**Final Dashboard**

We built our dashboard using JavaScript and we designed the webpage using our index.html and our Cascading Style Sheet files. The final dashboard represents the loan data we obtained based on the seller name. The dropdown option includes all the banks from our dataset. For the purposes of the dashboard only 500 rows of our dataset were used. To display the charts, you can click on one selection and to refresh the page, click on the title.

**Bar Chart**

The first chart is a bar chart that shows the amount of unpaid principal balance based on the state. By selecting the seller in the dropdown options, we can see which state has a high number of outstanding balances. The higher the unpaid principal balance the higher the approval for loan applications in that particular state. For example: if we select ‘Wells Fargo Bank’ the chart will show TX and FL as the states with the highest unpaid principal balance. This finding is similar to our finding when we conducted our exploratory analysis of our data, the count of property per state were the highest in TX, FL and CA. This means that the states with high number of properties had a higher number of loan applications that were approved. Take home message: it is better to apply for mortgage in locations with high number of properties.

**Donut Chart**

The second chart is the donut chart which compares the original interest rate and the current interest rate given by the banks. By looking at the donut chart, we can see that the bank ‘Wells Fargo Bank’ changed their interest rate as time went by. The original interest rate tends to be the same for a large percentage of the loans and in this case, 88.4% of the loans were given a 5% interest rate while 11.6% of the loans had an interest rate of 6%. The current interest rate has changed significantly as only 16.3% of the loans have a rate of 5% and the rest are either lower than the 5% rate or between 5-6% rates. This can be due missed payments or more frequent payments.

**Bubble Chart**

The third chart, the bubble chart shows the loan applicant’s debt to income ratio and their credit score. The colour of the bubbles represents the borrower’s credit score and the size of the bubble represents the debt to income ratio. With this, we can visuals which borrower is most likely to consistently pay their loan and avoid the delinquency status. For example: based on ‘Wells Fargo Bank’ results we can see a cluster of borrowers with a high credit score and a high debt to income ratio. Although, this data is clustered at the high end of both variables, it is important to note that the most ideal borrower would have a lower debt to income ratio with a high credit score.