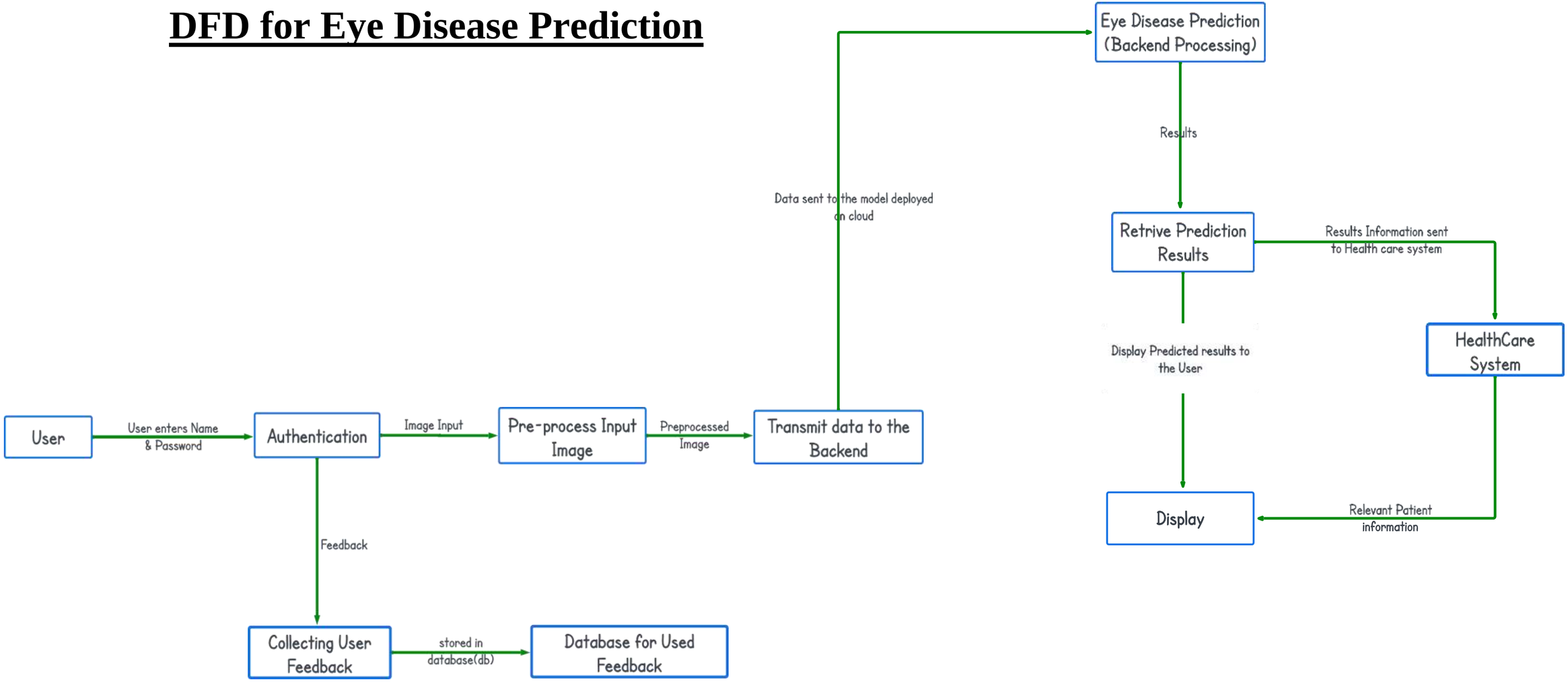
DFD for Eye Disease Prediction



Data Flow:

1. User interacts via Web Browser
2. Request processed by Flask Web App (Frontend)
3. Frontend sends image to Inference module
4. Inference module loads and processes image
5. Processed image input to Transfer Learning Model
6. Model predicts disease probability and classification
7. Results sent back to Frontend for display
8. User can provide feedback through the User Interface
9. Feedback stored in User Feedback Database
10. Integration with Healthcare Systems for timely alerts.

User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Patients	Login	USN-1	As a patient, I want to register an account to access the eye disease prediction system.	The patient should be able to successfully create an account using valid personal information.	High	Sprint-1
	Image Uploadation	USN-2	As a patient, I want to upload eye images for analysis.	The system should allow the patient to upload eye images in common formats (e.g., JPEG, PNG).	High	Sprint-2
	Eye Health Monitoring	USN-3	As a patient, I want to view the prediction results and understand the likelihood of having an eye disease.	the patient should be able to view a clear and understandable prediction report indicating the likelihood of having an eye disease, with relevant details and explanations provided for transparency.	Medium	Sprint-2
Ophthalmologists and Eye Care Professionals	Login	USN-1	As a doctor, I want to log in to the system to access patient data securely.	The system should authenticate the doctor's credentials securely, granting access only to authorized personnel	High	Sprint-1

	Treatment Planning	USN-2	As a doctor, I want to review patient history and eye images for diagnosis.	The system should present a well-organized patient history, including relevant medical information.	Medium	Sprint-2
AI/ML Developers	Model Development	USN-3	Improving Machine Learning Model for Eye Disease Prediction.	The ML developer should be able to access the model's source code, implement enhancements, and validate the changes through testing.	Medium	Sprint-3