In [1]:
```
import numpy as np
import cv2
from tensorflow import keras
import pickle
import streamlit as st
from streamlit_drawable_canvas import st_canvas
model = pickle.load(open('mnist.pkl', 'rb'))


# MODEL_DIR = os.path.join(os.path.dirname(__file__), 'model')
# if not os.path.isdir(MODEL_DIR):
#     os.system('runipy mnist digit classification.ipynb')

st.title('My Digit Recognizer')
st.markdown('''
Try to write a digit!
''')

# data = np.random.rand(28,28)
# img = cv2.resize(data, (256, 256), interpolation=cv2.INTER_NEAREST)

SIZE = 192
mode = st.checkbox("Draw (or Delete)?", True)
canvas_result = st_canvas(
    fill_color='#000000',
    stroke_width=10,
    stroke_color='#FFFFFF',
    background_color='#000000',
    width=SIZE,
    height=SIZE,
    drawing_mode="freedraw" if mode else "transform",
    key='canvas')

if canvas_result.image_data is not None:
    img = cv2.resize(canvas_result.image_data.astype('uint8'), (28, 28))
    rescaled = cv2.resize(img, (SIZE, SIZE), interpolation=cv2.INTER_NEAREST)
    st.write('Model Input')
    st.image(rescaled)

if st.button('Predict'):
    test_x = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)
    val = model.predict(test_x.reshape(1,784))
    st.write(f'result: {np.argmax(val[0])}')
    st.bar_chart(val[0])
```

```
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  Warning: to view this Streamlit app on a browser, run it with the following
  command:

    streamlit run C:\Users\99Minds-1\AppData\Local\Programs\Python\Python311
\Lib\site-packages\ipykernel_launcher.py [ARGUMENTS]
```

In [ ]: