Read me for Tableau Desktop Dashboard Design

**AS of 11/8/2020**

NOTES: BEFORE YOU BEGIN:

The Tableau 2020.1 version is installed in the Downloads folder and needs to be executed on each student’s machine. Even after you execute it, the students will be asked every time they open Tableau, to clarify that we are continuing the trial.

**\*\*Be sure to go to the Windows “View” menu and select “File Name Extensions” and “Hidden Items”. Once we create the actual image that Bruce gives us, we will do this in advance. This is just a reminder.**

All files for this class (Tableau Learning) will be located at ONLC’s repository on GitHub. To access these files (you and the students):

1. Go to github.com/ONLC-ClassMaterials
2. Find the repository named : Tableau Desktop Level 3 Dashboards A Deep Dive
3. Click the green “Code” button and save the .zip file
4. **Extract where desired.**

**\*\*\*\*This class has an e-book and in the “Before Starting” section, there is also an Author’s One Drive which contains all the files for this class. His files include only Solution files and one Start File. We have created all the other Starter files, etc. that we will need for class and they are up on the GitHub repository above.**

For Tableau Desktop Dashboard Design, the students will download the class files and put them directly on the desktop, in a folder called “ClassFiles”.

This classes uses a Kindle e-BOOK. When opening the Table of Contents, you will see that the book contains 9 chapters, each with a different type of Dashboard for the students to create. The students will love it as we move from basic to very detailed to analytical to some really fun examples too!

**Update: 11/8/2020 – Students should not create any data sources, they are in place for all files. The author’s data files were a mess… they have all been changed so that all labs work**

**Dashboard design class has been completely re-vamped with regard to the files students will download. For each chapter, you will find a separate folder. In each folder you will find:**

**SOLUTION file – all sheets and dashboards are complete**

**STARTER\_CompleteSheets – all sheets are done, Students will only do dashboards**

**STARTER\_EmptySheets – All sheets are empty, Students will have to create sheets and Dashboards**

**Timing Options:**

**FROM DATA ONLY: Students start with the “BlankSheets” option. This has no starter files, but the data is connected already.**

**FROM STARTER: Students start with the “CompleteSheets” starter that contains data and starter sheets and they only need to create the dashboard.**

**FROM SOLUTION: Students do no hands on work, but instead open and work with the solution.**

**All students have different learning needs, practice needs, time constraints, meetings to attend, etc. For this reason, they can choose their desired option when it comes to creating the various Dashboards in this book.**

**UPDATE 11/8/2020**

**\*\*Take the opportunity here to show the students how to work with the “CompleteSheets” files. Their purpose here is to learn about dashboards, so from this chapter forward, everyone should start with the “CompleteSheets” .twbx files, or the SOLUTION .twbx files, if they do not wish to complete the labs. The EmptySheets.twbx files are in every chapter, but should only be used by students at work, or home, after class is over. Otherwise, they won’t have time in two days to finish all dashboards.**

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| **MOST IMPORTANT TO TELL THE STUDENTS** |
| **FROM CHAPTER 3 and FORWARD:**  **Students should read through each lesson, so they can see what took place before the dashboard, and they can click on each sheet to solidify the concepts in the book.**  **THEN, they should start building the dashboards where they start in each chapter in the book.**  **They can always build from scratch from home or office after class is over** |

**Also, for the sake of the trainers, we have introduced a Level of Difficulty for each chapter, based on the pre-requisites for this class. They are:**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**CHAPTER WORKOUT 1 – Personal Finance Dashboard**

**Chapter 1 Data Sources: W1 Personal finance dataset.xlsx**

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| **Start from Scratch – only so you can use this chapter as a review and get students on the same page with tableau data sources, sheets, and dashboards. This should level the experience of all students. Plus, its very simple, with only a few sheets.** |
| ***Creating a workbook: DashboardDesign\_Chapter1\_Starter.twbx***  ***Connecting to Data Source: W1 Personal finance dataset.xlsx***  ***Creating 3 worksheets:***   * ***Cash Balance by Date*** * ***Cash Balance by Account*** * ***Expenditure by Month*** * ***Personal Finance Dashboard***   ***Total Time: 20-30 Minutes (up to 45 min if students are brand new to Tableau because we are doing this with the students from scratch)*** |
| **Kindle Location: 58** |
|  |
| **Start with Starter: DashboardDesign\_Chapter1\_Starter.twbx** |
| **Use the data connection and the worksheets already in the Workbook. Create the Personal Finance Dashboard – 10 Minutes** |
| **OR** |
| **View/Use Solution: DashboardDesign\_Chapter1\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |
| **Kindle Location: N/A** |

