Project Design Phase-I
User Stories Template Date 21 October 2023

Team ID Team-592485

Project Name Project – Greenclassify: Deep Learning-Based Approach For Vegetable Image Classification

Maximum Marks 2 Marks

User Stories

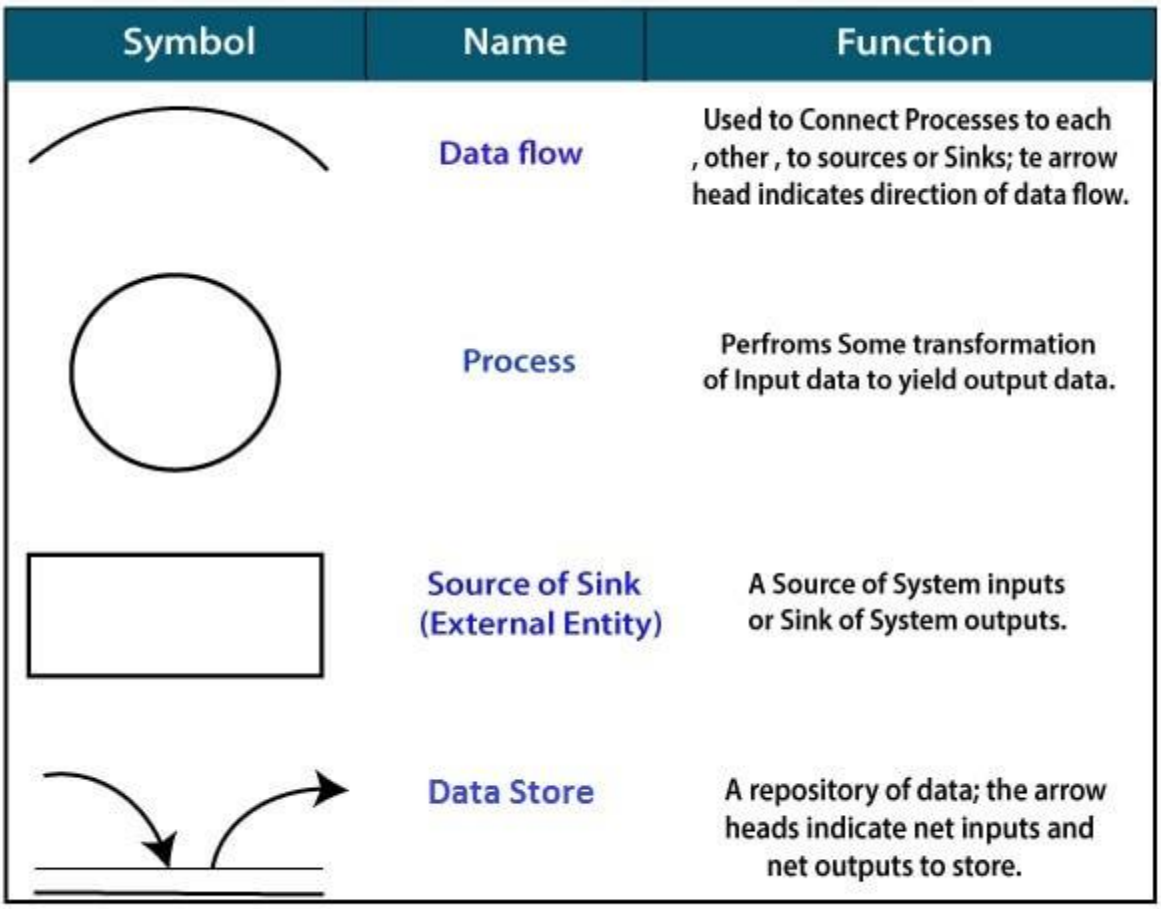
User type	Functional Requirements	User Story Number	User Story	Acceptance criteria	Priority	Release
Consumers(Web-App)	Quality Verification	USN-1	Allow users to scan vegetables in grocery stores to verify their quality, freshness, and authenticity.	The app should successfully verify the quality and freshness of scanned vegetables from at least five different grocery stores.	High	Sprint-1
	User Registration	USN-2	Users should be able to register with their email address and create a password	Users must receive a verification email to activate their account.	High	Sprint-1
	User Login	USN-3	Registered users should be able to log in with their email and password.	After login, users should be directed to a personalized dashboard based on their user category.	High	Sprint-1
	Nutritional Information	USN-4	Provide nutritional information, including calorie count, vitamins, and minerals, for each scanned vegetable.	The app should display detailed nutritional information for at least 100 different vegetable varieties, including calories,	Medium	Sprint-2

