BUSINESS MANAGEMENT SYSTEM

-Bangle Business

Software Engineering
CSE 3001
F1 slot

REVIEW

TEAM 14

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PROBLEM INTRODUCTION

Since Large scale business man have the budget to hire people to look into their statistics, It becomes easy for them to be organized, systematic and provides them an upper hand. However, small scale businessmen have lot of burden due to excess manual work.

- Still they are relying on lot of paperwork whose importance is similar to the actual money.
- Owner can't rely on someone to handle this kind of task. If something happens he/she can't blame someone.
- Their is no concept of fixed pricing to each vendor. It's dynamic in each case.

Business management system for bangle merchants will provide them chance to boost up their progress as they will be able to think of other important aspects rather than worrying about their statistics.

SCOPE STATEMENT

To design and deploy reliable, interactive, within Budget application for small scale businessmen which could provide certain tools that can be used to keep track of their meetings as well as records of various cash turnovers, so as to avoid manual calculations and to make them focus on other important tasks. The main objective is to save time and effort.

PROCESS MODEL

INCREMENTAL PROCESS MODEL-

Incremental process model best suits our project.

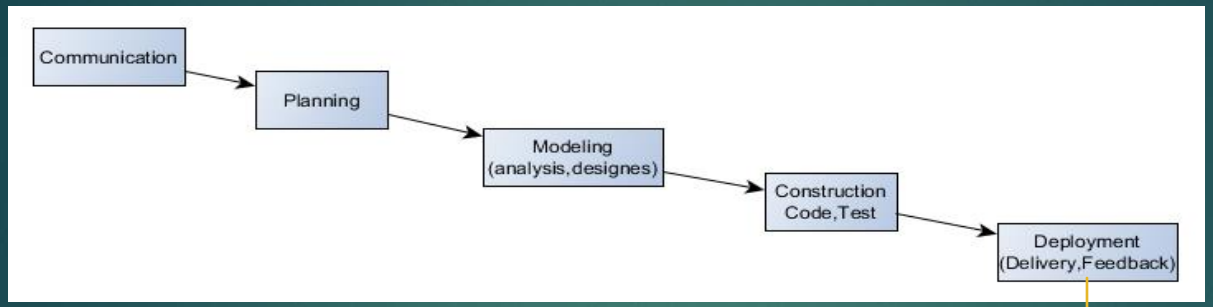
- Rather than delivering the system as a single delivery, the development and delivery is broken down into increments with each increment delivering part of the required functionality.
- User requirements are prioritized and the highest priority requirements are included in early increments.
- Once the development of an increment is started, the requirements are frozen though requirements for later increments can continue to evolve.
- New updates can be delivered with each increment so system functionality is available earlier.
- Early increments act as a prototype to help elicit requirements for later increments.

JUSTIFICATION-

- Customer can have new requirements and their requirements will be fulfilled step-wise.
- Lower risk of overall project failure.
- The highest priority system services tend to receive the most testing.
- Pre-determined requirements will be the first ones to be fulfilled as they are not high priority requirements.
- The customer requirements are high priority requirements and they will receive the most testing, so validation from the customers would not be an issue.
- The risk of system failure would be very less because every increment acts as a prototype for the upcoming requirements, so issues that will arise due to any requirement would be minor.

