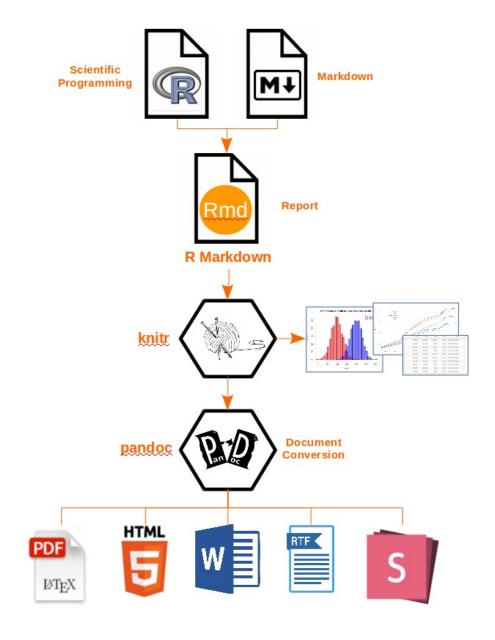


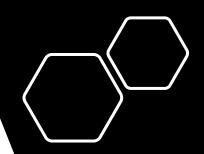


R Markdown

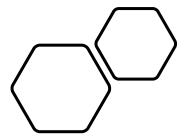


- rmarkdown is a R package in R programming environment
- R Markdown files have extension .Rmd
- rmarkdown has tools to convert .Rmd files into pdf, html, docx etc.
- Htmlwidgets can embedded in Rmd files.
- HTML presentation can be created in Rmd
- install.packages("rmarkdown") remotes::install_github('rstudio/rmarkdown') Development version
- File > New File > R Markdown



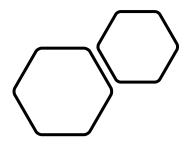


R Markdown and Latex



- R Markdown uses LaTeX to create PDF documents.
- BibTeX is the reference manager for LaTeX.
- BibTeX interfaces with EndNote, Mendeley and Zotero.
- LaTeX is one of the distribution of TeX.
- MacOS uses <u>MacTeX</u>, Linux uses <u>LaTeX</u>, Windows uses <u>MiKTeX</u>

Pandoc and R Markdown



- Pandoc in R Markdown converts
 .Rmd in almost any format
- https://pandoc.org/installing.html
- Rstudio recognizes Rmd files and activates knitr button.

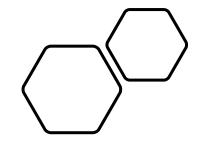
```
modifier_ob.
 mirror object to mirror
mirror_mod.mirror_object
 peration == "MIRROR_X":
mirror_mod.use_x = True
irror_mod.use_y = False
irror_mod.use_z = False
 operation == "MIRROR_Y"
irror_mod.use_x = False
lrror_mod.use_y = True
 lrror_mod.use_z = False
  _operation == "MIRROR_Z"
  irror_mod.use_x = False
  _mod.use_y = False
  rror_mod.use_z = True
  election at the end -add
   ob.select= 1
   er ob.select=1
   ntext.scene.objects.action
   "Selected" + str(modific
   rror ob.select = 0
  bpy.context.selected_obje
  lata.objects[one.name].sel
 int("please select exactle
  --- OPERATOR CLASSES ----
      mirror to the selected
   ject.mirror_mirror_x"
  ext.active_object is not
```

YAML

- Yet Another Markup Language
- It stores configuration information in key: value format
- Some of this information is on top of the Rmd
- YAML carries knitting instruction.
- Example:

```
output: html_document
output: pdf_document
output:
    pdf_document:
```

toc: true



What YAML can control

- Table of Contents
- Data Frames printing format
- Fonts, color and document appearance etc.

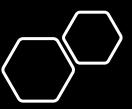
```
```{r setup, include=FALSE}
knitr::opts_chunk$set(echo = TRUE)
```





#### Code Chunk

- echo=FALSE /TRUE
- results= 'hide' /.../...
- message= FALSE /TRUE
- warning= FALSE /TRUE
- fig.show= FALSE /TRUE



### Advanced Features in Rmarkdown

#### **Tabbed Sections**

- Add {.tabset} to parent heading
- Add {.tabset .tabset-dropdown} to parent heading

#### Manage Chunk names

- Install namer package
- Install miniUI if needed
- Apply r chunk labels using addins namer.

#### Source Script