

Rmarkdown template

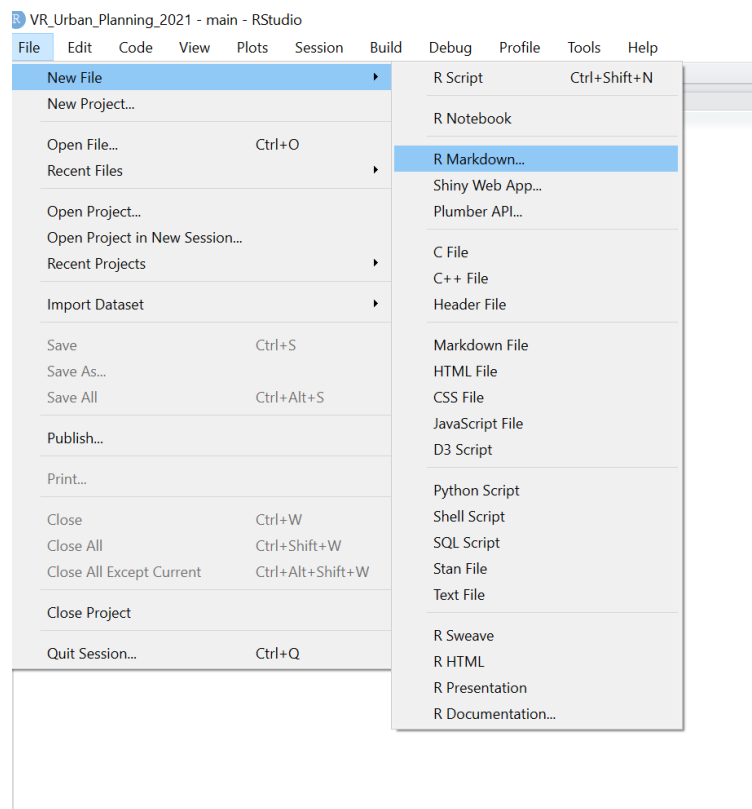
This is a R Markdown (.Rmd) file that will allow you to produce a pdf document that you will need to submit as a part of your assessment. Use the steps described below to start with your .Rmd file.

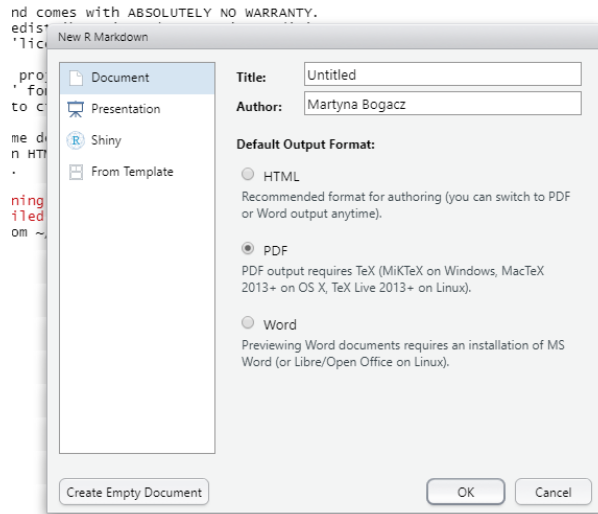
Step 0: Install and load all the necessary packages

The example of how to install and load the packages - for demonstration only. The # in front of the line stops the code from executing.

```
#install.packages("rmarkdown")  
#install.packages("knitr")  
  
#library(rmarkdown)  
#library(knitr)
```

Step 1: Open a new .Rmd file





Here you can choose the output file (as PDF) but this can be changed later (see the next section).

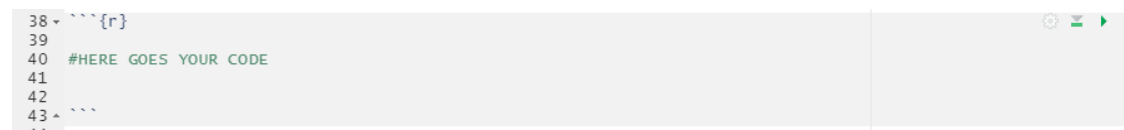
Step 2: Setting up the output file

It is recommended to start your Rmarkdown document with the following inputs to ensure that a pdf document is produced. You can set the output by changing from `github_document` to `pdf_document` using `output: pdf_document`.

```
title: "Coursework submission VR Urban Planning (856011)"
subtitle: "subtitle of your choice"
output:
  pdf_document:
    number_sections: true
author: "your name"
```

Step 3: Including Code

To include an R code chunk that will be executable use:



You can read more on executable R chunks [here](#). For example, the following code in the executable chunk will allow you to get a summary of dataset called 'cars'.