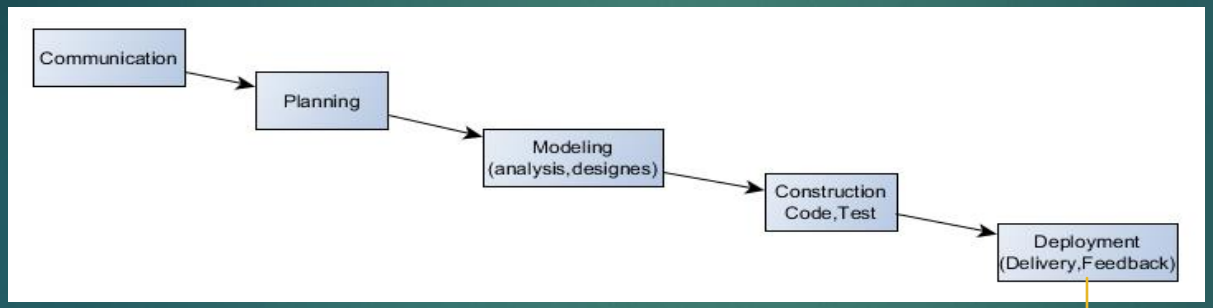
MODEL-

Increment 1



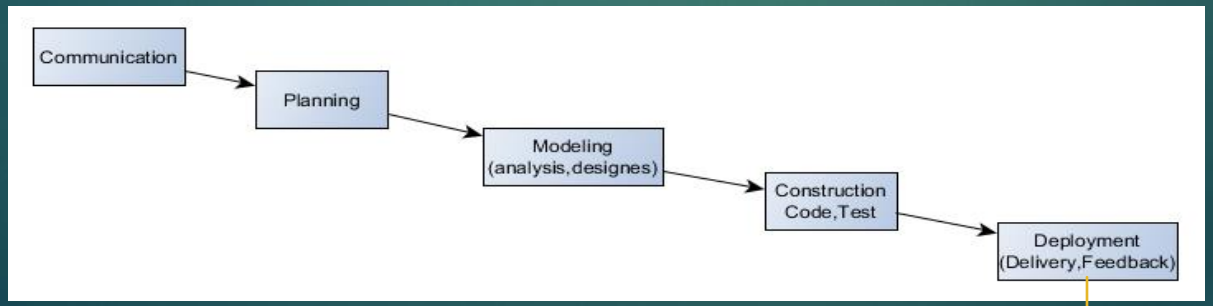
Delivery of 1St increment

Increment 2



Delivery of 2nd increment

Increment N



Delivery of Nth increment

STAKE HOLDERS

Since our application is focused to directly help the domain specified people. Our stake holders will be:

- Bangle Merchants

REQUIREMENTS W.R.T STAKE HOLDERS

Requirements with respect to the stake holders.

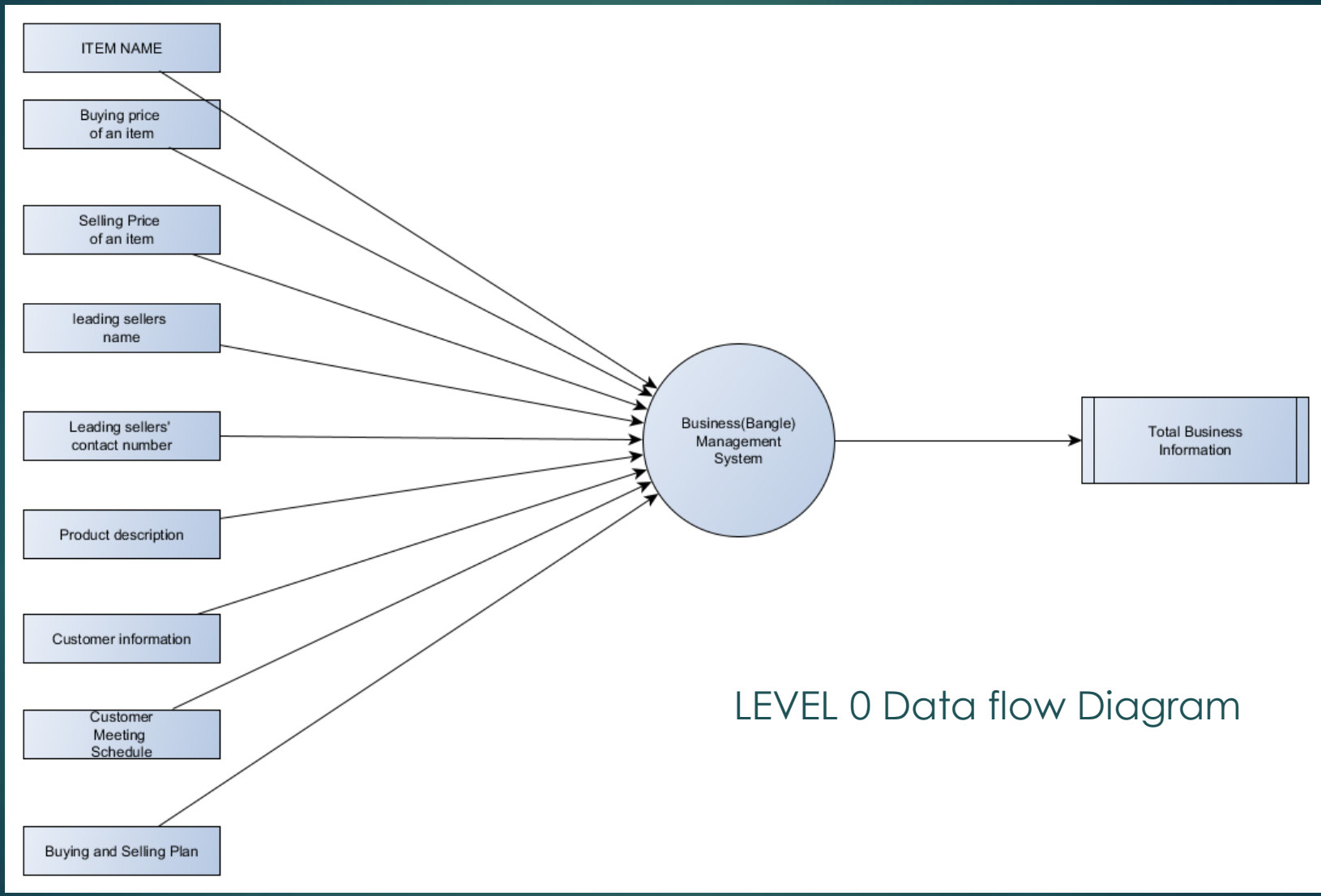
The system should be able to:

