A Field Guide to xaringan

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Preface

`xaringan` is a powerful slide editor package built by Yihui Xie, a software engineer at RStudio. While the defaults he sets are incredibly well thought out, most of us can't resist wanting to tweak our slides in every way imaginable. This book, inspired by Bob Rudis's *21 Recipes for Mining Twitter with rtweet*, is here to serve the purpose of providing solutions to some of the most common tweaks that you might want to perform. This will in no way be an exhaustive list, but hopefully can get new users to `xaringan` up and running quickly.

This book has a companion repo made up of self-contained examples that demonstrate the topic of each section. This way the reader can read about the information here, and then go there to see all of the code. The rendered slides are also linked to in each corresponding section.

Each section is broken into 4 subsections:

- Problem - Outline the problem to solve
- Companion Deck - The rendered slide deck corresponding to the problem
- Solution - A description of the solution to the problem
- Discussion - Extra details and tips and tricks

About the Author

Davis Vaughan is a lover of all things R and Finance. He is graduating with a Master's in Quantitative Finance in May 2018, with immediate plans to work in the fixed income financial industry. He is the co-author of several packages hosted under the Business Science name including **tidyquant**, **tibbletime**, and **timetk**.

Chapter 1

Installing xaringan

1.1 Problem

You want to install the `xaringan` package.

1.2 Companion Deck

None

1.3 Solution

Great! You have two options, install from CRAN to get the stable version, or from GitHub to get the development version.

```
install.packages("xaringan")

devtools::install_github("yihui/xaringan")
```

1.4 Discussion

This book will use the CRAN version. Specifically version `0.6`.

Chapter 2

Getting started with xaringan

2.1 Problem

You want to start using `xaringan` to create slide decks in RMarkdown.

2.2 Companion Deck

slides

deck Rmd

2.3 Solution

`xaringan` outputs a number of folders and files to contain everything necessary to create your slides. Because of this, I suggest using an RStudio Project to keep everything nice and tidy. From RStudio:

```
File -> New Project... -> New Directory -> New Project
```

Then create a `xaringan` slide deck from the template provided by the package.

```
File -> New File -> R Markdown -> From Template -> Ninja Presentation
```

2.4 Discussion

The template is the easiest way to get started with `xaringan`. It provides a full working example of the things you can build. As soon as you open the template presentation, you can click `Knit` to have it immediately render a presentation in the viewer.

Chapter 3

Creating a slide

3.1 Problem

You want to create a slide in `xaringan`.

3.2 Companion Deck

slides

deck Rmd

3.3 Solution

In `xaringan`, your entire presentation is created using 1 RMarkdown file.

- Slides are separated with a triple dash, `---`. The triple dash represents the beginning of a slide.
- You can write plain text between two sets of `---` and have it show up as text on the slide.

The chunk below demonstrates how to create a slide, and add some text.

```
---

Hello reader

---
```

3.4 Discussion

There are two extra caveats here.

1) A title slide is automatically generated for you from the YAML header. This is the first chunk of information that you should see in the template. It should start with `title:`.
2) For the first slide after the title slide, you do not need to add a `---` to get it to render. It is already provided for you by the YAML header. The companion example for this lesson provides the following snippet to demonstrate this:

```
---
title: "Presentation Ninja"
subtitle: " <br/>with xaringan"
author: "Yihui Xie"
date: "2016/12/12"
output:
  xaringan::moon_reader:
    lib_dir: libs
    nature:
      highlightStyle: github
      highlightLines: true
      countIncrementalSlides: false
---

^ Everything up until now was provided for you
This is the slide following the title

---

Another slide
```

Chapter 4

Adding R chunks to slides

4.1 Problem

You want to add executable R code to a slide.

4.2 Companion Deck

slides

deck Rmd

4.3 Solution

Just like with RMarkdown/Notebooks, you can add executable R code with chunks. While on a slide, just add a chunk like you would with RMarkdown, and type the code that you want to execute.

````
---

Here is some R code

```{r}
1 + 1
```

---
````

This will render both the R code AND the output. We can use this to programmatically generate images in our slides. By setting `echo=FALSE`, only the image is shown on the slide.

````
---

We can use this to generate images programatically

```{r, echo=FALSE}
plot(cars)
```
````

4.4 Discussion