FACE RECOGNITION SYSTEM

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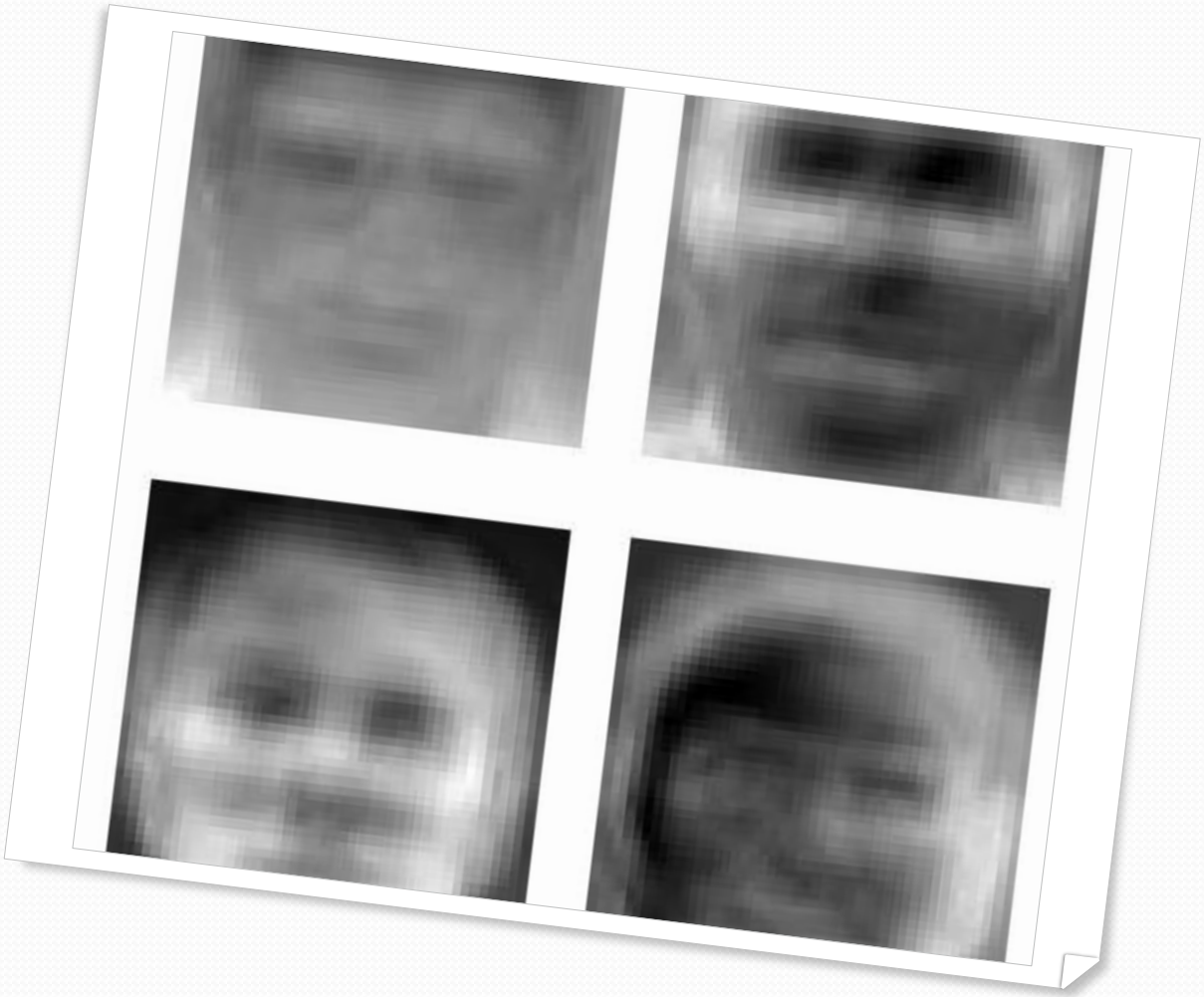
Online Shopping System

This is the first step where the system locates and identifies human faces in images or videos. It uses algorithms to distinguish between faces and other objects.

