

Project Design Phase-I

Data Flow Diagram & User Stories

Date	16 October 2023
Team ID	Team - 610222
Project Name	Dog Breed Identification Using Transfer Learning
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a visual representation that shows the flow of data within a system. In the context of your dog breed identification project, I can outline a high-level DFD that illustrates the flow of data between major components of the system. Here's a simplified DFD for your project.

DFD (Context Diagram):

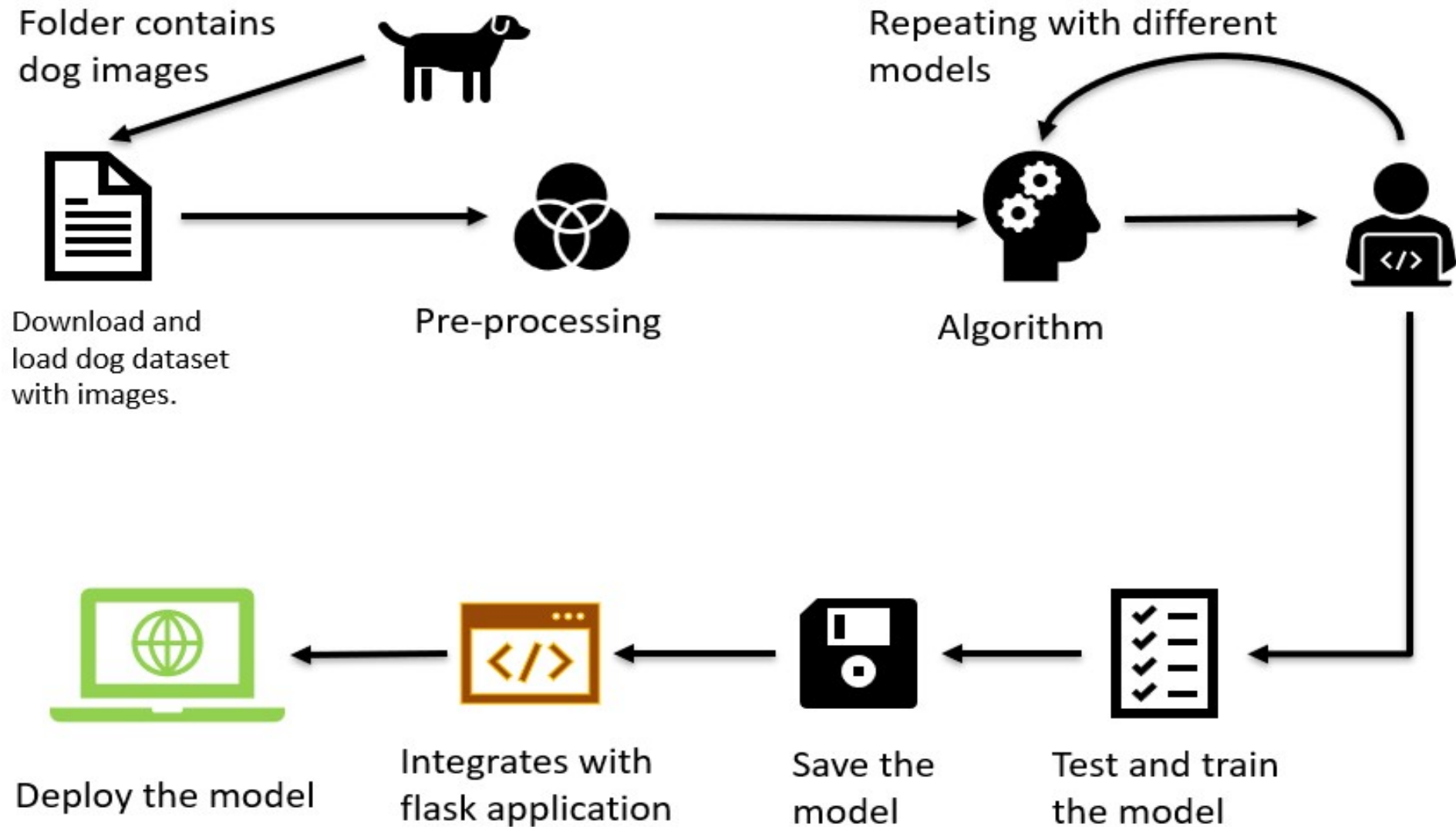
This top-level diagram provides an overview of the entire system.

Processes:

- User Input: Represents users interacting with the mobile app or web platform, uploading dog images.
- Breed Identification: Depicts the process of the model making breed predictions.
- Educational Content: Symbolizes the delivery of educational resources to users.
- Veterinary Integration: Shows the integration with veterinary clinics for diagnostic purposes.
- Data Privacy and Security: Signifies the protection of user data and privacy.
- Language and Localization: Represents the translation and localization of content.
- Business Model: Covers the monetization aspect of the system.
- Scalability and Future Improvements: Demonstrates future expansion and enhancements.

