Experiment 7

Aim: CI/CD Pipeline with Open Source Tools

Objective: Automate testing, version checks, and deployment using GitHub Actions.

Detailed Steps

- Create GitHub Actions workflow YAML
- Add test, lint, and build jobs
- Pull data/models with DVC if needed
- Test pipeline on push to 'main'

Open-Source Tools

GitHub Actions, GitLab CI, DVC

Deliverables

- Workflow YAML
- CI logs/screenshots

Conclusion

Experiment 8

Aim: Dashboard, Responsible AI Reporting & Final Portfolio

Objective: Build Streamlit/Dash dashboard, write Responsible AI report, and publish final repo.

Detailed Steps

- Develop dashboard for predictions & insights
- Include SHAP plots, metrics, drift checks
- Write Responsible AI checklist (fairness, privacy, consent)
- Publish final code, notebooks, API, and workflow on GitHub

Open-Source Tools

Streamlit, Dash, Markdown, Jupyter, GitHub/GitLab

Deliverables

- Streamlit app link
- Responsible AI.md
- Final public repo link

Conclusion