- Face Alignment
- Feature Extraction
- Decision Making



Introduction

- Security and Access Control:
- Law Enforcement and Surveillance:
- Financial Services:

Discription

- The system begins by detecting human faces within an image or video feed
- Once a face is detected, the system performs face alignment to standardize its position
- The system extracts distinctive features from the face, such as the distance between the eyes

Modules

Priviledge	Admin	User
Add Item	Y	N
Update Item	Y	N
Delete Item	Y	N
Add Offer	Y	N
DB-Acess	Y	N
View	Y	Y

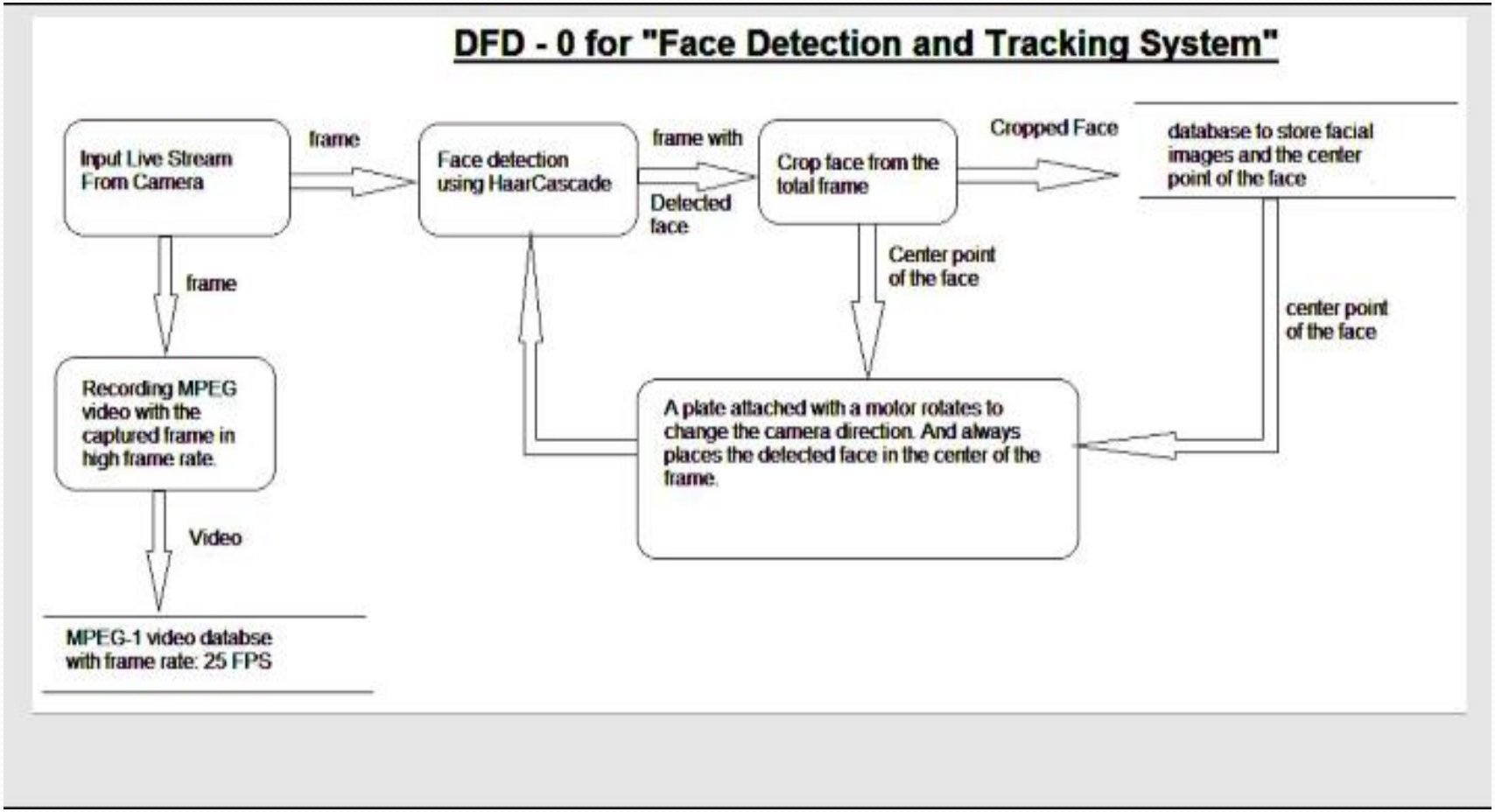
Fullfilment

- The system should be able to accurately detect human faces within images or video frames
- Based on the matching results, the system makes a decision on the identity of the individual.
- A fulfilled face recognition system should be evaluated based on performance metrics such as accuracy, speed, and robustness.
- For practical applications, the system should be integrable with existing infrastructure (e.g., CCTV systems,