- Create a schedule of tasks.
- Delete tasks.
- Modify the C.P. of raw products.
- Modify the profit Percentage based on vendors.
- Maintain profit, loss along with the Payment records.
- Generate reports with respect to the time and location.

VIEWPOINT

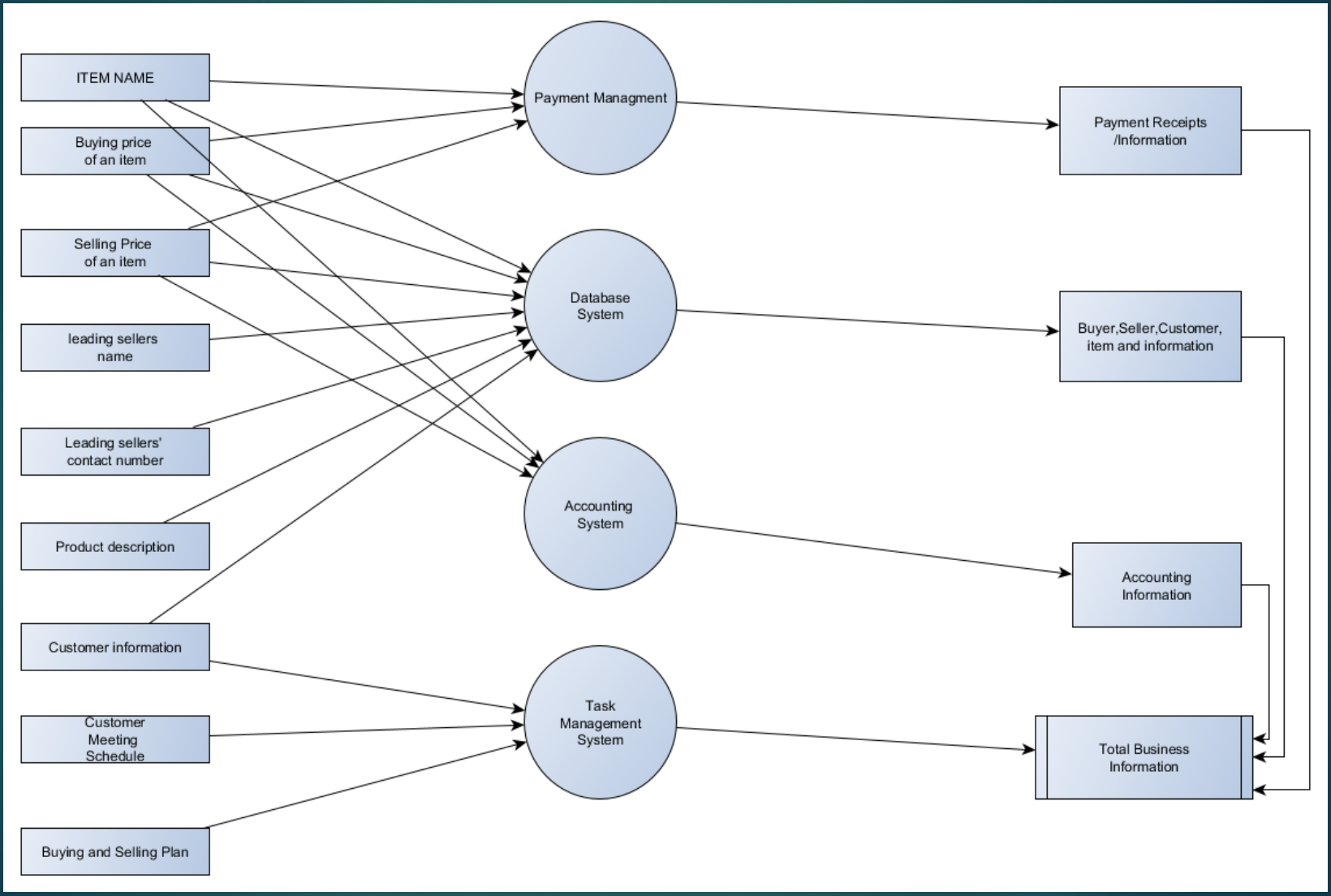
- The suitable view point for the system is the **functional viewpoint** because our system is not simply storing data but also involves the manipulation of the input data given by the user.
- This viewpoint can be implemented using the Data Flow Diagram which involves three phases, input, system processing, and output.
- For example, to add a task, the user must provide an input of name, time, date, etc and the system processes the inputs and then the task is added.
- The system involves storing and retrieving data from the database.

