

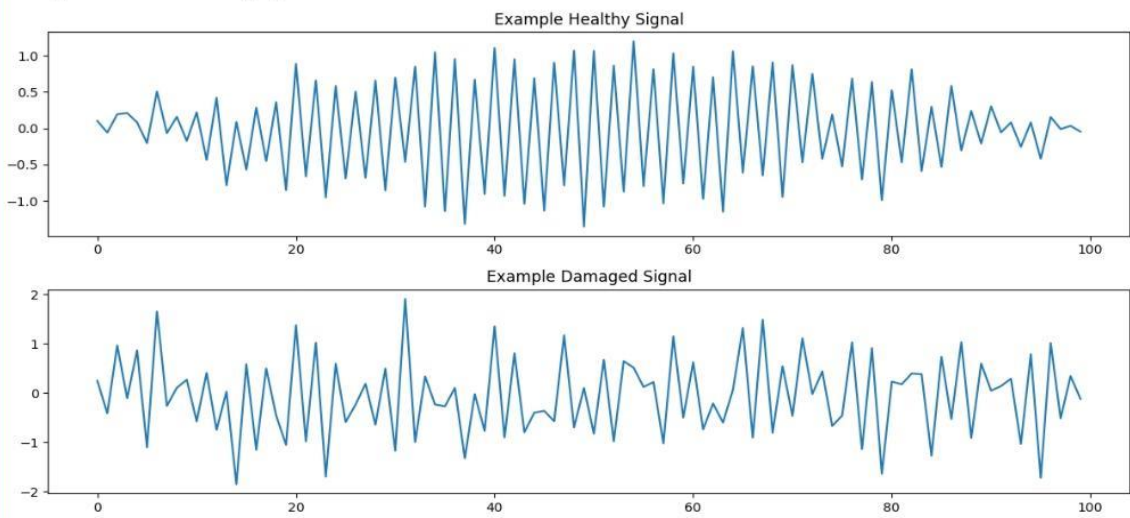
PHASE-3

Classification Report:

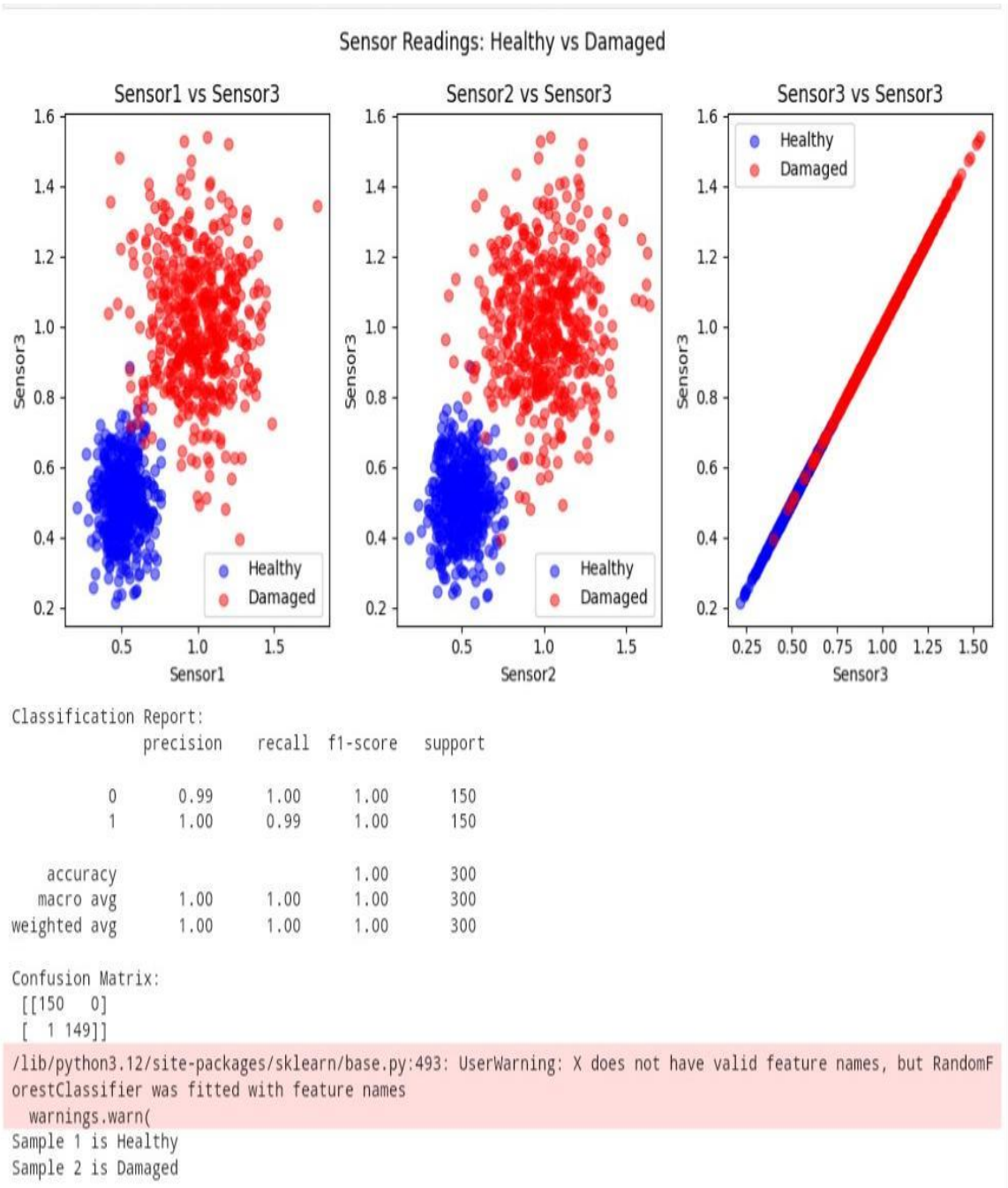
		precision	recall	f1-score
support				
	0.0	0.99	1.00	1.00
150				
	1.0	1.00	0.99	1.00
150				
accuracy				1.00
300				
macro avg		1.00	1.00	1.00
300				
weighted avg		1.00	1.00	1.00
300				

