## grade distribution

## September 10, 2021

```
[]: import pandas as px
     import plotly.express as ps
[]: import pandas as px
    import plotly.express as ps
[]: # This is the examples of existing grades of the images
    df.head()
[ ]:
                Grade Centering Surface Corners Edges
    Identifier
    2135041001
                  7.5
                                      7.0
                            10.0
                                               8.5
                                                      7.5
    2135041002
                  8.0
                            10.0
                                      7.5
                                               8.5
                                                      8.0
                                                      9.0
    2135041003
                  9.0
                             9.5
                                      8.5
                                               9.0
    2135041004 8.5
                                      8.5
                                                      8.5
                             9.5
                                               9.0
    2135041005
                  8.0
                            10.0
                                      8.5
                                               8.5
                                                      7.5
[]: # Histogram of final scores of cards
    fig = px.histogram(df, x = 'Grade', title = 'Histogram of grades')
    fig.show()
[]: # Histogram of "Centering" scores of cards
    fig = px.histogram(df, x = 'Centering', title = 'Histogram of centering')
    fig.show()
[]: # Histogram of "Surface" scores of cards
    fig = px.histogram(df, x = 'Surface', title = 'Histogram of surface')
    fig.show()
[]: # Histogram of "Corners" scores of cards
    fig = px.histogram(df, x = 'Corners', title = 'Histogram of corners')
    fig.show()
[]: # Histogram of "Edges" scores of cards
    fig = px.histogram(df, x = 'Edges', title = 'Histogram of edges')
    fig.show()
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