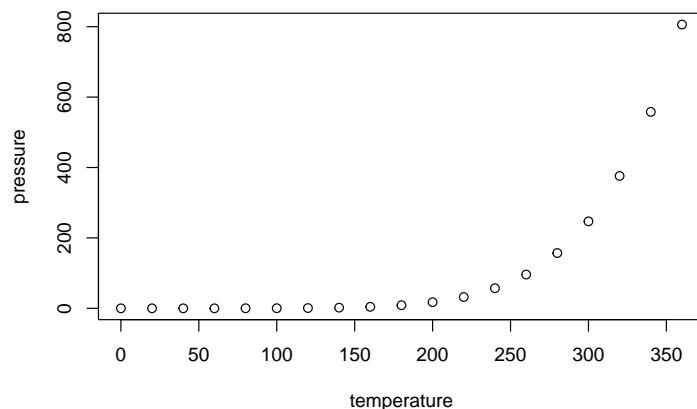
```
summary(cars) # here is the code that your use
```

```
##      speed      dist
##  Min.   : 4.0    Min.   :  2.00
##  1st Qu.:12.0    1st Qu.: 26.00
##  Median :15.0    Median : 36.00
##  Mean   :15.4    Mean   : 42.98
##  3rd Qu.:19.0    3rd Qu.: 56.00
##  Max.   :25.0    Max.   :120.00
```

Step 4: Including Plots

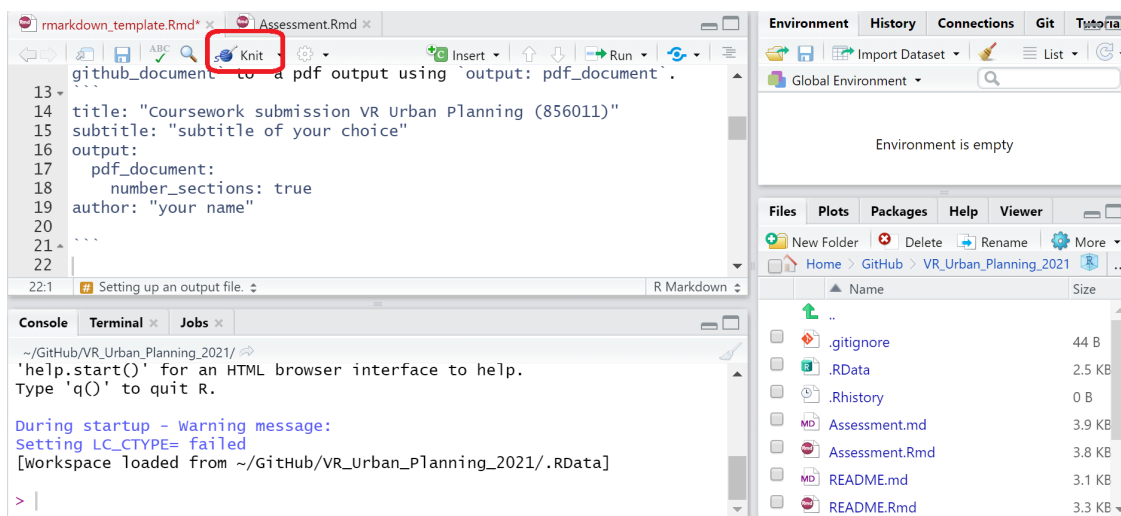
It is also possible to include visualisations and plots using R code chunks by simply running a `plot()` function inside the R chunk. For example, in the code below the dataset 'pressure' is plotted in the figure.

```
plot(pressure)
```



Step 5: Knitting your document

When you open R markdown file in RStudio and click the **Knit** button (marked in red in the figure below) all R code chunks are run and a pdf document with your report will be produced. To make sure that the document is reproducible, you should include a code chunk that shows which packages you used.



Report

What follows is an example template of your report.

Part 1 - Theoretical

Introduction

This section may contain research questions, motivation of the study, identified research gaps and the discussion of the advantages and potential disadvantages of VR use relative to traditional research approaches *in the chosen case*.

Hypotheses

List of the hypotheses to be tested and rationale.

Experimental setup

Detailed description of how the data will be collected.

Methodology

Description of the methods you will use including justification why certain method was chosen over other options.

Planned analysis

Description of the steps that will be undertaken to pre-process, clean and analyse the data.

Expected outcomes of the case study

What results are you expecting to achieve?

Part 2 - Practical

In this part provide the description and code of all steps that were undertaken to pre-process, clean, analyse and visualise your data (collected during the lab day), following what you have learned during practicals.

References