**FinTech Unit 6 Homework: Grading Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Ratings** | | | |
| **Rental Analysis** • Number of housing units per year calculated.  • Bar chart visualization of rental analysis results.   **Average Housing Costs in San Francisco per Year** • Average gross rents and sales prices per year calculated . • Line plots for gross rents and sales prices per year generated. | **20 Points Mastery** • Completed 4 out of 4 requirements • Code runs without error and produces the assigned results • Code accounts for all possible scenario  • Code is free of bugs | **19 > 16 Points Approaching Mastery** • Completed 3 out of 4 of requirements • Code runs without error • Code produces results as expected 80% of the time | **16 > 14 Points Progressing** • Completed 2 out of 4 requirements • Code runs without error  • Code produces results, but not necessarily the correct results | **14 > 0 Emerging** • Completed 1 or none out of the 4 requirements • No submission • Code runs with error |
| **Average Prices by Neighborhood** • ***sales\_price\_per\_sqr\_foot*** and **gross\_rent** calculated for each year. • ***sales\_price\_per\_sqr\_foot*** and **gross\_rent** per year visualized on hvplot line plots.   **Top 10 Most Expensive Neighborhoods** • DataFrame created with mean house values by neighborhood per year. • ***average\_house\_value mean*** visualized per year, neighborhood dropdown selector added. | **20 Points Mastery** • Completed 4 out of 4 requirements • Code runs without error and produces the assigned results • Code accounts for all possible scenario  • Code is free of bugs | **19 > 16 Points Approaching Mastery** • Completed 3 out of 4 of requirements • Code runs without error • Code produces results as expected 80% of the time | **16 > 14 Points Progressing** • Completed 2 out of 4 requirements • Code runs without error  • Code produces results, but not necessarily the correct results | **14 > 0 Emerging** • Completed 1 or none out of the 4 requirements • No submission • Code runs with error |
| **Comparing Cost to Purchase Versus Rental Income** • Hvplot used to generate bar chart comparing sales price and gross rents side by side • Neighborhood dropdown selector added.  **Neighborhood Map** • Create a DataFrame joining the neighborhood location data with rent and sales data.  • Generate an interactive map with average prices per neighborhood. | **15 Points Mastery** • Completed 4 out of 4 requirements • Code runs without error and produces the assigned results • Code accounts for all possible scenario  • Code is free of bugs | **14 > 11 Points Approaching Mastery** • Completed 3 out of 4 of requirements • Code runs without error • Code produces results as expected 80% of the time | **11 > 9 Points Progressing** • Completed 2 out of 4 requirements • Code runs without error  • Code produces results, but not necessarily the correct results | **9 > 0 Emerging** • Completed 1 or none out of the 4 requirements • No submission • Code runs with error |
| **Dashboard** • Rental analysis code ported over into self contained functions. • Interactive dashboard encompassing each functional visualization. | **15 Points Mastery** • Completed 2 out of 2 requirements • Code runs without error and produces the assigned results • Code accounts for all possible scenario  • Code is free of bugs | **14 > 11 Points Approaching Mastery** • Completed 1 out of 2 of requirements • Code runs without error • Code produces results as expected 80% of the time | **11 > 9 Points Progressing** • Completed fewer than 1 out of 2 requirements • Code runs without error  • Code produces results, but not necessarily the correct results | **9 > 0 Emerging** • Completed 0 out of 2 requirements • No submission • Code runs with error |
| **Coding Conventions/Formatting**  • Appropriate header, name, short description at top of the notebook  • Imports are at the top of the file, just after any headers or subheads.  • Files read in from relative file path  • Functions and variable names are descriptive, lowercase, with words separated by underscores  • Clean code, no repetition, maintainable and highly reusable code.  • Appropriate code wrapping and cell sizes  • Appropriate subheads as needed | **10 Points Mastery** | **9 Points Approaching Mastery** | **8 Points Progressing** | **8 > 0 Emerging** |
| **Deployment/Submission**  • Files submitted in personal repo • Appropriate directory structure with correct files needed to run scripts  • Appropriate commit messages  • Appropriate README | **10 Points Mastery** | **9 Points Approaching Mastery** | **8 Points Progressing** | **8 > 0 Emerging** |
| **Documentation/Comments**  • Code is well commented with concise, relevant comments | **10 Points Mastery** | **9 Points Approaching Mastery** | **8 Points Progressing** | **8 > 0 Emerging** |
| **Cost Analysis (Optional Challenge) •** Create a parallel coordinates plot of most expensive neighborhoods in San Francisco per year. • Create a parallel categories plot of most expensive neighborhoods in San Francisco per year. •Create a sunburst plot of most expensive neighborhoods in San Francisco per year. | **30 Points Mastery** • Completed 3 out of 3 requirements • Code runs without error and produces the assigned results • Code accounts for all possible scenario  • Code is free of bugs | **20 Points Approaching Mastery** • Completed 2 out of 3 of requirements • Code runs without error • Code produces results as expected 80% of the time | **10 Points Progressing** • Completed 1 out of 3 requirements • Code runs without error  • Code produces results, but not necessarily the correct results | **0 Emerging** • Completed 0 out of 3 requirements • No submission • Code runs with error |