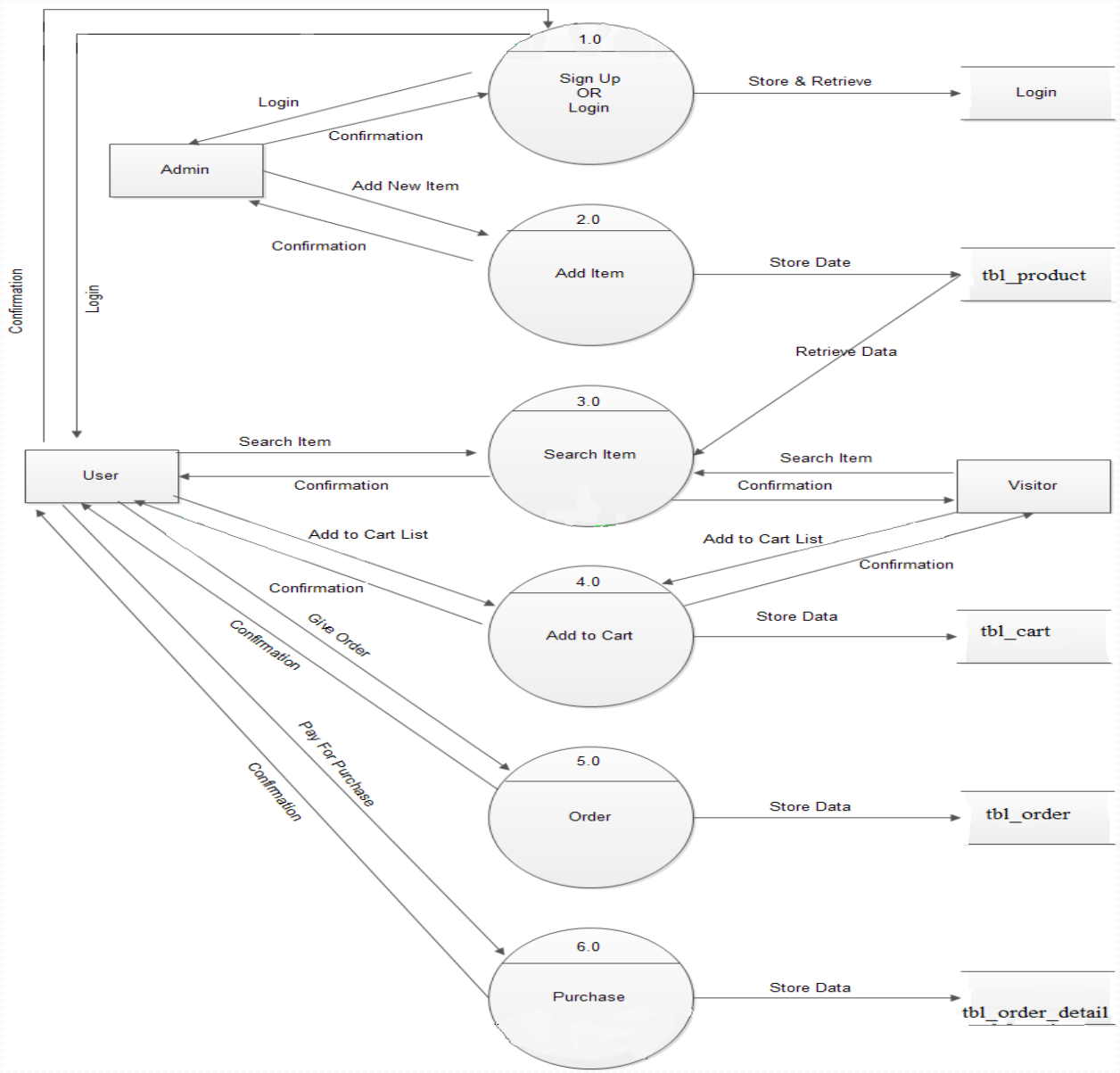
Requirements

Hardware		Software	
Processor :	Pentium-IV 600 MHz 1 GHz [Recommended]	Operating System:	Windows XP [SP2] or Higher
Hard Disk:	4 GB[Min] 40 GB[Recommended]	Technology :	JSP
RAM:	512 MB 1 GB [Recommended].	Web Server :	Internet Information Services (IIS) 5.1 & advance
		DBMS :	MySQL 5.1