**Trainers: The three sheets are very basic in this chapter but contain good info about dimensions and measures, date hierarchies, Quick Table Calculations, Totals and Continuous vs. Discrete**

**The dashboard is basic but introduces Vertical and Horizontal containers and blanks**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**CHAPTER WORKOUT 2 – Superstore Basic Sales Dashboard**

**Chapter 2 Data Sources:**

* **Sales Commission**
* **Sales Target Extract**
* **Sample-Superstore**

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| **Start from Scratch only so you can review with students (a second time):** |
| **Start a new Tableau Workbook**  **Connect the data**  **Creating 4 worksheets and 1 Dashboard**  **Total Time: 45 Minutes** |
| **Kindle Location 397** |
|  |
| **Start from W2\_Starter\_EmptySheets** |
| **Open Workbook: W2\_Starter\_DataOnly.twbx**  **Creating 4 worksheets, Create a Dashboard**  **Total Time: 45-60 Minutes** |
| **Kindle Location 417** |
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| **Start from W2\_Starter\_CompleteSheets.twbx** |
| **Use the data connection and the worksheets already in the Workbook. Create the Superstore Year Results Dashboard – 30 Minutes** |
| **Kindle Location: 517 (bottom)** |
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| **View/Use Solution: W2\_Chapter2\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |
| **Kindle Location: N/A** |

**Trainers: The four sheets created are all a bit different but use the Show Me in some cases, and in addition, use filter and right-mouse click for continuous fields**

**The dashboard is a bit more complex than the one in Chapter 1, but teaches how to get rid of things you don’t want on Dashboards, using Vertical and Horizontal containers and a Filter Action on the Dashboard.**

**The naming convention for these files is talked about in the LAB, by the Author. “W2” stands for “Workout 2”**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**UPDATE 11/8/2020**

**\*\*Take the opportunity here to show the students how to work with the “CompleteSheets” files. Their purpose here is to learn about dashboards, so from this chapter forward, everyone should start with the “CompleteSheets” .twbx files, or the SOLUTION .twbx files, if they do not wish to complete the labs. The EmptySheets.twbx files are in every chapter, but should only be used by students at work, or home, after class is over. Otherwise, they won’t have time in two days to finish all dashboards**

**CHAPTER WORKOUT 3 – Airbnb’s in New York**

**Trainers, here are the custom colors you can copy out of this file, if you plan to do any demos (this is in the students file as well, for their information).**

**HTML CUSTOM COLORS:**

**Rausch: #FF5A5F**

**Babu: #00A699**

**Arches: #FC642D**

**Hof: #484848**

**Foggy: #767676**

* **W3 Airbnb reviews.csv (extract used here – only an FYI – wont deal with datasets)**
* **W3 Airbnb listings.csv (extract used here – only an FYI – wont deal with datasets)**

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| **Start from DashboardDesign\_Chapter3\_Starter\_CompleteSheets.twbx** |
| **Create 1 Dashboard** |
| **Total Time: 45-60** |
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| **View/Use Solution: DashboardDesign\_Chapter3\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |

**Trainers: There are seven sheets, filters, parameters, calculations, converting to dimensions and converting data types. The dashboard is complex (but excellent).**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**CHAPTER WORKOUT 4 – Billboard Hot 100 Analytics**

**Chapter 4 Data Sources:**

**W4**

* **W4 Features dataset.csv**
* **W4 Music dataset.csv**

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| **Start from DashboardDesign\_Chapter4\_Starter\_CompleteSheets.twbx** |
| **Create dashboards(4), Story(1)** |
| **Kindle Location: 1223– If you do not want to create any sheets, but want to jump right into creating the dashboards and story.** |
| **Total Time: 45-60 Min.** |
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| **View/Use Solution: DashboardDesign\_Chapter4\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |
| **Kindle Location: N/T** |

**Trainers: There are 7 sheets, 4 dashboards and their (1) first story. These labs introduce filters, stack charts, filters, some basic bar charts and trend lines. The dashboards are cool because they are beautiful, putting like charts together and then creating a story that includes dashboards, not just sheets. Interesting data. Not hard work, but a lot of it. Great Lab.**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**CHAPTER WORKOUT 5 – World Population Dashboard**

