MARKDOWN CONTENT

```markdown
## Part 1: **Setup**

>"The only difference between a mob and a trained army is organization" - *Calvin Coolidge*

Just like all aspects of life, organizing your files in R can maximize effectiveness and reduce frustration. One way to achieve that is to organize all the bits and pieces of your data analysis into a folder on your computer that holds all files relevant to the particular piece of your assignment or data analysis.  Fortunately, R studio provides a very simple method to create a self-contained ***Project*** that helps achieve that functionality. Most Importantly, storing all your files in a project also ensures your code to work, even if you move your files around your computer or onto other computers.

*Not Convinced*? Let's try out an example:

### *Without organizing files in an R project*

(***Please Follow all Directions carefully***)

* Create a folder named `lab1` in any location where you are **NOT** planning to store your labs. (Note: we will delete this folder later)

* Create two folders inside the `lab1` folder: `data` and `scripts`.

* Download and unzip the data files from <https://geog215-spds.rbind.io/labs/lab1/data/lab1_data.zip> and save them (the unzipped files) in the `data` folder.

* Open Rstudio

* Set your working directory to the `lab1` folder. This is going to be your "parent" directory for the analysis (Hint: You can either do this by writing a command in the console, or you can use a command from the RStudio menubar). If you do not know how to do this you can check the "Set/change working directory" section in <http://www.sthda.com/english/wiki/running-rstudio-and-setting-up-your-working-directory-easy-r-programming>

* You are now going to save all your commands in an R script. Create a new R script called `lab01_01_YOURLASTNAME.R` and store it in the `scripts` folder. (You can either do this writing a command in the console, or you can use a command from the RStudio menubar). If you choose to write a command in the console, open the script in Rstudio. (Note: The script will automatically open if you choose to create it through Rstudio's menu bar.)

* To ensure that you are in the right directory everytime you run your R script, copy the executed command to set your working directory in your console to set your working directory into your script. Notice the file path, it is called an ***Absolute*** path because it contains all the sub-directories on your computer required to locate the file
```

```{r eval =F}
# Hint: In mac OSX it may look like
setwd("~/path/to/my/directory")
For Windows, the command might look like :
setwd("c:/Documents/my/working/directory")
```
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RENDERED HTML

```html
<hr />
<div id="part-1-setup" class="section level2">
<h2>Part 1: <strong>Setup</strong></h2>
<blockquote>
<p>"The only difference between a mob and a trained army is organization" - <em>Calvin Coolidge</em></p>
</blockquote>
<p>Just like all aspects of life, organizing your files in R can maximize effectiveness and reduce frustration. One way to achieve that is to organize all the bits and pieces of your data analysis into a folder on your computer that holds all files relevant to the particular piece of your assignment or data analysis. Fortunately, R studio provides a very simple method to create a self-contained <strong><em>Project</em></strong> that helps achieve that functionality. Most Importantly, storing all your files in a project also ensures your code to work, even if you move your files around your computer or onto other computers.</p>
<p><em>Not Convinced</em>? Let's try out an example:</p>
<div id="without-organizing-files-in-an-r-project" class="section level3">
<h3><em>Without organizing files in an R project</em></h3>
<p>(<strong><em>Please Follow all Directions carefully</em></strong>)</p>
<ul>
<li><p>Create a folder named <code>lab1</code> in any location where you are <strong>NOT</strong> planning to store your labs. (Note: we will delete this folder later)</p></li>
<li><p>Create two folders inside the <code>lab1</code> folder: <code>data</code> and <code>scripts</code>.</p></li>
<li><p>Download and unzip the data files from <a href="https://geog215-spds.rbind.io/labs/lab1/data/lab1_data.zip" class="uri">https://geog215-spds.rbind.io/labs/lab1/data/lab1_data.zip</a> and save them (the unzipped files) in the <code>data</code> folder.</p></li>
<li><p>Open Rstudio</p></li>
<li><p>Set your working directory to the <code>lab1</code> folder. This is going to be your "parent" directory for the analysis (Hint: You can either do this by writing a command in the console, or you can use a command from the RStudio menubar). If you do not know how to do this you can check the "Set/change working directory" section in <a href="http://www.sthda.com/english/wiki/running-rstudio-and-setting-up-your-working-directory-easy-r-programming" class="uri">http://www.sthda.com/english/wiki/running-rstudio-and-setting-up-your-working-directory-easy-r-programming</a></p></li>
<li><p>You are now going to save all your commands in an R script. Create a new R script called <code>lab01_01_YOURLASTNAME.R</code> and store it in the <code>scripts</code> folder. (You can either do this writing a command in the console, or you can use a command from the RStudio menubar). If you choose to write a command in the console, open the script in Rstudio. (Note: The script will automatically open if you choose to create it through Rstudio's menu bar.)</p></li>
<li><p>To ensure that you are in the right directory everytime you run your R script, copy the executed command to set your working directory in your console to set your working directory into your script. Notice the file path, it is called an <strong><em>Absolute</em></strong> path because it contains all the sub-directories on your computer required to locate the file</p></li>
</ul>
<div class="sourceCode" id="cb1"><pre class="sourceCode r"><code class="sourceCode r"><a class="sourceLine" id="cb1-1" data-line-number="1"><span class="co"># Hint: In mac OSX it may look like</span></a>
<a class="sourceLine" id="cb1-2" data-line-number="2"><span class="kw">setwd</span>(<span class="st">&quot;~/path/to/my/directory&quot;</span>)</a>
<a class="sourceLine" id="cb1-3" data-line-number="3">For Windows, the command might look like <span class="op">:</span></a>
<a class="sourceLine" id="cb1-4" data-line-number="4"><span class="kw">setwd</span>(<span class="st">&quot;c:/Documents/my/working&quot;</span>)</a>
```

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