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| --- | --- | --- | --- | --- | --- |
|  | **Excellent** | **Good** | **Needs work** | **Points** | **Comments** |
| **Data**  **cleaning**  10 points | 10, 9 | 8, 7, 6 | 5, 4, 3 |  |  |
| * Data are read in and modified such that all variables are properly encoded and appropriately named. * Description is accurate, informative, and detailed. | * Data are read in and modified such that most variables are properly encoded and appropriately named. * Description is accurate but incomplete. | * Data are read in but some variables are not properly encoded. * Description is poor or missing. |  |  |
| **Data**  **summary**  10 points | 10, 9 | 8, 7, 6 | 5, 4, 3 |  |  |
| * Measures of centrality and variability in appropriate variables are computed. * At least two new useful measures are computed. * Description is accurate and informative. | * Measures of centrality and variability in appropriate variables are computed. * At least one new useful measure is computed. * Description is accurate but only mildly informative. | * Measures of centrality / variability are missing. * Fail to compute new useful measures. * Description is poor or missing. |  |  |
| **Data visualizations**  20 points  (10 each) | 10, 9 | 8, 7, 6 | 5, 4, 3 | Viz 1: |  |
| * Charts expertly demonstrate the best practices of visual design and convey a clear message. * Charts are functionally accurate and are generally easy to understand. | * Charts generally demonstrate best practices of visual design. * Although accurate, there are some elements that may be confusing. | * Charts generally lack best practices of visual design. * Elements are confusing. | Viz 2: |  |
| **Analysis**  **description**  10 points | 10, 9 | 8, 7, 6 | 5, 4, 3 |  |  |
| * Informative description of the design flaws in the original chart and the improvements the revised charts make to correct them. * Clear description of the messages revised charts communicate. | * Description of one or two of the design flaws in the original chart and the improvements the revised charts make. * Description of the messages of revised charts is accurate but incomplete or mildly informative. | * Poor description of the design flaws in the original chart and the improvements made in revised charts. * Description of messages of revised charts is poor or missing. |  |  |
| **Technical**  **things**  10points | 10, 9 | 8, 7, 6 | 5, 4, 3 |  |  |
| * All code runs without errors. * All code and data are included in the submitted .zip file. * Analysis is fully reproducible (i.e. .Rmd file compiles). | * Code has only one or two errors. * All code and data are included in the submitted .zip file. | * Code has multiple errors. * Submitted .zip file is missing key components to be able to reproduce the analysis. |  |  |
|  |  |  | ***Total* :** |  |  |