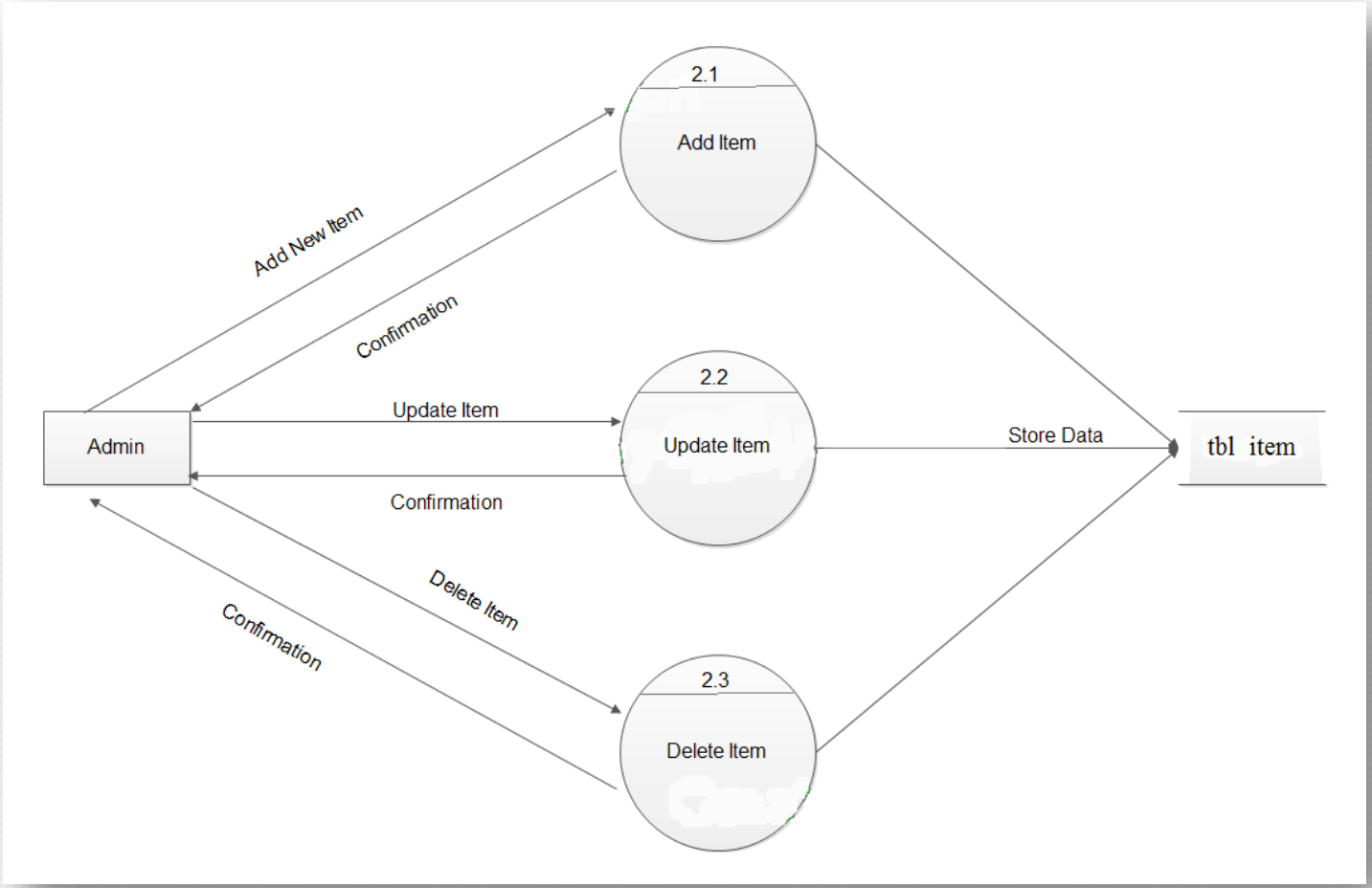
DFD (level -0)