				vitamins, and minerals.		
	Offline Functionality	USN-5	The application must accurately identify and classify various vegetables based on images provided by farmers.	The application should perform essential functions, including image classification and disease detection, in offline mode.	Medium	Sprint-4
Farmers(Web-App)	Image Recognition and Classification	USN-1	The application must accurately identify and classify various vegetables based on images provided by farmers	The application should accurately identify and classify at least 90% of common vegetables from images provided by farmers.	High	Sprint-1
	Disease Detection	USN-2	Farmers should be able to scan images of vegetables to detect common plant diseases and receive recommendations for treatment.	The application should correctly detect at least 80% of common plant diseases in scanned vegetable images and provide treatment recommendations.	Medium	Sprint-2
	User Registration	USN-3	Users should be able to register with their email address and create a password	Users must receive a verification email to activate their account.	High	Sprint-3
	User Login	USN-4	Registered users should be able to log in with their email and password.	After login, users should be directed to a personalized dashboard based on their user category.	High	Sprint-3
	Offline functionality	USN-5	Ensure that the app can work in offline mode for farmers in remote areas	The application should perform essential functions, including image classification	Medium	Sprint-4

			with limited connectivity	and disease detection, in offline mode.		

DATA FLOW DIAGRAM

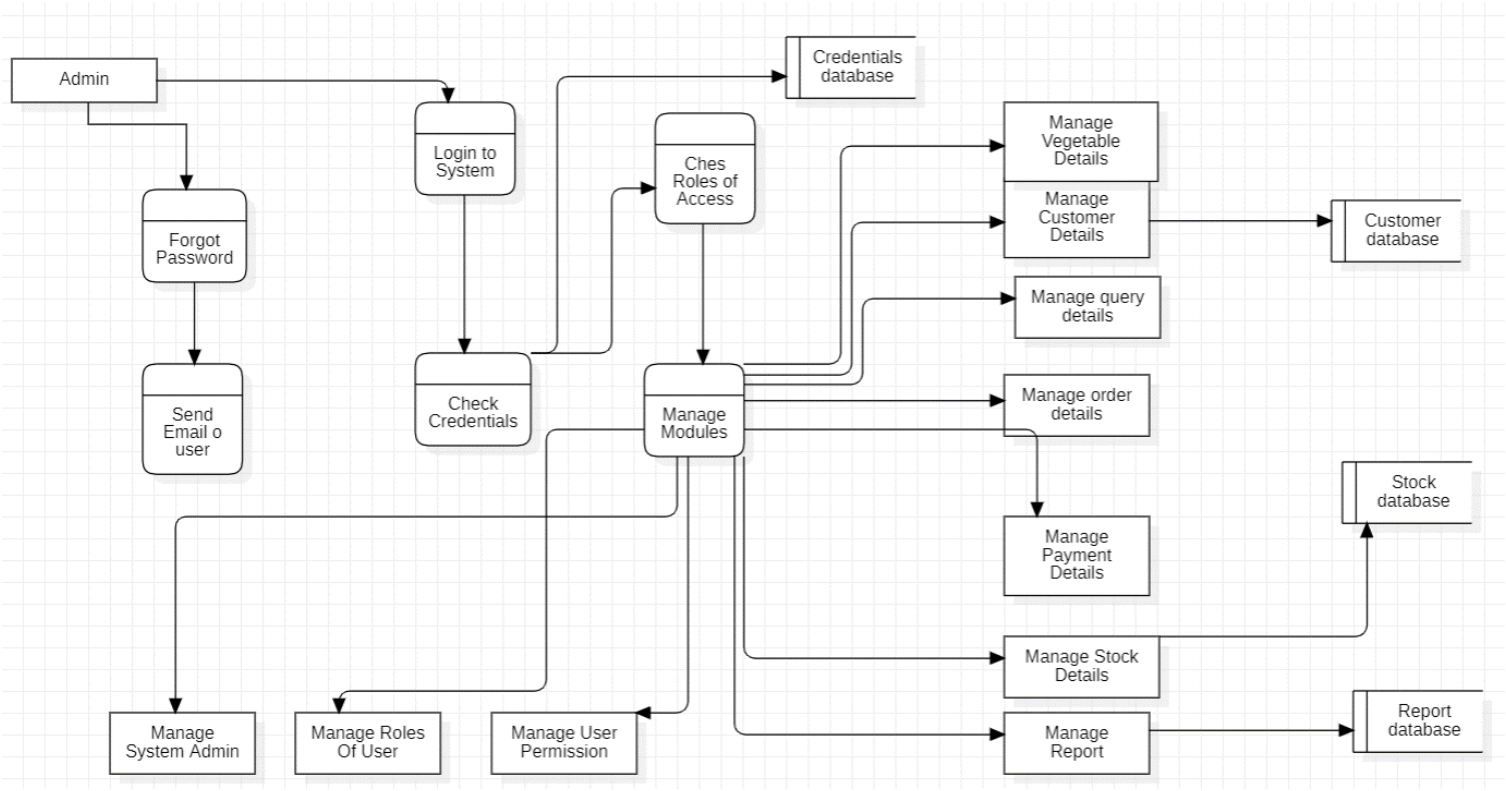
Also known as DFD, Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and reports generation. Data flow diagrams can be divided into logical and physical.



