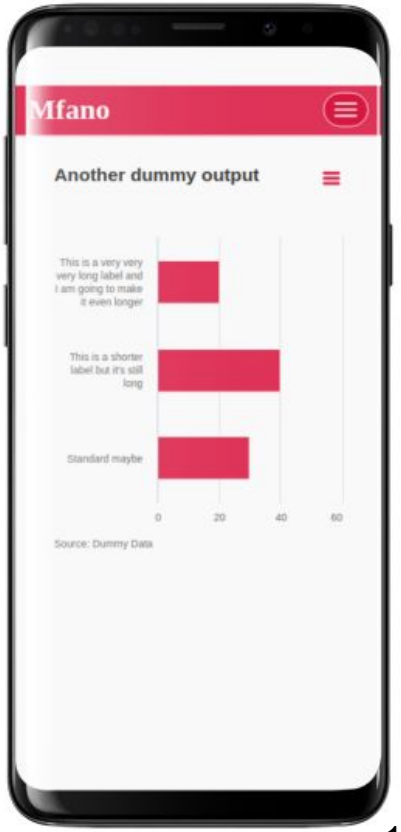
```
shinyServer(function(input, output) {

  ## defining the viewport width cutoff
  device_reactive <- reactive({

    if(as.numeric(get_width()) <= 480){
      "mobile"
    }
    else{
      "comp"
    }

  })
```

```
  output$kwanza_graph <- renderHighchart({
    kwanza_graph_function(type = device_reactive())[[1]]

  })

  output$pili_graph <- renderHighchart({
    kwanza_graph_function(type = device_reactive())[[1]]

  })

  output$pili_table <- renderDataTable({
    DT::datatable(kwanza_graph_function(type = device_reactive())[[2]],
                  options = list(
                    dom = 'tp',
                    pageLength = 5,
                    scrollX = "400px"
                  ))
  })
```

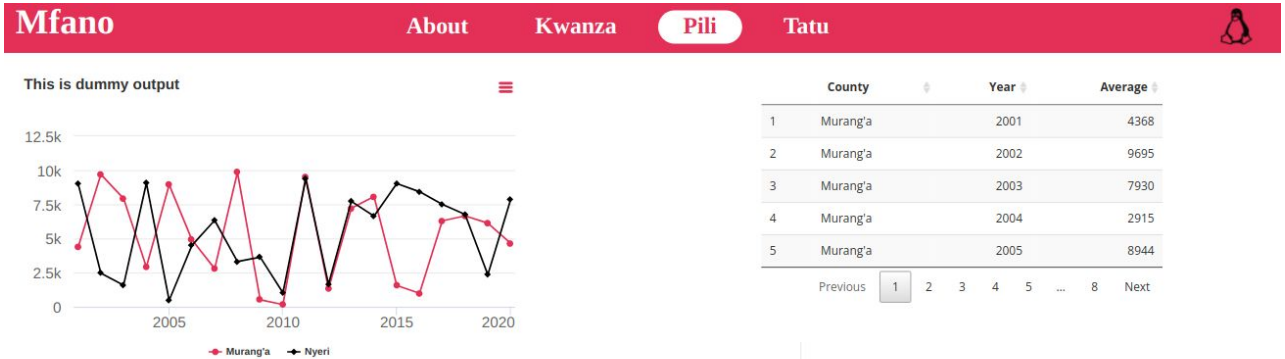
```
  output$tatu_graph <- renderHighchart({
    tatu_graph_function(type = device_reactive())
  })

})
```

Change type of graph

bit.ly/mfano



4. Change order of elements



Source: Dummy Data

```
ui <- navbarPage(
  div(div(
    id = "nav_logo",
    img(src = "peng-logo.png")
  ), "Mfano"
  ),
  id = "tabs",
  tags$head(includeCSS("www/custom.css")),
  collapsible = TRUE,
  tabPanel("About",
           shiny::includeHTML("www/about.html")),
  tabPanel("Kwanza",
           fluidRow(style = "height: 2vh"),
           fluidRow(
             column(6, offset = 3 ,
                    highchartOutput("kwanza_graph"))
           )),
  tabPanel("Pili",
           fluidRow(
             id = "pili_output",
             column(5,
                    highchartOutput("pili_graph")),

             column(4, offset = 2,
                    DTOutput("pili_table"))
             )
           ),
  tabPanel("Tatu",
           column(6, offset = 3 ,
                  highchartOutput("tatu_graph"))),
  detect()
  )
```

	County	Year	Average
1	Murang'a	2001	4368
2	Murang'a	2002	9695
3	Murang'a	2003	7930
4	Murang'a	2004	2915
5	Murang'a	2005	8944

