

# Developing Data Products - Module 3

## Week 2 Peer-graded Assignment

Tan Siu Ching

2025-04-19

### Introduction

In this assignment, I have created a web page using R Markdown that features a map created with Leaflet and host my webpage on GitHub Pages. The webpage contains the date that I created the document, and a map created with Leaflet.

Welcome to my interactive map project created using R and Leaflet!

In this assignment, I've marked several meaningful locations around Kuala Lumpur, Malaysia: - My **residential area**: *Bandar Utama 12* - My **workplace**: *University of Malaya (UM)* - The **city center** of *Kuala Lumpur*

These places reflect my everyday life — from where I live, to where I work, to the vibrant city and state I'm proud to be part of. Scroll down to explore the map and click on each point to learn more!

### Installation

To use Leaflet in R, install the package (if you haven't already):

```
install.packages("leaflet")
```

**My First Leaflet Map:** Create an interactive map using Leaflet in R that marks 3 of my favorite locations.

```

library(leaflet)

# Updated data frame without state
my_places <- data.frame(
  name = c("🏠 Bandar Utama 12 – My neighborhood",
    "<b>🏢 University of Malaya – My workplace</b><br><a href='https://www.um.edu.my'
target='_blank'>Visit UM Website</a>",
    "🏙️ Kuala Lumpur City Center"),
  lat = c(3.1387, 3.1205, 3.1390),
  lng = c(101.6158, 101.6544, 101.6869)
)

# Leaflet map with clustering and rectangle
leaflet(data = my_places) %>%
  addProviderTiles("CartoDB.Positron") %>%
  addMarkers(~lng, ~lat, popup = ~name,
    clusterOptions = markerClusterOptions(),
    popupOptions = popupOptions(maxWidth = 300)) %>%

# Add rectangle around Bandar Utama 12
addRectangles(
  lng1 = 101.6125, lat1 = 3.1360, # Southwest corner
  lng2 = 101.6190, lat2 = 3.1410, # Northeast corner
  fillColor = "blue",
  fillOpacity = 0.1,
  color = "blue",
  weight = 2,
  popup = "🏠 Area: Bandar Utama 12"
)

```

This is my Output