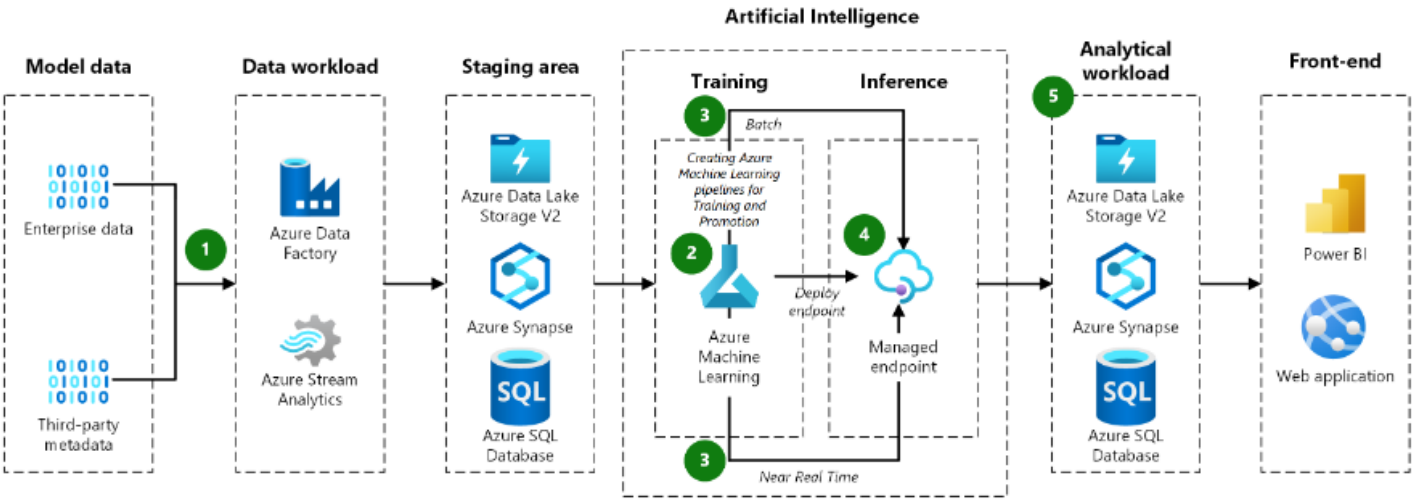
Symbol	Name	Function
	Data flow	Used to Connect Processes to each , other , to sources or Sinks; te arrow head indicates direction of data flow.
	Process	Perfroms Some transformation of Input data to yield output data.
	Source of Sink (External Entity)	A Source of System inputs or Sink of System outputs.
	Data Store	A repository of data; the arrow heads indicate net inputs and net outputs to store.

Symbols for Data Flow Diagrams

DFD:


Admin
Forgot Password
Send Email o user
Login to System
Credentials database
Check Credentials
Ches Roles of Access
Manage Modules
Manage Vegetable Details
Manage Customer Details
Customer database
Manage query details
Manage order details
Manage Payment Details
Stock database
Manage Stock Details
Manage Report
Report database
Manage System Admin
Manage Roles Of User
Manage User Permission

ARCHITECTURE



FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

FUNCTIONAL REQUIREMENT

FRNO.	FUNCTIONAL REQUIREMENT	SUB-REQUIREMENT
FR-1	User Authentication	1. Users must be able to create an account with a unique username and password. 2. Users must be able to log in using their registered credentials. 3. Users must have the option to reset their password through a secure process.
FR-2	Search Functionality	1. Users must be able to search for documents using keywords. 2. The search results should provide document metadata and a preview option. 3. Advanced search filters should be available to refine search results.
FR-3	User Roles and Permissions	1. The system should support multiple user roles (e.g., admin, editor, viewer). 2. Each role should have specific permissions, such as editing, viewing, or managing documents.

		3. Role assignment should be configurable by administrators.
FR-4	Document Management	1. Users should be able to upload documents in various formats. 2. The system should support document versioning to track changes. 3. Users should be able to organize documents into folders or categories.

NON-FUNCTIONAL REQUIREMENTS:

NFRNO.	Non-Functional Requirement	Description
NFR-1	Usability	Usability NFRs focus on the user experience and how user-friendly the system is. These requirements address aspects like accessibility, user interface design, and ease of use.
NFR-2	Performance	Performance NFRs define how well the system functions under specific conditions. They relate to response times, throughput, and resource utilization.
NFR-3	Reliability	Reliability NFRs ensure that the system operates consistently and without failure. These requirements address uptime, fault tolerance, and error handling.
NFR-4	Security	Security NFRs address the protection of data and the system from unauthorized

		access, breaches, and threats.
NFR-5	Scalability	Scalability NFRs pertain to the system's ability to handle growing demands by adding resources or nodes. They ensure that the system can expand when needed.
NFR-6	Maintainability	Maintainability NFRs relate to the ease of maintaining, updating, and enhancing the system over time. They address code readability, documentation, and modularity.