Confusion Matrix:

```
[[150  0]
 [  1 149]]
```



PHASE-4



PHASE-5

```
JupyterLab
Untitled2 Last Checkpoint: 4 minutes ago
File Edit View Run Kernel Settings Help Trusted
+ - 2x 100% Code JupyterLab Python (Pyodide)

Starting AI-EBPL Structural Health Monitoring System...

Sensor Data: {'strain': 3.262715626777573, 'vibration': 3.278119702322609, 'temperature': 25.516627098819967}
System Status: All Normal

Sensor Data: {'strain': 2.0751166346159886, 'vibration': 3.475837112528332, 'temperature': 44.485342770329495}
System Status: All Normal

Sensor Data: {'strain': 1.7879256961210503, 'vibration': 3.047423289814387, 'temperature': 27.670340594186392}
System Status: All Normal

Sensor Data: {'strain': 2.734101336405799, 'vibration': 2.258826054864914, 'temperature': 43.1895456862908}
System Status: All Normal

Sensor Data: {'strain': 2.9800751640252066, 'vibration': 6.200886848843813, 'temperature': 20.276917134356367}
System Status: All Normal

Sensor Data: {'strain': 4.09176030650779, 'vibration': 7.153771457282759, 'temperature': 39.69482285638864}
System Status: All Normal

Sensor Data: {'strain': 1.6248420594634123, 'vibration': 8.050220709721723, 'temperature': 37.216776853643445}
System Status: All Normal

Sensor Data: {'strain': 0.6424419456352733, 'vibration': 0.9420030271666557, 'temperature': 31.252989288468456}
System Status: All Normal

Sensor Data: {'strain': 3.4440502227702954, 'vibration': 4.511612476020652, 'temperature': 32.187086395320236}
System Status: All Normal

Sensor Data: {'strain': 0.3912160905698211, 'vibration': 7.275150167486034, 'temperature': 38.54201715223026}
System Status: All Normal

Sensor Data: {'strain': 4.609431557969239, 'vibration': 1.576000576163255, 'temperature': 25.03706164106888}
System Status: All Normal

Sensor Data: {'strain': 4.391716707276236, 'vibration': 3.1658716526140416, 'temperature': 32.237203284709196}
System Status: All Normal

Sensor Data: {'strain': 4.999414088025204, 'vibration': 6.455350954443846, 'temperature': 30.709897827440145}
System Status: All Normal

Sensor Data: {'strain': 4.446278244290066, 'vibration': 7.011132804103651, 'temperature': 24.593011729200285}
System Status: All Normal

Sensor Data: {'strain': 4.307741404244537, 'vibration': 8.171089135554737, 'temperature': 37.23765982801155}
System Status: ALERT: Anomaly Confirmed!
```