Project Name: Create a Tableau Story

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Summary:

- Prosper is a peer-to-peer (P2P) lending platform, with over $10 billion in funded loans, where individuals can either invest in personal loans or request to borrow money.
- On Prosper, borrowers list loan requests between $2,000 and $35,000 and individual investors invest as little as $25 in each loan listing they select.
- Prosper handles the servicing of the loan on behalf of the matched borrowers and investors.
- This analysis will serve as a reference for those interested in exploring opportunities in the peer-to-peer lending world!

Design:

- Design Decisions:
    - Audience:
        - Udacity Reviewer's and Students.
        - Potential investors and borrowers.
        - Individuals interested in Peer-to-Peer lending.
    - The visualization will address the following:
        - Key attributes in the dataset I will be focusing on are: interest rate and risk. This is to help potential investors/borrowers make informative decisions.
        - Relationships between the key attributes.
        - Interesting/Unusual data points.
        - Interactive views showing how the key attributes change based on the different variables/values.
    - Chart Types:
        - Map: this chart will be used to visualize the data geographically (per state) and help the readers understand (explore) how the key attributes vary depending on the state.
        - Bar chart: bar chart will be utilized significantly as the dataset include many categorical variables (such as: employment status, loan category, risk rating, etc.), and it would help to use bar charts to compare specific measures across the different categories.
        - 100-stacked bar charts: this type will be used to show the breakdown of loan status (Good Standing vs. Delinquent) across specific categorical variables.
        - Boxplot: this type will also be used to compare distributions of specific measures (such as interest rate) across categorical variables (Risk Score).
        - Scatterplot: this type will be used to plot two measures (such as interest rate and debt-to-income) to identify any possible correlations.
        - Text table: this type will be used conservatively to show very specific values to help the reader spot the exact values explained in the description.
    - Encoding:
        - Color Marks: I will use colors mainly to differentiate between Good Standing loans from Delinquent ones.
        - Filters: I will use interactive filters and Shelf filters.
        - Field/value calculations: calculate specific values for the reader or fields to be used to organize (sort) the 100-stacked bar chart.

Feedback:

#	Reviewer	Feedback	Action
1	Peer review	Update the text in the introduction section to highlight the key information the reader needs to focus on.	Done.

2	Peer review	Delete the gridlines in the Summary (by State) dashboard as it is creating unnecessary distraction.	Removed gridlines from the charts when necessary.
3	Peer review	Consider adding Loan Category filter to the (Summary by Status dashboard)	Removed the dashboard after the first Udacity Review.
4	Peer review	Change the position of the risk score and prosper rating chart so they are aligned horizontally.	Removed the dashboard after the first Udacity Review.
5	Peer review	Change the location of the description in dashboards 5, 6, 7, and 8 to be on the right of the charts.	Done.
6	Peer review	Consider increasing the number of categories and occupations from top 10 to top 20 in dashboards 7 and 8.	Removed the dashboard after the first Udacity Review.
7	Peer review	Use a larger font for numbers and special values in the dashboard descriptions.	Done.
8	Peer review	Consider adding a sentence to advise the reader to hover the mouse over the map to filter data.	Done.
9	Udacity Review	To do this I recommend that you look back through your charts and see if any trends intrigue you or otherwise stand out. Then interrogate the dataset to see if you can find out what's behind the trend; this is bound to involve looking at relationships between variables.	Reduced the story points from 10 to 6, also created new dashboards to focus on providing insights/explain some of the correlations between the different variables. Here I mainly focused on Interest Rate, Risk Score, and Debt to Income Ratio.
10	Udacity Review	Please detail the reasoning behind your design decisions.	Updated the design section to include how the design decisions were made.
11	Udacity Review	Please also make a brief comment in your write-up on the changes you made.	Added a link to the draft version in the Versions section.

Resources:

As part of DAND, I performed an Exploratory Data Analysis on the dataset using R. I relied on this analysis to determine which areas to focus my visualizations on. Here is the link: http://rpubs.com/tkannab/dand-eda

Versions

#	Version	Link
1	First Draft – Peer Review	https://public.tableau.com/profile/toufik.kannab#!/vizhome/DAND-T2-P4-Draft/Prosper
2	Final Version – Revised	https://public.tableau.com/profile/toufik.kannab#!/vizhome/DAND-T2-P4/Prosper