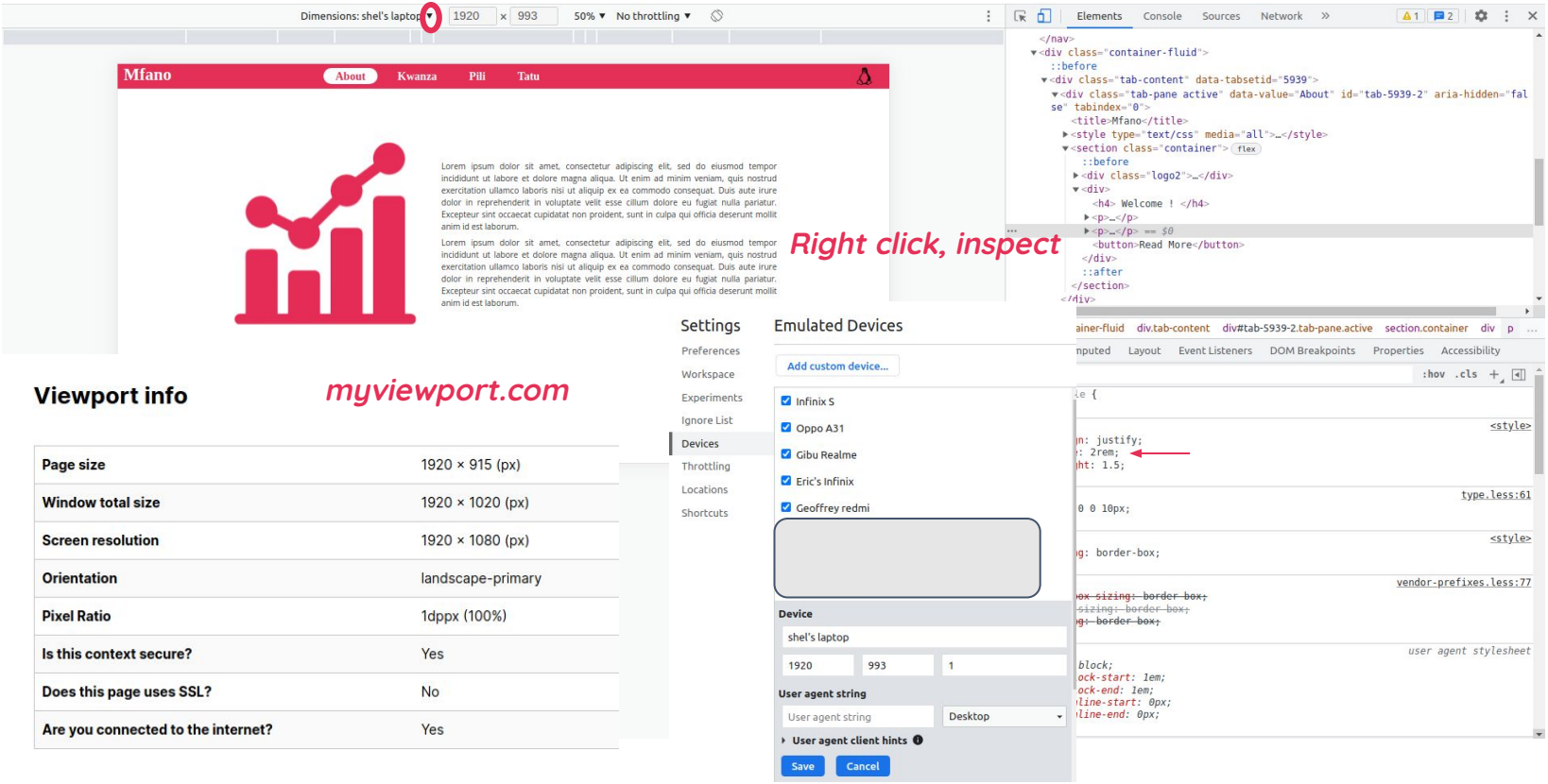
Previous 1 2 3 4 5 ... 8 Next

```
#pili_output {
  display: flex;
  flex-direction: column-reverse;

}
```

