

Project Design Phase-II

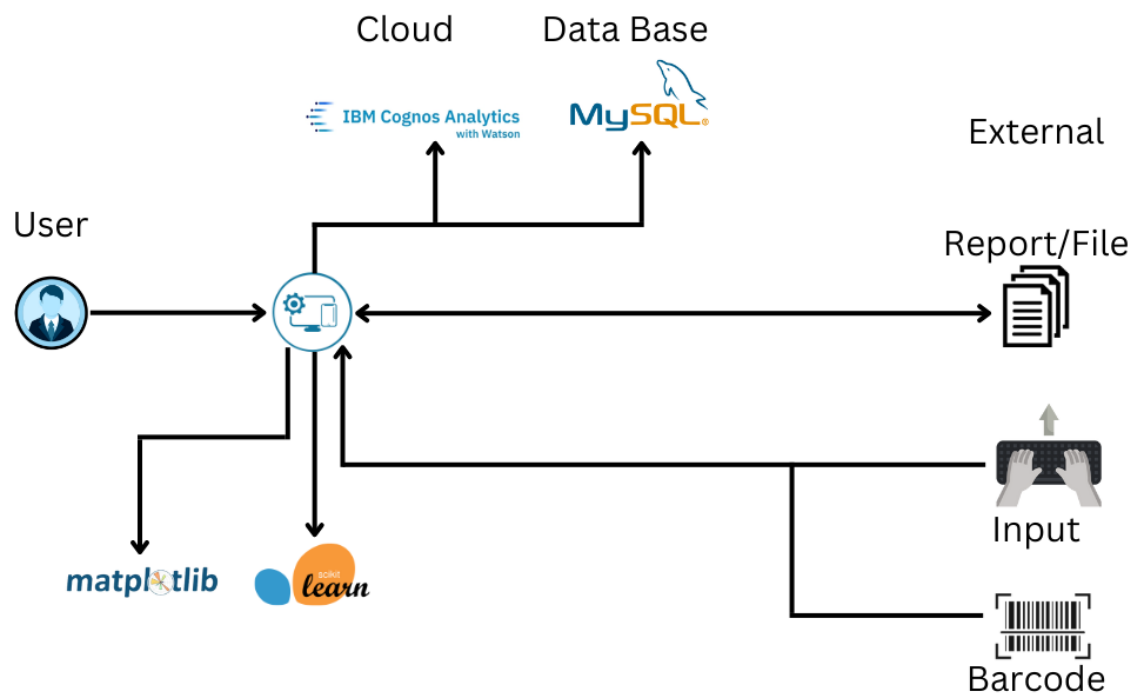
Data Flow Diagram & User Stories

Team ID	PNT2022TMID26463
Project Name	Retail Store Stock Inventory Analytics

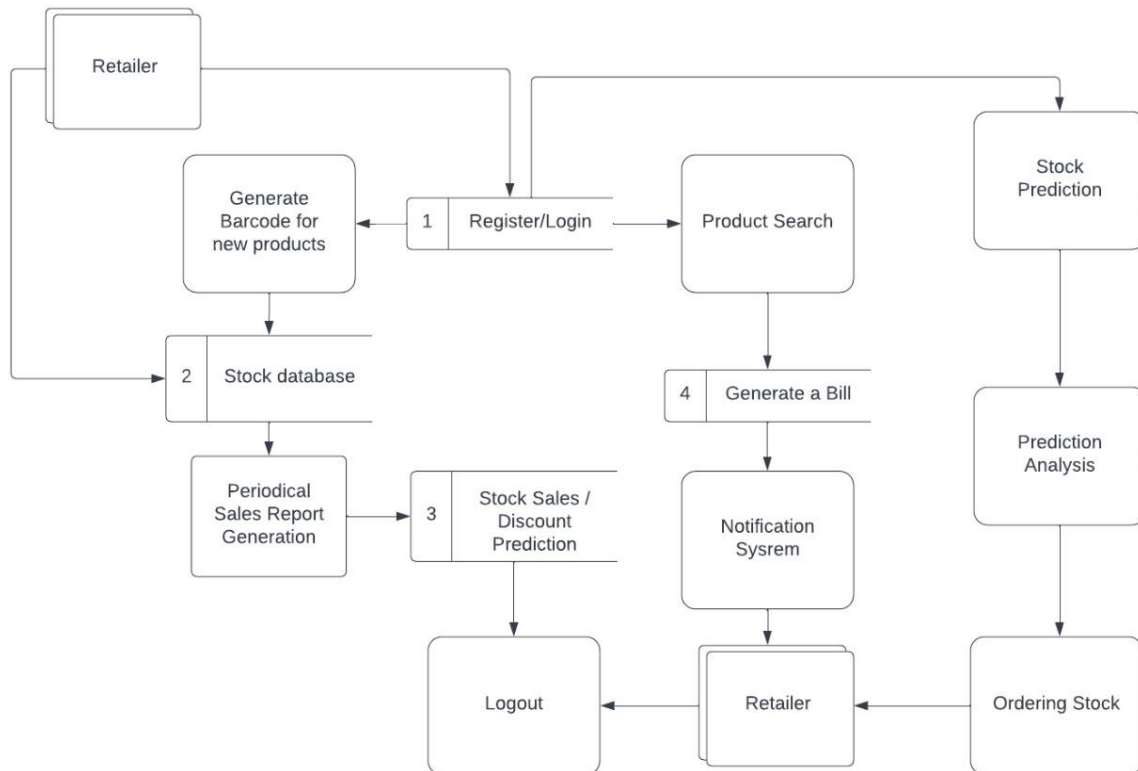
Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Flow:



