

IDEATION PHASE: EMPATHY MAP CANVAS

Team ID: LTVIP2026TMIDS91662

Project Name: AI-Powered Dog Breed Identification using Transfer Learning

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EMPATHY MAP: Understanding the User (Pet Owner/Shelter Volunteer)

SAY & DO	THINK & FEEL
* "I wonder what specific breed this dog is?"	* I think it's a Golden Retriever, but it might be a Labrador mix.
* "I need a fast way to identify this dog without an expert."	* I feel frustrated when I can't find reliable information quickly.
* Uploads a JPG/PNG image to the Gradio web interface.	* I hope the AI is accurate enough to tell the difference between similar breeds.
* Checks the confidence score to verify the result.	* I feel more confident when I see a high percentage score (e.g., 87.3%).

HEAR	SEE
* Friends saying, "That looks like a rare breed; you should check."	* A variety of dogs that look very similar but belong to different classes.
* Experts mentioning that manual identification is prone to error.	* A professional Gradio interface with a clean, "Soft" theme.
* Technical news about how AI and MobileNetV2 are making apps faster.	* Instant results appearing in less than 2 seconds after uploading.
* Users discussing GitHub-ready tools for animal welfare.	* A clear "Not confident" message if the image is unclear or not a dog.

PAIN & GAIN

PAINS (Challenges):

- **Complexity:** High visual similarity between 120 different breeds makes manual identification difficult.
- **Time:** Waiting for expert feedback or searching through books is too slow.
- **Accuracy:** Fear of misidentifying a breed which could affect health or care decisions.

(GAINS Goals/Benefits):

- **Efficiency:** Achieving 67.26% validation accuracy in just seconds.
- **Accessibility:** A mobile-responsive web app available to anyone with a link.
- **Confidence:** Using a system with professional visualization and clear confidence thresholding.