Monitoring and Maintenance: Indicates ongoing system monitoring and maintenance.

Dataflow Diagram:



User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story/Task	Acceptance Criteria	Priority	Release
Radiologist	AI-Assisted Radiological Diagnosis	USN - 1	As a radiologist, I need the system to provide rapid COVID-19 detection from chest X-rays with high accuracy and reliability.	The AI should be highly accurate in identifying Covid-19 cases from X-ray images. Reports should be generated quickly for radiologists to review.	High	Sprint 1
Veterinarian	Pet Health Monitoring	USN - 2	As a veterinarian, I want a system that tracks and alerts me about changes in a pet's health condition.	The system should monitor vital signs, provide timely alerts, and maintain historical health data.	High	Sprint 1
Dog Owner	Breed Identification	USN - 3	As a dog owner, I want to identify my dog's breed easily using the mobile app.	The app should accurately identify the dog's breed from uploaded images, providing additional information about the breed.	High	Sprint 1

School Teacher	Educational Resources	USN - 4	As a school teacher, I need access to educational content about dog breeds for my students.	The system should provide educational resources, including images, descriptions, and history of dog breeds.	Medium	Sprint 2
Mobile App Developer	Integration with AI Model	USN - 5	As a mobile app developer, I want to integrate our app with the AI model for breed identification.	The system should provide clear documentation and APIs for easy integration into mobile apps.	Medium	Sprint 2
Animal Shelter Manager	Breed Identification for Rescues	USN - 6	As an animal shelter manager, I need to quickly identify dog breeds for rescue dogs.	The app should provide fast and accurate breed identification, helping in pet adoption.	High	Sprint 3
Geneticist	Genetic Research on Dog Breeds	USN - 7	As a geneticist, I need access to a dataset of dog breed images for my research on genetic characteristics.	The system should provide a well-structured dataset with image and breed information.	Medium	Sprint 3
Elementary Student	Learning About Dogs	USN - 8	As an elementary student, I want to learn about different dog breeds through a fun and engaging app.	The app should include interactive features, quizzes, and appealing visuals to make learning enjoyable.	High	Sprint 4

Dog Groomer	Coat Care Information	USN - 9	As a dog groomer, I need information on the care and grooming of specific dog coat types.	The system should provide detailed care instructions for different coat types, along with visual references.	High	Sprint 4
Animal Welfare NGO	Identifying Dog Breeds for Rescues	USN - 10	As an animal welfare NGO, we need a tool for identifying dog breeds to help find suitable homes for rescue dogs.	The system should provide accurate breed identification and easily shareable breed profiles for adoption promotion.	High	Sprint 5
Biologist	Studying Evolutionary Biology	USN - 11	As a biologist, I require a dataset of dog breeds for my research on evolutionary biology.	The system should provide a comprehensive dataset with accurate breed information.	Medium	Sprint 5
Middle School Student	Educational Fun App	USN - 12	As a middle school student, I want an educational app that teaches me about dog breeds in a fun and interactive way.	The app should include games, quizzes, and interactive features for an engaging learning experience.	High	Sprint 6
Dog Trainer	Breed-Specific Training Resources	USN - 13	As a dog trainer, I need access to breed-specific training resources and tips.	The system should provide breed-specific training guides and video tutorials.	High	Sprint 6

Ethical Breeder	Breeding Standards Compliance	USN - 14	As an ethical dog breeder, I want to ensure my breeding practices adhere to recognized breed standards.	The system should provide breed standards and guidelines for ethical breeding.	Medium	Sprint 7
Zoologist	Research on Canine Behavior	USN - 15	As a zoologist, I require access to a dataset of dog breeds for my research on canine behavior.	The system should provide a dataset with behavioral information and characteristics for dog breeds.	Medium	Sprint 7
Mobile App User	App Usability and Performance	USN - 16	As a mobile app user, I expect the app to be easy to use and responsive.	The app should have a user-friendly interface, fast breed identification, and minimal bugs.	High	Sprint 8
Breed Enthusiast	Access to Rare and Unique Breed Information	USN - 17	As a breed enthusiast, I want to access information on rare and unique dog breeds not commonly found in other resources.	The system should provide detailed information and images of rare and unique dog breeds.	Medium	Sprint 8
Government Regulator	Breed Identification for Licensing	USN - 18	As a government regulator, I need a reliable tool for identifying dog breeds for licensing and regulatory purposes.	The system should offer accurate breed identification and generate official breed certificates.	High	Sprint 9

Dog Photographer	Breed Identification for Clients	USN - 19	As a dog photographer, I require an app to identify dog breeds in client photos.	The app should provide fast breed identification for client photo sessions.	High	Sprint 9
Data Analyst	Breed Data for Market Analysis	USN - 20	As a data analyst, I need access to breed data for market analysis and trends.	The system should provide comprehensive data for market analysis, including breed popularity and demographics.	Medium	Sprint 10