Static Code for App

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Quarto

Quarto enables you to weave together content and executable code into a finished document. To learn more about Quarto see https://quarto.org.

Running Code

When you click the **Render** button a document will be generated that includes both content and the output of embedded code. You can embed code like this:

```
#Read in packages
library(httr)
library(jsonlite)
library(dplyr)
library(lubridate)
```

query API

```
data_rainfall_wind <- function(lat, lon, start_date, end_date) {
  url <- "https://archive-api.open-meteo.com/v1/archive"
  response <- GET(url, query = list (
    latitude = lat,
    longitude = lon,
    start_date = start_date,
    end_date = end_date,
    hourly = "precipitation,wind_speed_10m",
    timezone = "auto"
  ))
  data1 <- fromJSON(content(response, as = "text"))
```

```r
df <- tibble(
  time = ymd_hm(data1$hourly$time),
  precipitation = data1$hourly$precipitation,
  wind_speed = data1$hourly$wind_speed_10m
)
# 4-hour summary
df_4hr <- df %>%
  mutate(interval = floor_date(time, "4 hours")) %>%
  group_by(interval) %>%
  summarize(
    precipitation_sum = sum(precipitation, na.rm = TRUE),
    wind_speed_avg = mean(wind_speed, na.rm = TRUE),
    .groups = "drop"
  )

  return(df_4hr)
}


#Asheville Helene flood
rain_asheville <- data_rainfall_wind(35.5975, -82.5461, "2024-09-25", "2024-09-27")

#houston July 2025 flood
rain_kerrville_Tx <-data_rainfall_wind(30.0474, -99., "2025-07-03", "2025-07-05")

#Nc Chantal July 2025 flood
rain_Orangecounty_NC<- data_rainfall_wind(36.0263, -79.1097, "2025-07-06", "2025-07-07")
```

The `echo: false` option disables the printing of code (only output is displayed).