bit.ly/mfano

5. Inspect Browser

bit.ly/mfano

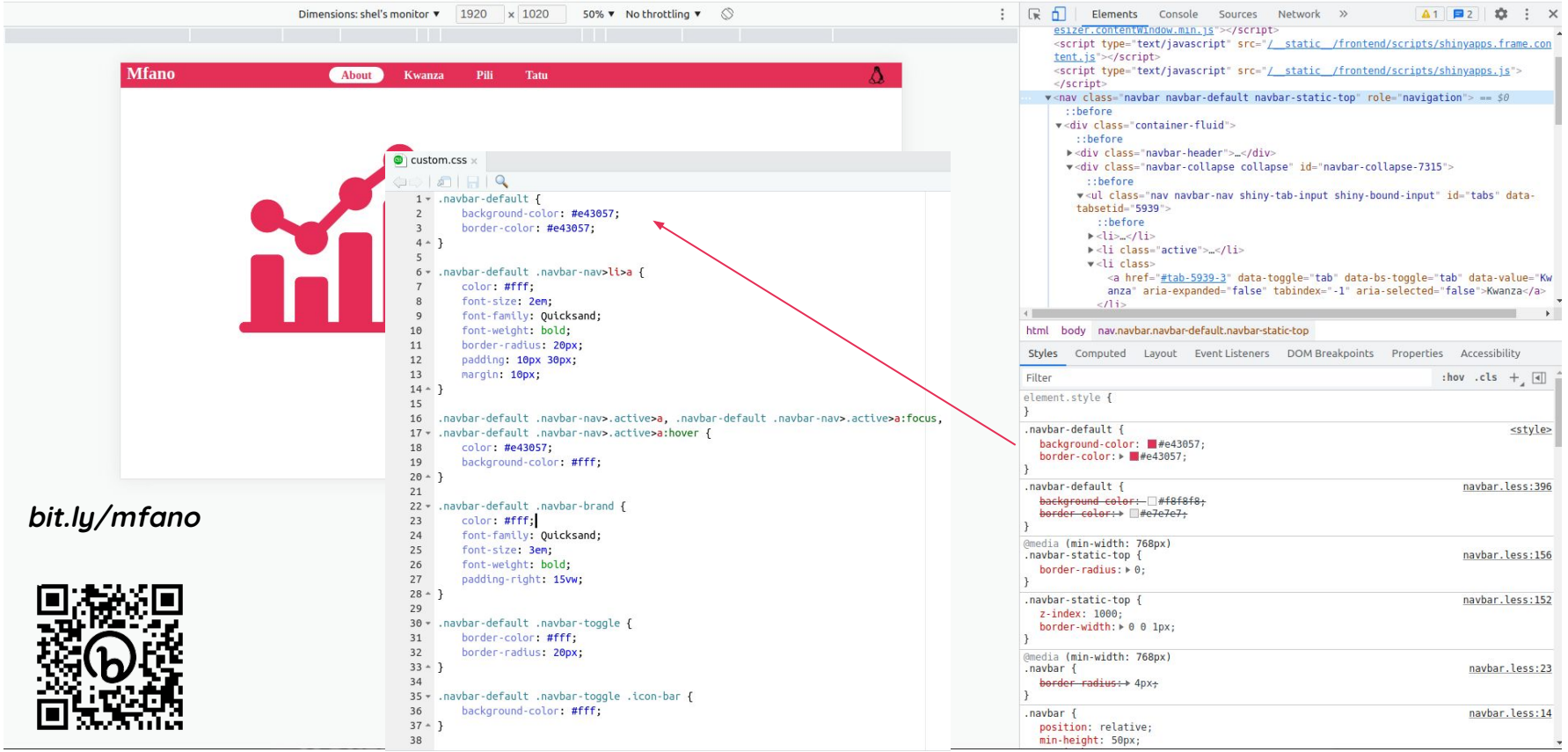


Viewport info

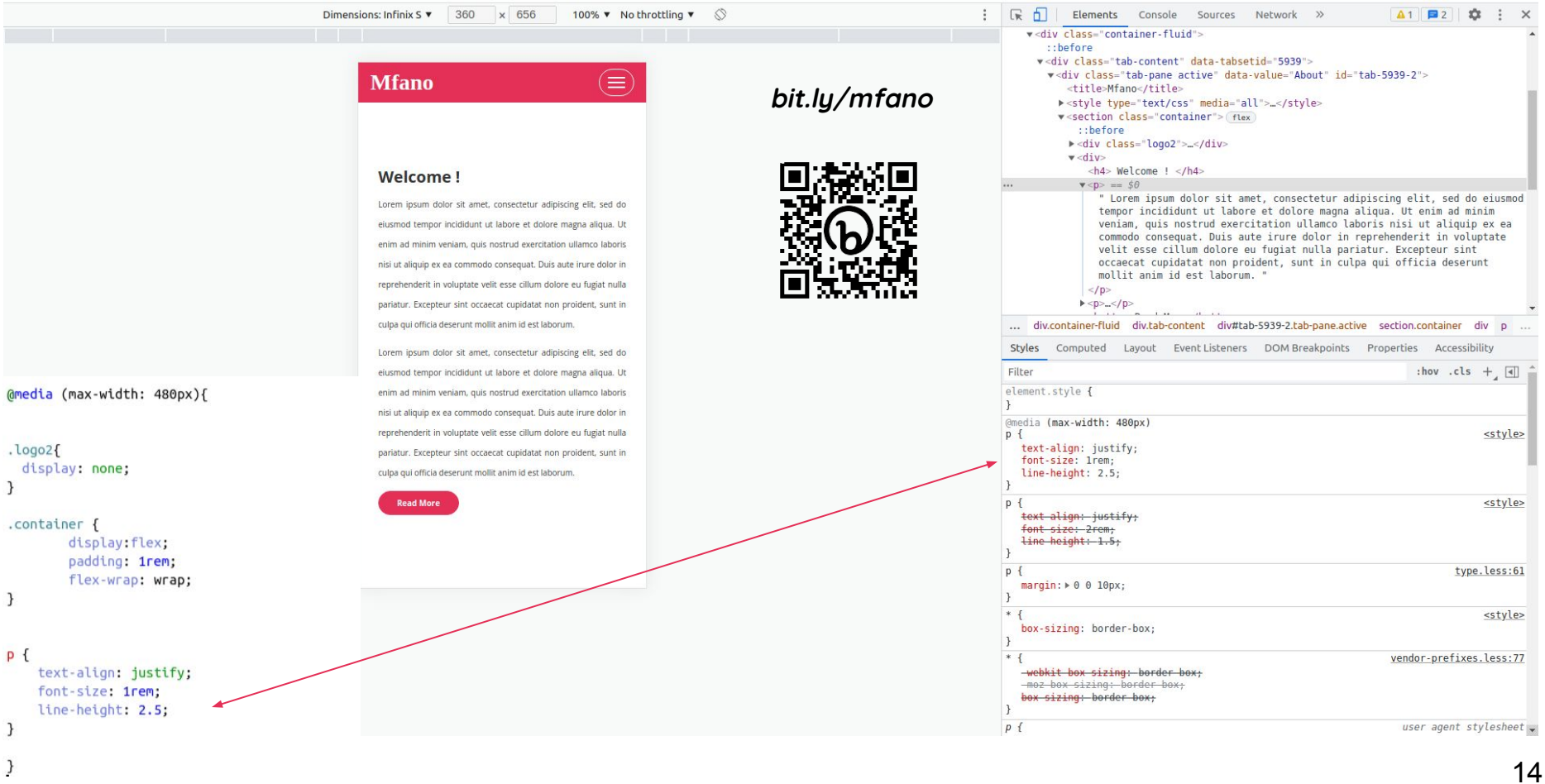
myviewport.com

Page size	1920 × 915 (px)
Window total size	1920 × 1020 (px)
Screen resolution	1920 × 1080 (px)
Orientation	landscape-primary
Pixel Ratio	1dppx (100%)
Is this context secure?	Yes
Does this page uses SSL?	No
Are you connected to the internet?	Yes

6. Inspect Browser



bit.ly/mfano


Dimensions: Infinix S
360
656
100%
No throttling
Mfano
Welcome !
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
Read More
bit.ly/mfano
@media (max-width: 480px){
.logo2{
display: none;
}
.container {
display:flex;
padding: 1rem;
flex-wrap: wrap;
}
p {
text-align: justify;
font-size: 1rem;
line-height: 2.5;
}
}
Elements
Console
Sources
Network

::before

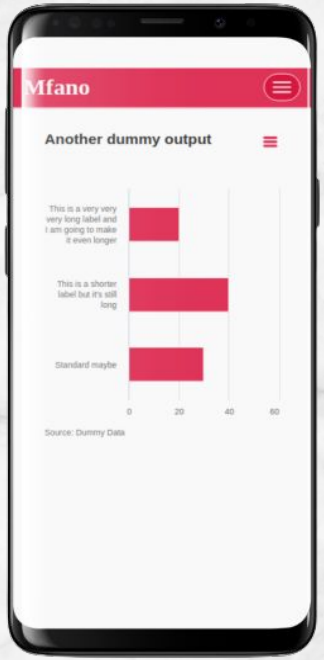
<title>Mfano</title>
<style type="text/css" media="all">…</style>
<section class="container">
::before
…

<h4> Welcome ! </h4>
 == $0
" Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. "

…
div.container-fluid
div.tab-content
div#tab-5939-2.tab-pane.active
section.container
div
p
Styles
Computed
Layout
Event Listeners
DOM Breakpoints
Properties
Accessibility
Filter
:hov
.cls
element.style {
}
@media (max-width: 480px)
p {
text-align: justify;
font-size: 1rem;
line-height: 2.5;
}
<style>
p {
text-align: justify;
font-size: 2rem;
line-height: 1.5;
}
<style>
p {
margin: 0 0 10px;
}
type.less:61
* {
box-sizing: border-box;
}
<style>
* {
-webkit-box-sizing: border-box;
-moz-box-sizing: border-box;
box-sizing: border-box;
}
vendor-prefixes.less:77
p {
user agent stylesheet

Result

bit.ly/mfano



Disclaimer

Check out bootstrap and {bslib}

I am not a css pro **YET**, so I believe my code could be more efficient

THANKS !