**Chapter 5 Data Sources:**

* **W5 GDP by country.csv**
* **W5 Population by Country.csv**
* **W5 Country details.csv**
* **W5 Countries of the World**

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| **Start from DashboardDesign\_Chapter5\_Starter.twbx** |
| **Create dashboards(1), Story(1)** |
| **Kindle Location: 1544– If you do not want to create any sheets, but want to jump right into creating the dashboards and story.** |
| **Total Time: 45-60 Min.** |
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| **View/Use Solution: DashboardDesign\_Chapter5\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |
| **Kindle Location: N/T** |

**Trainers: There are 7 sheets, 1 dashboard and 1 story. These labs introduce calculations (including LOD), filters, and sets with Outliers. It is only 1 story and 1 dashboard but it shows that once the more difficult tasks are done on the sheets, it pays off for the dashboard and story.**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**CHAPTER WORKOUT 6 – USA Colleges Dashboard**

**Chapter 6 Data Sources:**

* **W6 IPEDS\_Data US Colleges.xlsx**

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| **Start from DashboardDesign\_Chapter6\_Starter\_CompleteSheets.twbx** |
| **Create dashboards(1)** |
| **Kindle Location: 1776– If you do not want to create any sheets, but want to jump right into creating the dashboards and story.** |
| **Total Time: 30-45 Min.** |
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| **View/Use Solution: DashboardDesign\_Chapter6\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |
| **Kindle Location: N/T** |

**Trainers: There are 6 sheets and 1 dashboard only. But the dashboard is complex and will challenge the students, even if they don’t do the sheets in the chapter. These labs introduce a great use of text properties in sheets and on a dashboard, mapping, pivots, and formatting.**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**CHAPTER WORKOUT 7 – FIFA 19 – Player Rank Dashboard**

**Chapter 7 Data Sources:**

* **W7 fifa 19\_dataset.csv (French Internationale de football association – year 2019)**

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| **Start from DashboardDesign\_Chapter7\_Starter\_CompleteSheets.twbx** |
| **Create dashboards(1)** |
| **Kindle Location: 1776– If you do not want to create any sheets, but want to jump right into creating the dashboards and story.** |
| **Total Time: 30-45 Min.** |
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| **View/Use Solution: DashboardDesign\_Chapter7\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |
| **Kindle Location: N/T** |

**Trainers: There are 6 sheets and 1 dashboard only. Parameters are included, calculated fields (including LOD), Filters, Graphs, Folders and Floating Items in Dashboards. If the students are starting with the starter\_dataonly files, they have a lot of work to do with calculations. They can, as an alternative copy and paste those from solution. Also, ALL the calculations were left in all the projects because there were so many. Students can open them to look at them.**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**CHAPTER WORKOUT 8 – Olympics Dashboard**

**Chapter 8 Data Sources:**

* **W8 Athlete events.csv**
* **W8 noc\_regions.csv**

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| **Start from DashboardDesign\_Chapter8\_Starter\_CompleteSheets.twbx** |
| **Create dashboards(1)** |
| **Kindle Location: 1776– If you do not want to create any sheets, but want to jump right into creating the dashboards and story.** |
| **Total Time: 30-45 Min.** |
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| **View/Use Solution: DashboardDesign\_Chapter8\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |
| **Kindle Location: N/T** |

**Trainers: There are 5 sheets and 1 dashboard only. Parameters are included, calculated fields, converting data types, converting dimensions to measures, using filters, parameters and highlight action. If students are doing this from scratch it is quite a bit of work.**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**

**CHAPTER WORKOUT 9 – You Tube Trending Dashboard**

**Chapter 9 Data Sources:**

* **W9 US Videos.csv**
* **W9 US Category id.json**

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| **Start from DashboardDesign\_Chapter9\_Starter\_CompleteSheets.twbx** |
| **Create dashboards(1)** |
| **Kindle Location: 2363– If you do not want to create any sheets, but want to jump right into creating the dashboards and story.** |
| **Total Time: 30-45 Min.** |
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| **View/Use Solution: DashboardDesign\_Chapter9\_Solution.twbx** |
| **Open the solution file to view, copy/paste objects, or if you want to skip lab – no lab time** |
| **Kindle Location: N/T** |

**Trainers: There are 10 sheets and 1 dashboard only. This is an extremely difficult project because there are NO step-by-step directions. Of course all students should look at the solution at the least, but if there is time on the last day, you can leave this project optional and they can start anywhere they wish to.**

* **Easy**
* **Easy with some challenge**
* **Challenging**
* **Extremely Difficult**