Chapter 6 Tools

This chapter serves as a reference page for the tools that we will use in this course.

6.1 Google Sheets

- Cheat sheet

Part 1

6.1.1 Create or import files

- 1.1 Create a new file
- 1.2 Import and convert existing files

6.1.2 Add content to your spreadsheet

- 2.1 Enter and edit your data
- 2.2 Customize your spreadsheet
- 2.3 Work with rows, columns, and cells
- 2.4 Work with multiple sheets

6.1.3 Share and collaborate on files

- 3.1 Share files in Drive, Docs, Sheets, or Slides
- 3.2 Unshare files in Drive, Docs, Sheets, or Slides
- 3.3 Add comments and replies in Drive, Docs, Sheets, or Slides
- 3.4 Suggest edits in Docs 3.5 Chat with people directly in Docs, Sheets, or Slides

6.1.4 Print and download files

- 4.1 Print your file
- 4.2 Download versions in other formats
- 4.3 Make a copy
- 4.4 Email a copy as an attachment

6.1.5 Access your calendar, notes, and tasks

- 5.1 Open your Google Calendar and events
- 5.2 Open notes in Google Keep
- 5.3 Open your to-do lists in Google Tasks
- 5.4 Get add-ons

Part 2 - More on Google Sheets

6.1.6 Access Sheets

- 1.1 Get Sheets on your devices
- 1.2 (Optional) Add multiple Google Accounts
- 1.3 Create a browser bookmark
- 1.4 Add a Sheets desktop shortcut (Windows only)
- 1.5 Work offline (Chrome only)

6.1.7 Sheets and Excel best practices

- 2.1 Work with Excel files in Drive
- 2.2 Use Excel and Sheets together
- 2.3 Edit Excel files in Sheets
- 2.4 Import Excel data into Sheets
- 2.5 Convert Excel files to Sheets
- 2.6 Share a copy of a Sheets file in Excel format

6.1.8 Manage data in Sheets

- 3.1 Perform basic operations
- 3.2 Search for data
- 3.3 See changes to data
- 3.4 Restrict data sharing
- 3.5 Use keyboard shortcuts

6.1.9 Analyze data in Sheets

- 4.1 Add charts
- 4.2 Get automatic charts
- 4.3 Add charts to Docs and Slides
- 4.4 Functions in Sheets and Excel
- 4.5 Add pivot tables
- 4.6 Get automatic pivot tables

6.1.10 Export spreadsheets

- 7.1 Print spreadsheets
- 7.2 Download in different formats
- 7.3 Make a copy
- 7.4 Email a copy

6.1.11 Get Sheets productivity tips

- 8.1 Import data from Forms
- 8.2 Save time with templates
- 8.3 Find out if someone changes a spreadsheet

6.2 Using Tableau for Visualizations

6.2.1 Background

Tableau is heavily used among business analysts and data scientists. As we use Tableau, we will not be covering all the powerful data connections and dashboard tools in the software in our class. We will be focusing on creating different data views for visual analytics in this class. The links below will be used during the semester.

6.2.2 Registration and Download

Tableau provides free access for college students to their professional tools. They also have a Tableau public option for all users. We will be using their training videos and online guides to help us get up to speed with the tool. You will need to create a `sign up` through the link at the top right of their website to see some of the videos we will use during the semester.

1. Download Tableau Desktop and Tableau Prep here
2. Select each product download link to get started. When prompted, enter your school email address for Business Email and enter the name of your school for Organization.
3. Activate with your product key found on Canvas.

Students can continue using Tableau after the class is over by individually requesting their one-year license through the Tableau for Students program.

6.2.3 Training materials

Getting started

- Tutorial: Get Started with Tableau Desktop
  - Step 1: Connect to your data and Connection to Google Sheets
  - Step 2: Drag and drop to take a first look
  - Step 3: Focus your results
- Use Show Me to Start a View
- Understanding pill types
- Granularity, Aggregation, and Details

A little more introduction depth

Once you are logged in, the first 12 minutes of this getting started video will be the most useful. Here are some other excellent guides.

- Buidling data Views from Scratch and the Getting started with Visual Analytics 6-minute video.
- Additional features of Drag and drop fields
- Measure Values and Measure Names

Saving and exporting your work

- Export Views and Workbooks
- Print Views
- Save your Work

Editing your graphic

Part 1

- Using Shelves and Cards
- Changing the mark or geometry of the graphic
- Editing the marks or geometry
- Reference Lines, Bands, Distributions, and Boxes

Part 2

- Sorting visualization information and a 6-minute video on sorting
- Filters
- Editing tooltips
- Add annotations
- Grouping categories

6.2.4 Primary charts

We will focus on the first few charts in this section.

- Build a Histogram and Create Bins from a Continuous Measure
- Build a Line Chart
- Build a Bar Chart
- Build a Box Plot

- Build a Scatter Plot
- Visualize Benford’s Law