DFD - 0 for "Face Detection and Tracking System"
Input Live Stream From Camera
frame
Face detection using HaarCascade
frame with
Detected face
Crop face from the total frame
Cropped Face
database to store facial images and the center point of the face
frame
Center point of the face
center point of the face
Recording MPEG video with the captured frame in high frame rate.
A plate attached with a motor rotates to change the camera direction. And always places the detected face in the center of the frame.
Video
MPEG-1 video databse with frame rate: 25 FPS

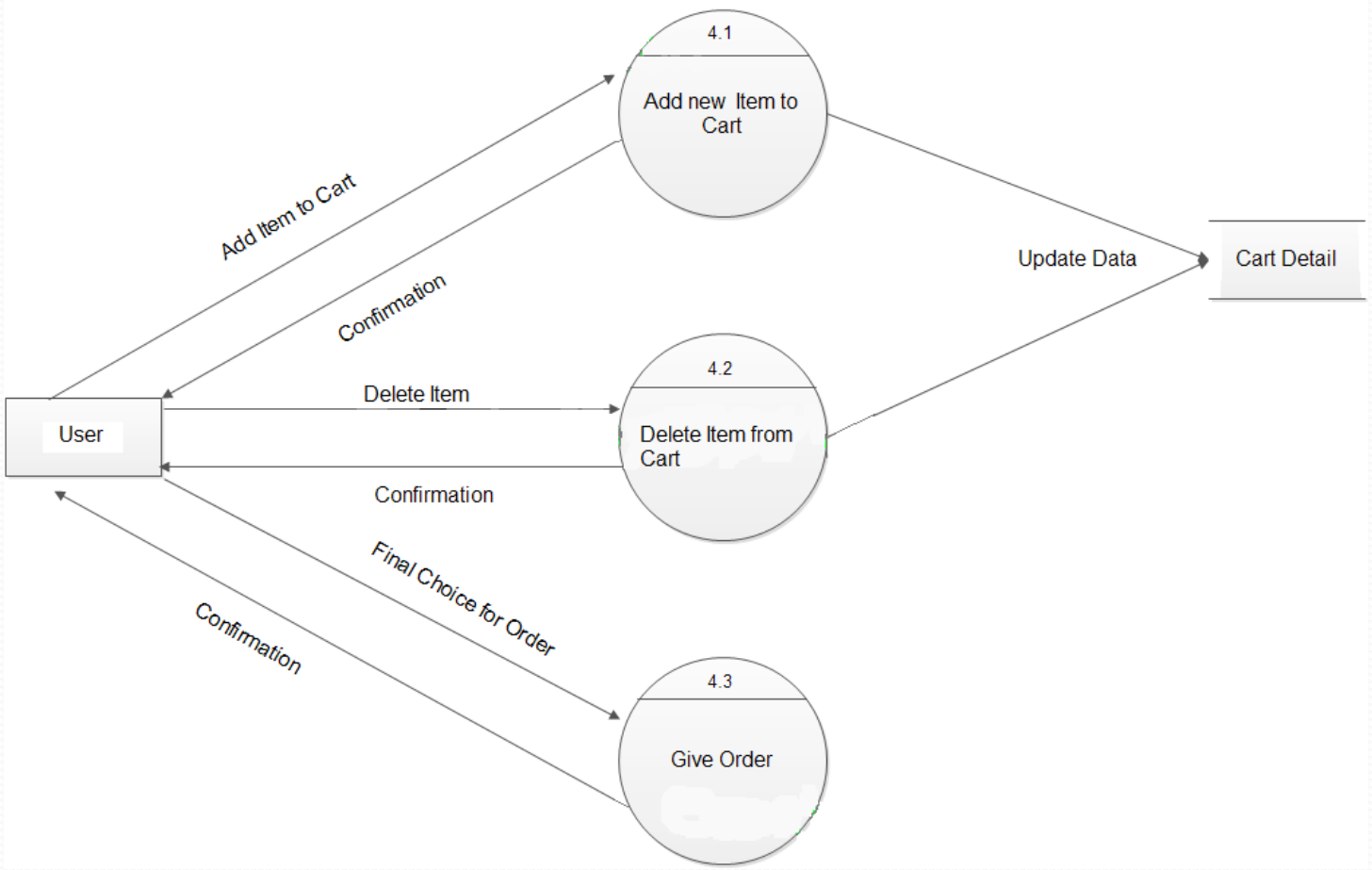
Level-1


1.0
Sign Up
OR
Login
Store & Retrieve
Login
Login
Confirmation
Admin
Add New Item
Confirmation
2.0
Add Item
Store Date
tbl_product
Confirmation
Login
Retrieve Data
3.0
Search Item
Search Item
Confirmation
User
Search Item
Confirmation
Visitor
Add to Cart List
Confirmation
Add to Cart List
Confirmation
4.0
Add to Cart
Store Data
tbl_cart
Confirmation
Give Order
Confirmation
Pay For Purchase
5.0
Order
Store Data
tbl_order
Confirmation
6.0
Purchase
Store Data
tbl_order_detail

