

## Project Design Phase-II

### Data Flow Diagram & User Stories

Date	31 January 2025
Team ID	LTVIP2025TMID32756
Project Name	Pollen's Profiling: Automated Classification of Pollen Grains
Maximum Marks	4 Marks

### Data Flow Diagram (DFD)

#### *Level 0 – DFD (Simplified Description)*

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Actors:

- User (Researcher/Scientist)
- System
- Image Classifier (AI Model)
- Database

Processes:

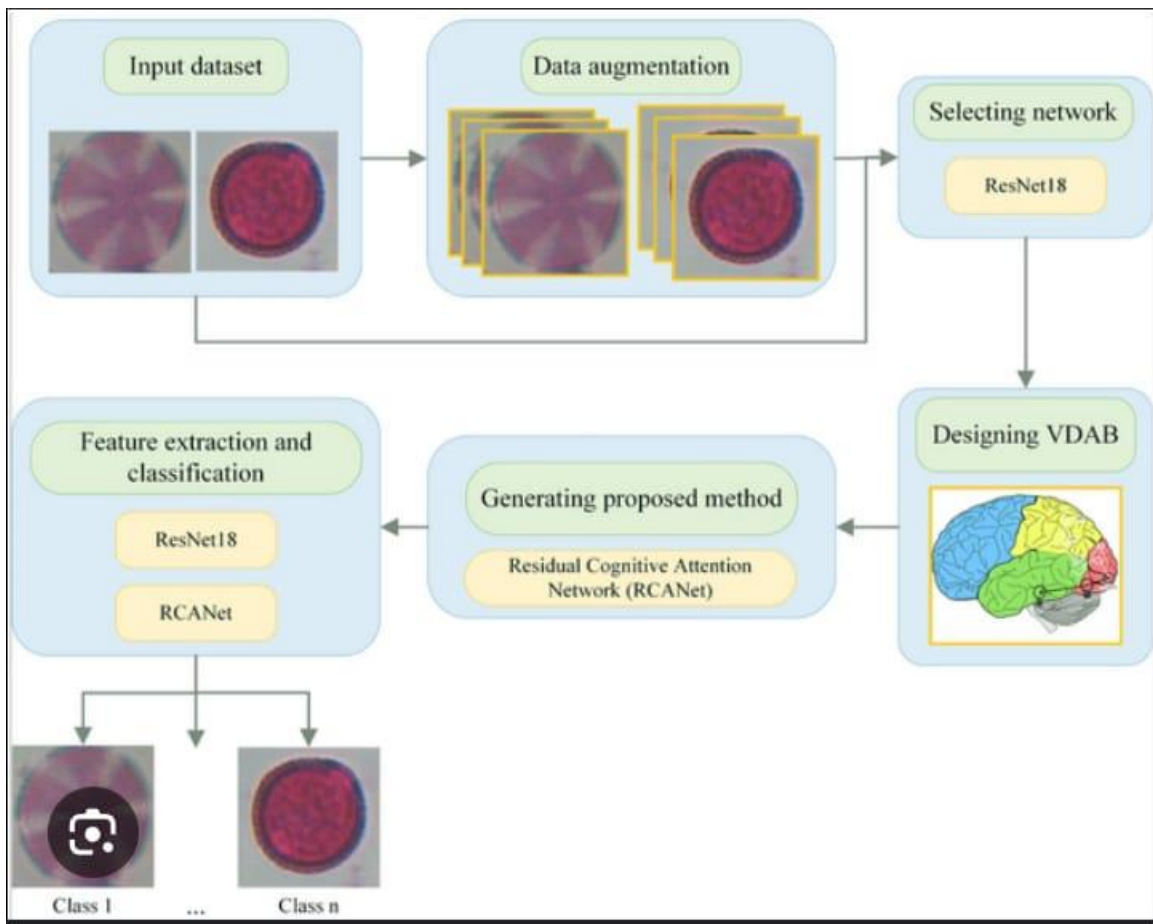
1. Upload Pollen Image
2. Process Image
3. Classify Pollen Type
4. Store/Display Results

Data Stores:

- Image Repository
- Classification Results DB

Flow:

- User uploads a pollen grain image.
- System receives image and processes it through the AI model.
- Classification results are stored in the database.
- Results are displayed to the user.



## User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority / Release
Researcher (Mobile)	Upload	USN-1	As a researcher, I can upload an image of a pollen grain for classification	The image is uploaded and confirmed visually	High / Sprint-1
Researcher (Mobile)	Classification	USN-2	As a researcher, I can view the classification result of the uploaded image	AI model returns the correct pollen category	High / Sprint-1
Researcher (Mobile)	History	USN-3	As a researcher, I can see the history of my uploaded and classified images	Previous classified images are listed with time and result	Medium / Sprint-2
Admin	User Management	USN-4	As an admin, I can manage (add/edit/delete) researcher access to the system	Admin panel reflects the changes in access	Medium / Sprint-2
Data Analyst (Web)	Download Results	USN-5	As an analyst, I can download classification results for further processing	Results are downloaded in CSV or JSON format	Low / Sprint-2