User Manual

Directory Structure

```
project/
├── bugreport.py               # Main script
├── datasets/                  # Input data directory
│   ├── pytorch.csv
│   ├── tensorflow.csv
│   ├── keras.csv
│   ├── incubator-mxnet.csv
│   └── caffe.csv
└── model_results/             # Output directory (created automatically)
```

How to run:

To analyze all projects, run:

```
python bugreport.py
```

This script will process all datasets listed in the `PROJECTS` list within the `main()` function of `bugreport.py`.

Customizing the analysis:

To modify which projects are analyzed, edit the `PROJECTS` list in the `main()` function:

```
PROJECTS = ['pytorch', 'tensorflow', 'keras', 'incubator-mxnet', 'caffe']
```

Each name should match a corresponding CSV file in the `datasets/` directory.

Output Files

After execution, the following outputs will be generated under：

`model_results/<project_name>/`:

- `*_final_comparison.csv`: Model performance comparison (Accuracy, F1, AUC, etc.)
- `*_confusion_matrix.png`: Confusion matrix for each model
- `*_history.png`: Training curves (deep learning models)
- `*.h5`: Optional saved model weights

Notes：

All experimental result files, including performance summaries, training history plots, and confusion matrices, have been uploaded under the directory `model_results/` in the GitHub repository for review.