

- [METADABA-Template](#)

# METADABA-Template

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This is a basic directory structure for developing Quarto based Preparatory Labs for Metropolitan College

Please install the following before running the code:

1. Python 3.10 or higher - more information [Python](#)
2. R 4.3.0 or higher - more information [R](#)
3. Quarto 1.6.33 - more information [Quarto](#)
4. [Quarto](#), [radian](#), [jupyter](#), and [rpy2](#) python packages. You can install them by running the following command in your terminal:
5. *Although not needed for graphing and other advanced features you can also install*
  1. Node.js - more information [Node.js](#)
  2. Pandoc - more information [Pandoc](#)
  3. LaTeX - more information [LaTeX](#)
  4. Git - more information [Git](#)
  5. RStudio - more information [RStudio](#)
  6. Anaconda - more information [Anaconda](#)
  7. Jupyter - more information [Jupyter](#)
  8. Graphviz - more information [Graphviz](#)

```
pip install numpy pandas matplotlib seaborn jupyter quarto radian rpy2
```

1. [quarto](#), [rmarkdown](#), [reticulate](#), [tidyverse](#), [ggplot2](#), [dplyr](#), [readr](#), [readxl](#), [stringr](#), [forcats](#), [lubridate](#), [janitor](#), [skimr](#), [kableExtra](#), [knitr](#), [kableExtra](#), [ggplot2](#), [plotly](#), [ggrepel](#), [ggpubr](#), [ggthemes](#), [ggsci](#), [ggbeeswarm](#), [ggrepel](#), [ggforce](#), [gganimate](#), [ggtext](#), [ggdist](#), [ggpattern](#), [ggpointdensity](#), [gghighlight](#), [ggrepel](#), [ggtext](#), [ggforce](#), [gganimate](#), [ggpattern](#), [ggpointdensity](#), [gghighlight](#), [ggdist](#), [ggsci](#), [ggthemes](#), [ggpubr](#), [ggbeeswarm](#) for R. You can install them by running the following command in your R console:

```
install.packages(c("quarto", "rmarkdown", "reticulate", "tidyverse", "ggplot2",  
"dplyr", "readr", "readxl", "stringr", "forcats", "lubridate", "janitor", "skimr",  
"kableExtra", "knitr", "kableExtra", "ggplot2", "plotly", "ggrepel", "ggpubr",  
"ggthemes", "ggsci", "ggbeeswarm", "ggrepel", "ggforce", "gganimate",  
"ggtext", "ggdist", "ggpattern", "ggpointdensity", "gghighlight", "ggrepel",  
"ggtext", "ggforce", "gganimate",  
"ggpattern", "ggpointdensity", "gghighlight", "ggdist", "ggsci", "ggthemes",  
"ggpubr", "ggbeeswarm"))
```

6. With the above packages installed, you can now run the following command in your terminal to install the **quarto-webr** package. It might require node.js to be installed on your system. Quarto web-r - more information [Quarto-WebR](#)

```
quarto add coatless/quarto-webr
```

7. Interactive python need to be also added to the quarto environment. You can do this by running the following command in your terminal - [pyodide](#)

```
quarto add coatless-quarto/pyodide
```

8. Interactive sql need to be also added to the quarto environment. You can do this by running the following command in your terminal - [sql.js](#)

```
quarto add shafayetShafee/interactive-sql
```