Model Bias Detection:

API RESPONSE on pageload-

{  
    "domain": [  
        "Healthcare",  
        "Finance",  
  "Manufacturing",  
        "Others"  
    ],

  "metadata": {  
        "errorMessage": "",  
        "isSuccess": true,  
        "status": 200  
    },  
    "status": 200  
}

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upload data

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On selection of domain/ upload data  
{  
    "protected\_attribute": [  
        "AGE",  
        "GENDER",  
        "RACE",  
        "Marital status",  
        "CHILDREN"  
    ],

  "metadata": {  
        "errorMessage": "",  
        "isSuccess": true,  
        "status": 200  
    },  
    "status": 200  
}

-------------------------------------------------------  
on selection of protected attribute-

REQUEST header :

{"protected\_attribute": "GENDER"}

RESPONSE:

{  
  "attribute\_results": [  
    {  
      "attribute\_label": "male",  
      "attribute\_id": 1  
    },  
    {  
      "attribute\_label": "female",  
      "attribute\_id": 2  
    }  
  ],  
  "fairness\_metrics": [  
    {  
      "group\_label": "Demographic Parity",  
      "group\_id": 1  
    },  
    {  
      "group\_label": "Equalized Odds",  
      "group\_id": 2  
    },  
    {  
      "group\_label": "Equality of Opportunity",  
      "group\_id": 3  
    }  
  ],  
  "model": [  
    {  
      "model\_label": "Random Forest",  
      "model\_id": 1  
    },  
    {  
      "model\_label": "XGBoost",  
      "model\_id": 2  
    }  
  ],  
  "metadata": {  
    "errorMessage": "",  
    "isSuccess": true,  
    "status": 200  
  },  
  "status": 200  
}

-------------------------------------------------------  
on click of Detect Bias -

RESPONSE-  
{  
  "Data\_kpis": {  
    "Demographic\_parity": {  
      "rate": -0.763  
    },  
    "Equalized\_ods": {  
      "rate": -0.859  
    },  
    "Equality\_of\_oppurtunity": {  
      "rate": -0.364  
    },  
    "Predictive\_rate\_parity": {  
      "rate": -0.2  
    }  
  },  
  "charts": [  
    {  
      "ChartName": "MaleGroup",  
      "SeriesName": "Population Male:"  
      "Datapoints": [  
        {  
          "Label": "True Positive",  
          "Value": 50  
        },  
        {  
          "Label": "True Negative",  
          "Value": 30  
        },  
        {  
          "Label": "False Positive",  
          "Value": 10  
        },  
        {  
          "Label": "False Negative",  
          "Value": 10  
        }  
      ]  
    },  
    {  
      "KPIS": {  
        "Positive\_rate": {  
          "rate": -0.763  
        },  
        "False\_positive\_rate": {  
          "rate": -0.859  
        },  
        "True\_positive\_rate": {  
          "rate": -0.364  
        },  
        "Positive\_predictive\_value": {  
          "rate": -0.2  
        }  
      }  
    }  
  ],  
  "metadata": {  
    "errorMessage": "",  
    "isSuccess": true,  
    "status": 200  
  },  
  "status": 200  
}