Online link:
tableau public source

Summary:

The idea was to find customers that met problems returning their loans back and for some reason gotten into "charged off" or "defaulted" groups. I was trying to analyze which states, income levels, credit scores, loans amount have increased chances to be a nest for problematic customers. Each slide step by step leads to the final outcome. In a first place, I looked into states to find %(of total rows) with problems, then listed out popular loan bins and how they change over time. Next step was to see problematic groups in their income level bins and finally get everything together to find most problematic credit scores, income levels and loans bins.

Design:

Most of items require user interaction: click, hover, select category, etc. To skip state of filters, click somewhere at "empty" space within plot.

V2 improvements:

For slide 1: I mostly used grey and shades of grey to present information as information itself very plain there was no need to introduce many colors. As requested I changed font, colors, tooltips. Removed redundant actions and interactions. Moved filter on top of slide. Changed annotation.

For slide 2: I colored bars to match with lines that are showing each loan group in time (8 groups 8 colors). To be not distracted by colors you can simply choose 1 bar and 1 line. Default state changed to show up all the rows together. Plot over time changed from all statuses to only bad ones.

For slide 3: I decided to add few colors just to be a bit more visually organized. 2 colors for bars to visually address differences between groups. Box plots could grey but I added a bit of light purple just to separate two plots. I was about to color box plot same as did for bars but did not found the way to make single box to be colored.
AS requested replaced Income level filter and put it on top. Removed other filtering actions. Renamed title, reorganized text.

For slide 4: Default light colors of tree map and 2 colors for the map: 1 for all states and 1 to pay attention to.
Removed endless tooltip, added percent's to tooltip. Outcome section has been enlarged and added new info.

V3 improvements:
   a. To focus on charged off and defaulted groups I filtered out everything not related to the problem. From slide 1.

b. Annotations have been changed to set the scene.
c. To stay consistent all the colors were changed over all slides and remained constant through all plots.
d. Titles and colors were changed on slide one to focus on one idea. Added short summary.
e. Slide2: I did not remove loans per category just made a bit narrower. Gave more space to line chart. Added short summary, changed titles.
f. Slide3: Box plots were removed. Gave more space for bar chart. Title has been changed as well as annotation. Sorted bars on Income Range, mentioned bins=5k. Applied colors.
g. Slide4: Added separation by color + ability to filter to get the biggest or tiniest groups. Added summary, changed annotation.

Feedback:

- Not recognizable colors on the map, text not visible on deep grey scale. Gradation in numbers not so big as colors suggest.
- Titles don't speak of them self.
- Check past due values in filter, few of them have just several rows and plot showed nothing valuable.
- Slide 1 filter to far away from user's focus.
- Data in tooltips is not useful.
- Add percent's to annotation.
- Change over time lines in relative percent's are not clear what that means.
- Slide2: Not clear lines should or should not sum up to 100%, whether these lines are only defaulted/charged data or whole data and statuses together.
- Diff with previous year not so obvious metric in relative percent's.
- Bad tooltips.
- Change title to mentioned amount of loans rather than loans.
- Change default states of animations.
- Popularity should cut against year but not range of dates.
- Slide 3 title group-criteria.
- Overlapping pictures.
- to remove 5k bins from title.
- color of whiskers should be aligned
- Change filter position from bottom to the top and ban actions on bar charts.
  19 typo in chart slide 4
- Long not informative tool tip.
- Tree map add tooltip and % + charged and defaulted groups.
- Add more outcomes as it looks like all info could be shown one last slide and came from the last slide.

Without help it was hard to navigate through slides, ideas were not clear until explained. Likely needed to add more text and place the filters in a plain sight to invite the one to select something before make any statements. Tooltips were helpless. Connection between slide not obvious. it would not have changed anything if there was only one last slide.

2)
You're off to a good start, but there is some work to be done yet here. Without trying to discourage you in the least, I'll be honest with you so that you can, in turn, be realistic about the changes that still need to be made to this project: Your project is difficult to follow and requires considerable cognitive effort on the part of the reader to decipher and interpret. It's not that we, as data visualization designers, are catering to lazy-minded readers. Instead, we want to make

as easy as possible for the reader to see and appreciate the trends in the data so that they can spend their mental effort coming to wider conclusions about the implications of those trends.

Please consider these points regarding your presentation:

- Try to stay consistent in how you encode variables across all the story points in your presentation. This takes some of the cognitive load off the reader as they don't have to re-orient themselves to a whole new set of encodings with each new slide. It can also facilitate quick interpretation of your charts; if the reader learns in the first chart that problematic loans are encoded with a specific color and sees that color on subsequent slides, they'll be able to identify it immediately. In the first slide you've decided on grayscale palette, and in your write-up, you explain that color is unnecessary in this slide. I recommend reconsidering this. On the one hand, your first slide can be an opportunity to encode variables or their levels with colors that will then be used throughout the presentation. Or nn the other, it can help highlight contrasts in the data.
- The line plot **"Changes Over Time"** on your first slide appears to be the most relevant to where you're going with the story points, but it's very difficult to interpret. A few things that I would recommend are to make sure the axis labels are legible, choose a more descriptive title (changes in what?), add color so that it's clear that each line represents a different category of loan, give the plot more space on this slide or even it's own slide since as it stands now the compressed vertical axis makes the line plots look flat.
- **"Loans per category"** on the second slide, and **"Loan popularity"** on the first slide are really two visual perspectives on the same data. Please consider consolidating these into a single chart.
- In the chart **"Chargedoff and Defaulted groups over time"**, without a vertical axis label, it's not clear what the percentages are describing; it looks like percent of problematic loans, though. You could add an axis label or just clarify this in the title.
- In the second slide, really nice job, highlighting the influence of the financial crisis and adding the filtering action so that both charts respond in unison to reader interaction.
- Great job of presenting the interaction of multiple variables in the first chart on the third slide. You did a good job of designing this plot, and I'd recommend giving it more space. Since it is a bit more complex then some of the other charts, I'd even recommend giving it its own slide. Also, I'd recommend sorting the bars by income level instead of percent of problematic loans. Importantly, you need to clarify what the upper and lower horizontal axis bin labels represent. As it stands now, the only label says "Income level" above what I think are the bins for loan amount.
- In my opinion, the first chart on the third slide captures most of what is in the neighboring boxplot, and they may be a bit redundant.
- On the final slide, I think you have a really good idea of how to show the profile of those most likely to have problematic loans. But it took a long time to figure out how to interact with the slide and what each of the two tree charts represent. A few questions to ask yourself: How can you make the tree charts more intepretable? Is the map necessary? Are problematic loans distributed in a geographically meaningful way such that a map needs to be included?
- The text box on the third slide is cut off and can't be fully read. Consider moving the text into the caption box or using a smaller font.

- Throughout the presentation, percentages are used but it's not clear what they refer to. For example, "% of Total" on the hover tool in the third slide is not clear; the reader is left to ask, "Total of what?", or to assume.

I've made a number of critical marks, but with the intention of helping you put together a data product that really shines. You've done a great job so far and should be able to make the necessary modifications without too much trouble as you've done most of the heavy lifting already.