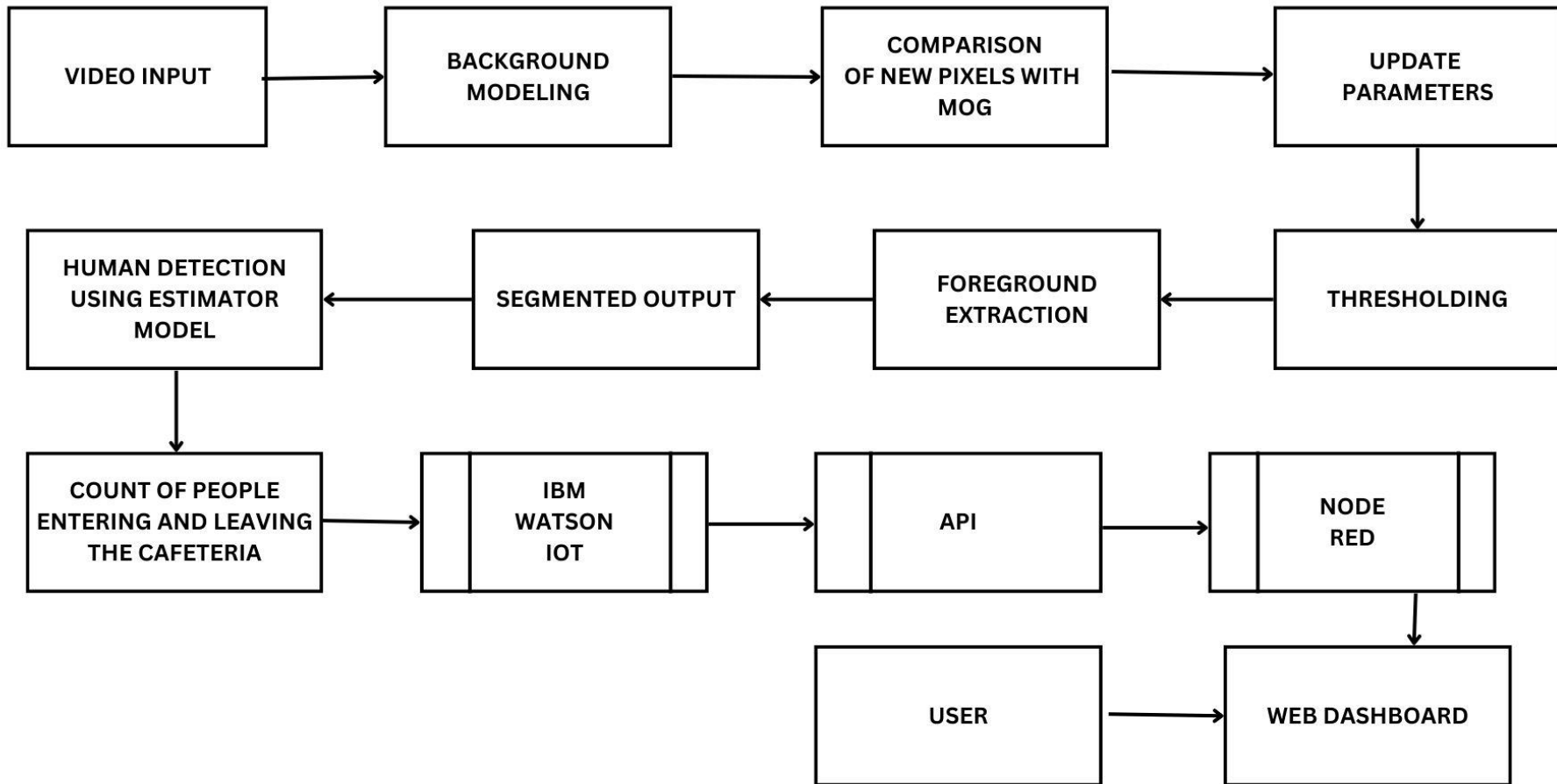


**Project Design Phase-II**  
**Data Flow Diagram & User Stories**

Date	06 May 2023
Team ID	NM2023TMID14254
Project Name	Go No Queue-Rush Estimator for Corporate Cafeteria

**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.



Data Flow Diagram

## User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Team Member
Cafeteria Manger	Authorize	USN-1	As a cafeteria manager, I want to deploy the rush estimator system to accurately predict peak hours based on historical data and external factors, such as weather conditions and special events, using IBM Watson IoT and Node-RED	I can authorize the system by estimating the persons in the cafeteria.	High	Mohammed Fazil Rahman N
Cafeteria Employee	Authorize	USN-2	As a cafeteria employee, I want the rush estimator system to display real-time queue lengths and wait times, enabling me to proactively manage the cafeteria resources and optimize service efficiency	I can view the wait time and manage the cafeteria resources.	High	Harshithan K S
Cafeteria Customer	Login	USN-3	As a cafeteria customer, I want the rush estimator system to provide me with estimated wait times and queue lengths before entering the cafeteria, so I can make informed decisions and plan my lunch break accordingly.	I can view the wait times before entering into the cafeteria	High	Jeeva J
Cafeteria Manager	Notification	USN-4	As a cafeteria manager, I want the rush estimator system to send notifications or alerts to cafeteria staff when the queue length or wait times exceed predefined thresholds, allowing us to allocate additional resources and minimize customer dissatisfaction	I can get notification about queue lengths to cafeteria staff	Medium	Sanjay Kumar
Cafeteria Manger	Manages	USN-5	As a cafeteria manager, I want the rush estimator system to generate reports and insights on peak hours, average wait times, and customer flow patterns, helping me make data-driven decisions for	I can send the reports and insights on peak hours, average wait times, etc	Medium	Sanjay V

			resource planning and process optimization.			
Cafeteria Customer	Notification	USN-6	As a cafeteria customer, I want the rush estimator system to provide alternative suggestions, such as less crowded time slots or nearby cafeterias with shorter wait times, in case the current cafeteria is experiencing significant rush.	I can get suggestions, such as crowded time slots, etc.	Medium	Jeeva J
Cafeteria Manager	Manages	USN-7	As a cafeteria manager, I want the rush estimator system to integrate with the existing cafeteria management system, enabling seamless coordination between the rush estimator predictions and operational activities, such as food preparation and staff scheduling.	I can view predictions and operational activities	Medium	Mohammed Fazil Rahman N
Cafeteria Employee	Notification	UNS-8	As a cafeteria employee, I want the rush estimator system to have an intuitive user interface on a display screen, showing visual cues like color-coded indicators or progress bars to easily understand the current rush status and expected wait times.	I can get notification alert about current status and expected wait times.	Medium	Sanjay Kumar
Cafeteria Manager	Authorize	USN-9	As a cafeteria manager, I want the rush estimator system to continuously learn and improve its rush predictions over time by leveraging machine learning algorithms and analyzing real-time data from IBM Watson IoT and other relevant data sources	I can get continuous updates on rush predictions	Low	Sanjay V
Cafeteria Customer	Manages	UNS-10	As a cafeteria customer, I want the rush estimator system to respect my privacy and ensure that any personal data collected is handled securely and in accordance with privacy regulations.	I want to maintain my personal data	Low	Harshithan K S

