| **Instructions:**  Evaluate the homework against the outlined criteria in the below rubric, assigning a rating to each criterion. Add points earned across all criteria and convert the total points to a letter grade, assigning a “+” or “-” letter grade designation at your discretion. | | A (+/-) | 70+ | C (+/-) | 30-49 | F (+/-) | <10 | | --- | --- | --- | --- | --- | --- | | B (+/-) | 50-69 | D (+/-) | 10-29 |  |  | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Notes:**  The deployed assignment utilizes **Tableau** to complete a number of visualizations as well as providing an analysis explaining any phenomenon uncovered by these visualizations. |  |

**Rubric for Citi Bikes Analytics:**

|  | **Mastery**  **20 points** | **Approaching Mastery**  **15 points** | **Progressing**  **10 points** | **Emerging**  **5-0 points** | **Incomplete** |
| --- | --- | --- | --- | --- | --- |
| **Discovered Phenomenon Visualizations** | The submitted Tableau workbook includes all of the following:  ✓ 4-10 total visualizations  ✓ A total of 2 dashboards (1 for each phenomenon)  ✓ Data is cleaned (i.e. No outliers or bad data)  ✓ Visualizations can logically be used to discover the solved phenomenon (i.e. they are not just random visualizations) | The submitted Tableau workbook includes 3 of the following:  ✓ 4-10 total visualizations  ✓ A total of 2 dashboards (1 for each phenomenon)  ✓ Data is cleaned (i.e. No outliers or bad data)  ✓ Visualizations can logically be used to discover the solved phenomenon (i.e. they are not just random visualizations) | The submitted Tableau workbook includes 2 of the following:  ✓ 4-10 total visualizations  ✓ A total of 2 dashboards (1 for each phenomenon)  ✓ Data is cleaned (i.e. No outliers or bad data)  ✓ Visualizations can logically be used to discover the solved phenomenon (i.e. they are not just random visualizations) | The submitted Tableau workbook includes 0-1 of the following:  ✓ 4-10 total visualizations  ✓ A total of 2 dashboards (1 for each phenomenon)  ✓ Data is cleaned (i.e. No outliers or bad data)  ✓ Visualizations can logically be used to discover the solved phenomenon (i.e. they are not just random visualizations)  -OR-  ✓ Less than 4 total visualizations created. | No submission was received  -OR-  Submission was empty or blank  -OR-  Submission contains evidence of academic dishonesty |
| **City Official Requested Maps (Grade based on the map the student chose to make.)** | **Basic:**  Visualization includes all of the following:  ✓ Maps all bike stations  ✓ Station markers indicate popularity in some way (color, size, etc.)  ✓ Sections are marked by zip code  ✓ A write-up on the trends that were discovered while making the map  **Advanced:**  Visualization includes all of the following:  ✓ Maps all bike stations  ✓ Station markers indicate popularity in some way (color, size, etc.)  ✓ Ability to change marker data based on month and year  ✓ Sections are marked by zip code  ✓ A write-up on the trends that were discovered while making the map | **Basic:**  Visualization includes 3 of the following:  ✓ Maps all bike stations  ✓ Station markers indicate popularity in some way (color, size, etc.)  ✓ Sections are marked by zip code  ✓ A write-up on the trends that were discovered while making the map  **Advanced:**  Visualization includes 4 of the following:  ✓ Maps all bike stations  ✓ Station markers indicate popularity in some way (color, size, etc.)  ✓ Ability to change marker data based on month and year  ✓ Sections are marked by zip code  ✓ A write-up on the trends that were discovered while making the map | **Basic:**  Visualization includes 2 of the following:  ✓ Maps all bike stations  ✓ Station markers indicate popularity in some way (color, size, etc.)  ✓ Sections are marked by zip code  ✓ A write-up on the trends that were discovered while making the map  **Advanced:**  Visualization includes 2-3 of the following:  ✓ Maps all bike stations  ✓ Station markers indicate popularity in some way (color, size, etc.)  ✓ Ability to change marker data based on month and year  ✓ Sections are marked by zip code  ✓ A write-up on the trends that were discovered while making the map | **Basic:**  Visualization includes 0-1 of the following:  ✓ Maps all bike stations  ✓ Station markers indicate popularity in some way (color, size, etc.)  ✓ Sections are marked by zip code  ✓ A write-up on the trends that were discovered while making the map  **Advanced:**  Visualization includes 0-1 of the following:  ✓ Maps all bike stations  ✓ Station markers indicate popularity in some way (color, size, etc.)  ✓ Ability to change marker data based on month and year  ✓ Sections are marked by zip code  ✓ A write-up on the trends that were discovered while making the map  -OR-  ✓ City official requested map doesn’t exist |
| **Presentation** | **Presentation:**  The Tableau story includes all of the following:  ✓ Phenomenon visualizations  ✓ Phenomenon dashboards  ✓ One of the city official’s requested maps  ✓ Arranged in a logical order (i.e. Visualizations for each phenomenon with each other, not all mixed up.) | **Presentation:**  The Tableau story includes 3 of the following:  ✓ Phenomenon visualizations  ✓ Phenomenon dashboards  ✓ One of the city official’s requested maps  ✓ Arranged in a logical order (i.e. Visualizations for each phenomenon with each other, not all mixed up.) | **Presentation:**  The Tableau story includes 2 of the following:  ✓ Phenomenon visualizations  ✓ Phenomenon dashboards  ✓ One of the city official’s requested maps  ✓ Arranged in a logical order (i.e. Visualizations for each phenomenon with each other, not all mixed up.) | **Presentation:**  The Tableau story includes 0-1 of the following:  ✓ Phenomenon visualizations  ✓ Phenomenon dashboards  ✓ One of the city official’s requested maps  ✓ Arranged in a logical order (i.e. Visualizations for each phenomenon with each other, not all mixed up.)  -OR-  ✓ Tableau story doesn’t exist |
| **Analysis** | **Analysis**  The submitted analysis should include all of the following:  ✓ Analysis on both uncovered phenomena, using the dashboards as a visual guide.  ✓ Analysis on the chosen city official requested map detailing any noticeable trends  ✓ Both write-ups are logically sound  ✓ Write-ups are written in a manner that a non-data scientist/analyst could understand. | **Analysis**  The submitted analysis should include 3 of the following:  ✓ Analysis on both uncovered phenomena, using the dashboards as a visual guide.  ✓ Analysis on the chosen city official requested map detailing any noticeable trends  ✓ Both write-ups are logically sound  ✓ Analyses are written in a manner that a non-data scientist/analyst could understand. | **Analysis**  The submitted analysis should include 2 of the following:  ✓ Analysis on both uncovered phenomena, using the dashboards as a visual guide.  ✓ Analysis on the chosen city official requested map detailing any noticeable trends  ✓ Both write-ups are logically sound  ✓ Analyses are written in a manner that a non-data scientist/analyst could understand. | **Analysis**  The submitted analysis should include 0-1 of the following:  ✓ Analysis on both uncovered phenomena, using the dashboards as a visual guide.  ✓ Analysis on the chosen city official requested map detailing any noticeable trends  ✓ Both write-ups are logically sound  ✓ Analyses are written in a manner that a non-data scientist/analyst could understand.  -OR-  ✓ Write-ups not submitted |