

Final Feedback — Group 3

What's strong

- You correctly diagnosed and addressed overfitting by switching to a better-structured dataset (CarDD) and conducting proper **sanity checks**. This is good ML practice.
- The pipeline is solid and well-explained: object detection annotations, class-wise breakdown, and SHA/perceptual hash tests are rarely done this well in student projects.
- Good plan to move toward transfer learning and regularization (e.g., focal loss, class rebalancing, Albumentations).

What to highlight in the poster

- Show the **overfitting trend across epochs** (e.g., A1–A3 curves), then how you plan to mitigate it.
- Visualize **damage types with bounding boxes** from the new dataset — these images are immediately interpretable.
- Consider a **bar chart of class frequency per split** — simple but shows your attention to dataset fairness.
- Emphasize the **real-world motivation** (insurance, cost estimation), especially if you attempt the regression component.

Refinements to report/poster

- When you update results: clarify if cost estimation is **categorical** or **continuous**, and how you're linking damage regions to estimated value.
- Briefly describe **how YOLOv8 format helped** — this is useful for readers unfamiliar with modern dataset structures.
- Make your experimental comparisons **explicit**: baseline vs. transfer learning, with/without augmentation, etc.

No need to change

- Don't retrain more models right now. Prioritize applying class balancing, then move to ResNet-50 or YOLO backbone.
- Avoid adding new datasets at this stage — focus on stability and interpretability.