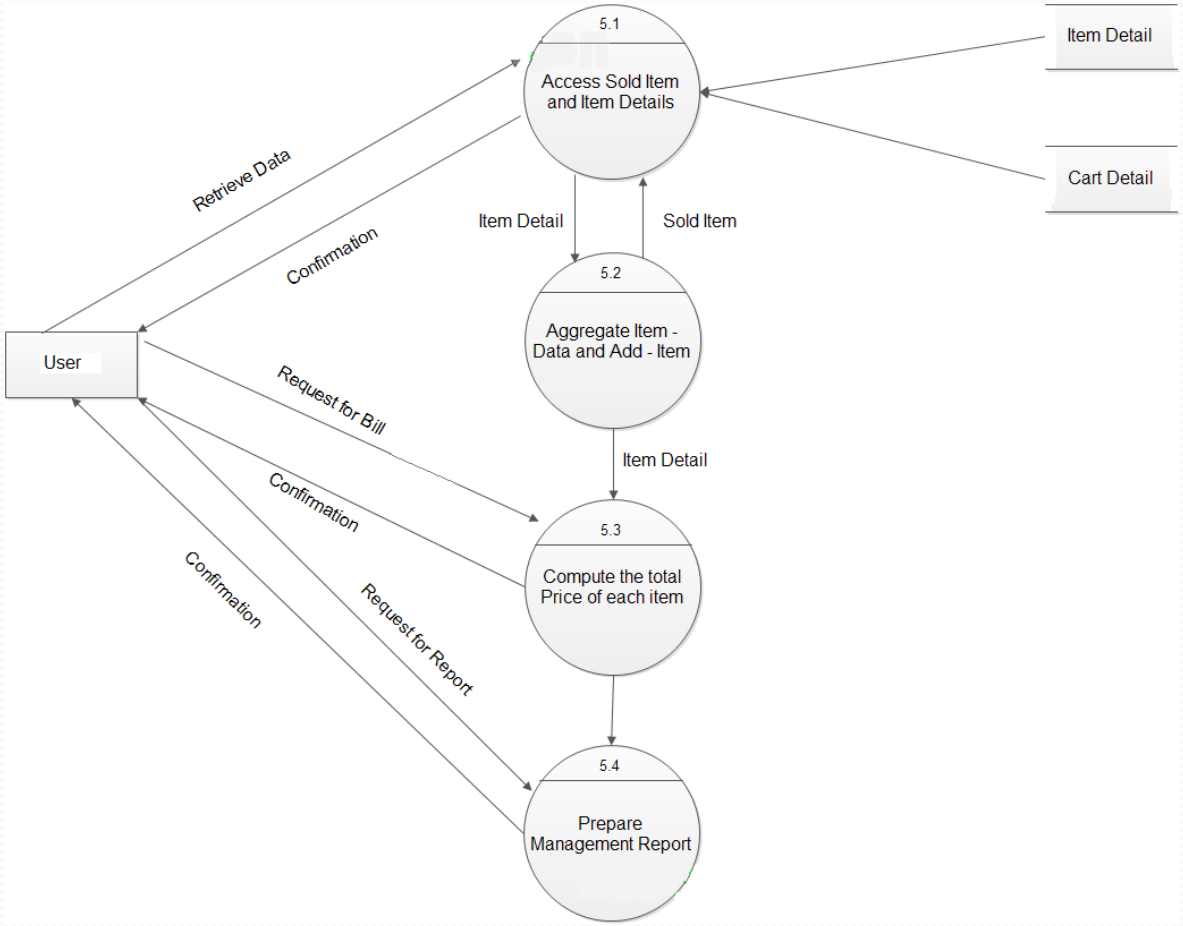
Level-2.0


2.1
Add Item
Add New Item
Confirmation
2.2
Update Item
Admin
Update Item
Store Data
tbl item
Confirmation
Delete Item
Confirmation
2.3
Delete Item