- 1) The user interacts with an application linked to a MySQL database and an IBM Cognos Analytics cloud service.
- 2) The application accepts both human and barcode input.
- 3) The application can use reports and files as input or output.
- 4) Matplotlib is utilised for data visualisation.
- 5) The SkLearn library is used in machine learning

DFD:**User Story:**

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my details like email, phone number, password, etc.	I can access my account.	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Gmail	I can register & access the account with Gmail Login	High	Sprint-1
		USN-4	As a user, I can register for the application through Facebook	I can register & access the account with Facebook Login	Low	Sprint-2
	Login	USN-5	As a user, I can log into the application by entering email & password	I can login and access my account	High	Sprint-1
	Dashboard	USN-6	As a user, I can view my profile and update my profile	Profile View & Update	High	Sprint-2

		USN-7	As a user, I can view the categorised product available	Product Categorisation	High	Sprint-2
		USN-8	As a user, I can search any products	Product Search	High	Sprint-2
		USN-9	As a user, I can give barcode as inputs to find the product details	Barcode scanning	High	Sprint-2
		USN-10	As a user, I can generate report based on history & prediction	Report Generation	High	Sprint-2
	Prediction	USN-11	As a user, stock can be predicted based the analysis generated	Stock Prediction	High	Sprint-3
			As a user, analysis of the predicted data can be done	Prediction Analysis	High	Sprint-3
	Bill Generation	USN-12	As a user, I can generate bills	Generating Bills	High	Sprint-3
	Notification System	USN-13	As a user, I can view notifications generated	Automatic Notification	High	Sprint-4
		USN-14	As a user, I can change the notification settings based on my need	Notification System Settings	Medium	Sprint-4
	Stock Data Base	USN-15	As a user, I can access the database and view the reports previously generated	Accessing Data Base	High	Sprint-3
	Discount Prediction System	USN-16	As a user, I can view and update discount based credit points available	Credit-point based discount	Medium	Sprint-4
	Order Stock	USN-17	As a user, I can order stock based on the analysed prediction data	Stock Ordering	High	Sprint-4
Customer (Web user)	Registration	USN-18	As a user, I can register for the application by entering my details like email, phone number, password, etc.	I can access my account.	High	Sprint-1
		USN-19	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-20	As a user, I can register for the application through Gmail	I can register & access the account with Gmail Login	High	Sprint-1
		USN-21	As a user, I can register for the application through Facebook	I can register & access the account with Facebook Login	Low	Sprint-2
	Login	USN-22	As a user, I can log into the application by entering email & password	I can login and access my account	High	Sprint-1

	Dashboard	USN-23	As a user, I can view my profile and update my profile	Profile View & Update	High	Sprint-2
		USN-24	As a user, I can view the categorised product available	Product Categorisation	High	Sprint-2
		USN-25	As a user, I can search any products	Product Search	High	Sprint-2
		USN-26	As a user, I can give barcode as inputs to find the product details	Barcode scanning	High	Sprint-2
		USN-27	As a user, I can generate report based on history & prediction	Report Generation	High	Sprint-2
	Prediction	USN-28	As a user, stock can be predicted based the analysis generated	Stock Prediction	High	Sprint-3
			As a user, analysis of the predicted data can be done	Prediction Analysis	High	Sprint-3
	Bill Generation	USN-29	As a user, I can generate bills	Generating Bills	High	Sprint-3
	Notification System	USN-30	As a user, I can view notifications generated	Automatic Notification	High	Sprint-4
		USN-31	As a user, I can change the notification settings based on my need	Notification System Settings	Medium	Sprint-4
	Stock Data Base	USN-32	As a user, I can access the database and view the reports previously generated	Accessing Data Base	High	Sprint-3
	Discount Prediction System	USN-33	As a user, I can view and update discount based credit points available	Credit-point based discount	Medium	Sprint-4
	Order Stock	USN-34	As a user, I can order stock based on the analysed prediction data	Stock Ordering	High	Sprint-4