ML Spring 2025 Plan

elect a period to highlight at right. A legend describing the	charting follows				Period Highlight:	Plan Duration Actual Start Scomplete Actual (beyond plan) % Complete (beyond plan)
ICTIVITY	PLAN START	PLAN DURATION	ACTUAL START	ACTUAL DURATION	PERCENT COMPLETE	PERIODS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51
Dataset Collection & Review: HMDA, Loan Approval Prediction, Lending Club	1	2	1	2	100%	1 2 3 4 5 0 7 6 7 10 11 12 15 14 15 10 17 10 15 20 21 22 25 24 25 20 27 20 27 20 25 35 30 37 50 37 40 41 42 45 40 47 40 47 30 31
Proposal Preparation	2	2	2	2	100%	
Data Cleaning & Preprocessing: Fair Encoding,	4	2	4	2	100%	1
Causal Inference, SMOTE, Normalization Feature Engineering: Mutual Information-Based	4	2	4	2	50%	
Selection Model 1 (Supervised - Logistic Regression):	5	3	5	3	100%	
mplementation & Evaluation Model 2 (Supervised - Naïve Bayes):	9	2	9	2	100%	
mplementation & Evaluation airness Adjustment: Adversarial Training to	8	3	8	3	0%	
Reduce Bias nitial Evaluation: Confusion Matrix, Precision,	6	2	6	2	100%	
Recall, Accuracy Midterm Report Submission: GitHub Updates +	7	1	7	1	100%	
Contribution Table Model 3 (Supervised - SGD): Implementation &	9	2	9	2	100%	
Evaluation Advanced Model Tuning: Hyperparameter	10	2	10	2	20%	
Optimization for SGD and SOM models Fairness Metrics Evaluation: Assess Demographic	10	2	10	2	100%	
Disparities Using Appropriate Fairness Metrics Cross-Dataset Validation	9	2	9	2	0%	
Model Comparison: Trade-Off Analysis on	10	2	10	2	100%	
Accuracy, Fairness, and Interpretability Ethical Review: Focus on Fairness, Bias Correction,		2	10	2	100%	
and Socioeconomic Impact Final Report Completion: Comprehensive Model	11	2	11	2	100%	
Analysis + Visualizations Final Presentation Preparation: Visualizations +	12	1	12	1	100%	
Key Insights Final Presentation & Q&A: 9-Minute Presentation		1	12	1	100%	
- 3-Minute Q&A GitHub Repository Final Updates: Code,	11	2	11	2	100%	
/isualizations, Updated README.md	0	0	0	0	0%	
	0	0	0	0	0%	
	0	0	0	0	0%	1
	0	0	0	0	0%	+
	0	0	0	0	0%	4
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