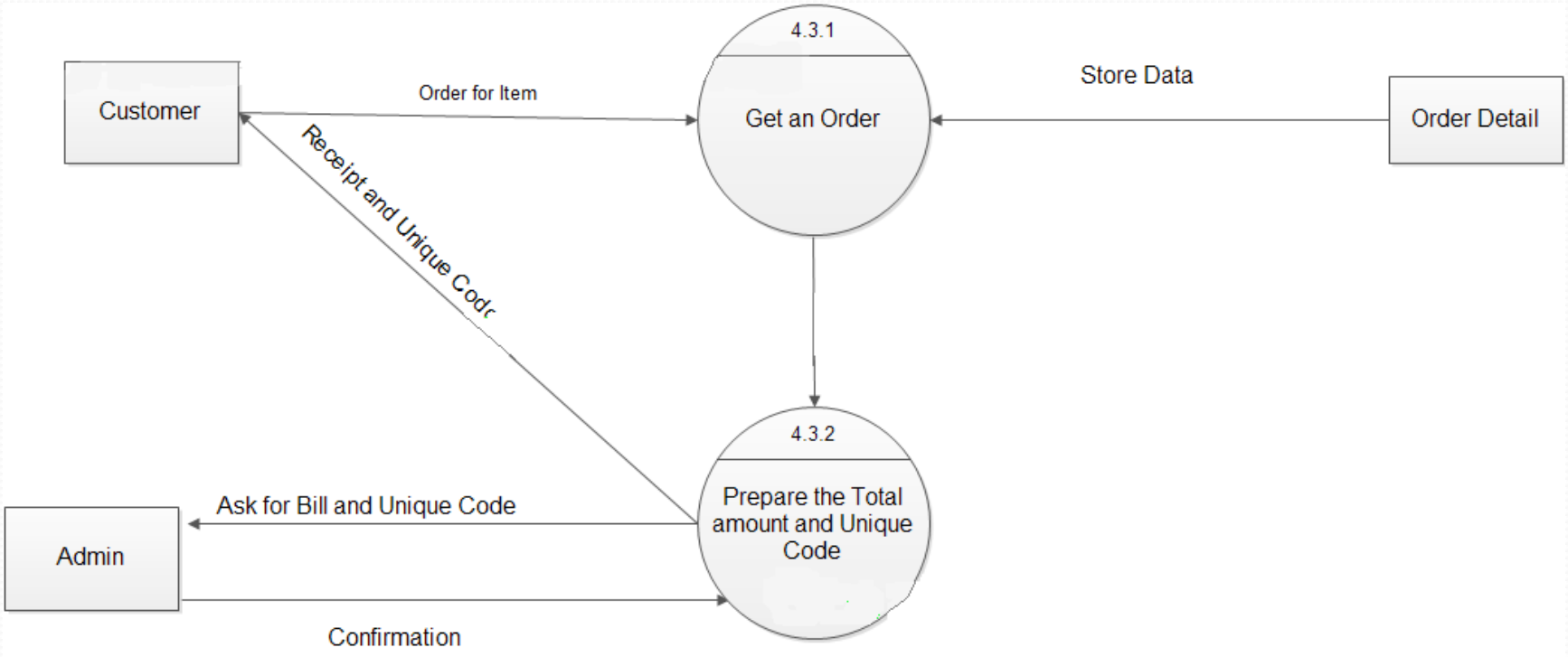
Level-2.1


4.1
Add new Item to Cart
Add Item to Cart
Confirmation
Update Data
Cart Detail
4.2
Delete Item
User
Delete Item from Cart
Confirmation
Final Choice for Order
Confirmation
4.3
Give Order

Level-2.2


5.1
Access Sold Item and Item Details
Item Detail
Cart Detail
Retrieve Data
Confirmation
Item Detail
Sold Item
5.2
Aggregate Item - Data and Add - Item
User
Request for Bill
Item Detail
Confirmation
5.3
Compute the total Price of each item
Confirmation
Request for Report
5.4
Prepare Management Report

Level-3


4.3.1
Customer
Order for Item
Get an Order
Store Data
Order Detail
Receipt and Unique Code
4.3.2
Prepare the Total amount and Unique Code
Ask for Bill and Unique Code
Admin
Confirmation