

Plot-a-Thon Rubric Key

| | | Achievement |
|----------------------------|--|--|
| | | Example of Outstanding/Totally Achieved-4 |
| Data Visualization Process | Cleaning Data Assessed components: -- <u>Identifies and uses data appropriate for prompt provided in Plot-a-thon</u> , -- <u>Effectively cleans data, including removing duplicates</u> -- <u>Effectively addresses challenges</u> in this process and finds an appropriate solution | <p><i>Exceptional visualizations will have identified the appropriate datasets and variables needed to tell their story. The dataset and variable selections should make logical sense and be easy for the viewer to understand,</i></p> <p><i>Well cleaned data can be proven through clear visualizations that either exclude or explain outliers, are free of coding errors that may cause disruption of the software or extraneous outliers, are free of duplicates, and make logical sense for the viewer,</i></p> <p><i>Well cleaned, transparent visualizations make data cleaning decisions clear to the viewer. When in doubt, document the decisions that you made in your data cleaning process (using notes on the visualization or in the reflection).</i></p> |
| | Analyzing and Visualizing Data through Tools (Excel, Tableau, R, or Python) Assessed components: -- <u>Effectively uses Excel, Tableau, R, or Python</u> to explore and process data -- <u>Identifies and analyzes key trends and patterns</u> that stand out or appear to provide insight, -- <u>Creates an insightful visualization</u> using the tool that highlights these key trends and patterns, paying attention to options for visualizing and details included. | <p><i>Exceptional visualizations will include effective use of its tools:</i></p> <ul style="list-style-type: none"> • Viewers are able to quickly identify key trends, patterns, and narratives. • Fully formatted titles and axes labels • Legible font • Data points/bars/etc. that are big enough to see • Effective use of color/color schemes • Legends (when necessary) |
| | Data-storytelling through an Infographic Assessed components: -- <u>Tells a compelling story about the data</u> that is easy to understand and memorable. Show intentionality in 1) data visualizations selected presented 2) word choice in title, copy, legend (if applicable) -- <u>Effectively presents at least four parts of the infographic</u> : headline, copy, visualization(s), and sources. -- <u>Effectively uses visual design</u> to communicate data and story memorably and professionally, paying attention to graphic design decisions (color, font, white space, graphics, etc.) -- <u>Engages a general audience</u> and makes them care through visuals and text; (The “So What”) | <p><i>--Exceptional data storytelling is memorable and easy to understand. These data stories provide insights or connections that are not only clear but also “sticky” to the audience—we want to read it in detail and know more.</i></p> <p><i>--All parts of the infographic (headline, copy, visualization(s), legend, sources) is complete and provides detailed language that is appropriate and relevant for the audience to understand the data story presented. Headline is catchy. Copy (description of the infographic) is clear and explains what readers should take away from the visualization.</i></p> <p><i>--Graphic design choices (color, font, images/graphics, lines, etc.) are professional, focused, and relevant in presentation. It directly supports and conveys the data story.</i></p> <p><i>--Infographic demonstrates sophistication in engaging the general U.S. audience. The infographic tells the audience why they should care and draws their attention. It also demonstrates an understanding that it is targeting this audience specifically through cultural cues/references, word choice/language, selection of graphics, images, etc. Language and visuals are relevant and appropriate for the audience.</i></p> |

| | | |
|--|--|---|
| | <p>Communicating the Project [Reflection Form]</p> <p>Assessed components:</p> <p>--<u>Provides a well organized and appropriately detailed description</u> for how the team achieved their goals, <u>and addressed the components required</u> in all three stages the data visualization process:</p> <ol style="list-style-type: none"> 1) cleaning, 2) analyzing and visualizing through tools, 3) storytelling through infographics. <p>--<u>Relates the process and experience with attention to professional speaking conventions and appeal to professional/academic audience</u>: all participants appearing in the video and speaking clearly, professional language, engaging the judging audience appropriately with relevant visuals, text, narration, etc.</p> | <p>--<i>Exemplary reflections include clear and appropriate detailed description of each of the three stages of the data visualization process</i>: 1) cleaning, 2) analyzing and visualizing through tools, 3) storytelling through infographic</p> <p>--<i>Reflections appropriately address the components that is being assessed</i> in each stage of the data visualization process, providing relevant details so that judges can understand what the team did</p> <p>--<i>Reflects displays a strong understanding of speaking and visual conventions</i> (provides introduction of speakers and conclusion, professional language, grammatically correct test, relevant visualizations, etc.) and the awareness of a professional audience.</p> <p>--<i>Each member of the team is expected to speak in the video</i></p> |
|--|--|---|