SYSTEM MODEL



LEVEL 0 Data flow Diagram

SYSTEM MODEL



ARCHITECTURE

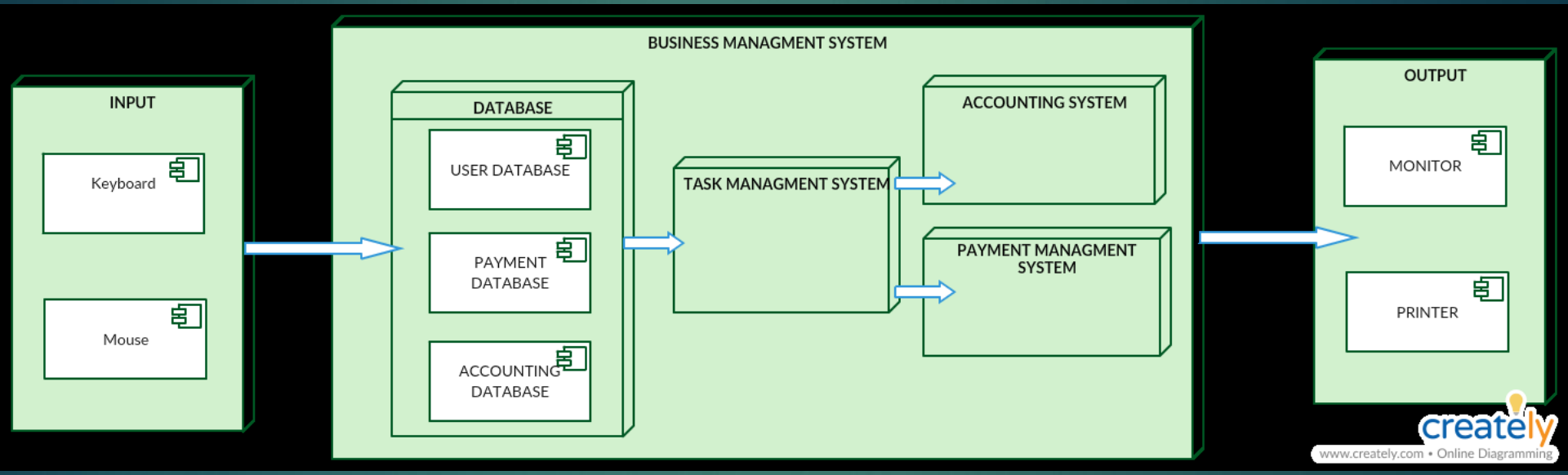
Suitable Architectural pattern

- Abstract machine model (Or Layered architecture)

Justifications:

- Used to model the interfacing of sub-systems.
- Organises the system into set of layers (or abstract machines) each of which provide a set of services.
- Supports the incremental development of sub-systems in different layers.
- In this model, the system is organized as the interfacing of subsystems such as payment system, accounting system, task management system, database system.

DEPLOYMENT MODEL



Test Cases

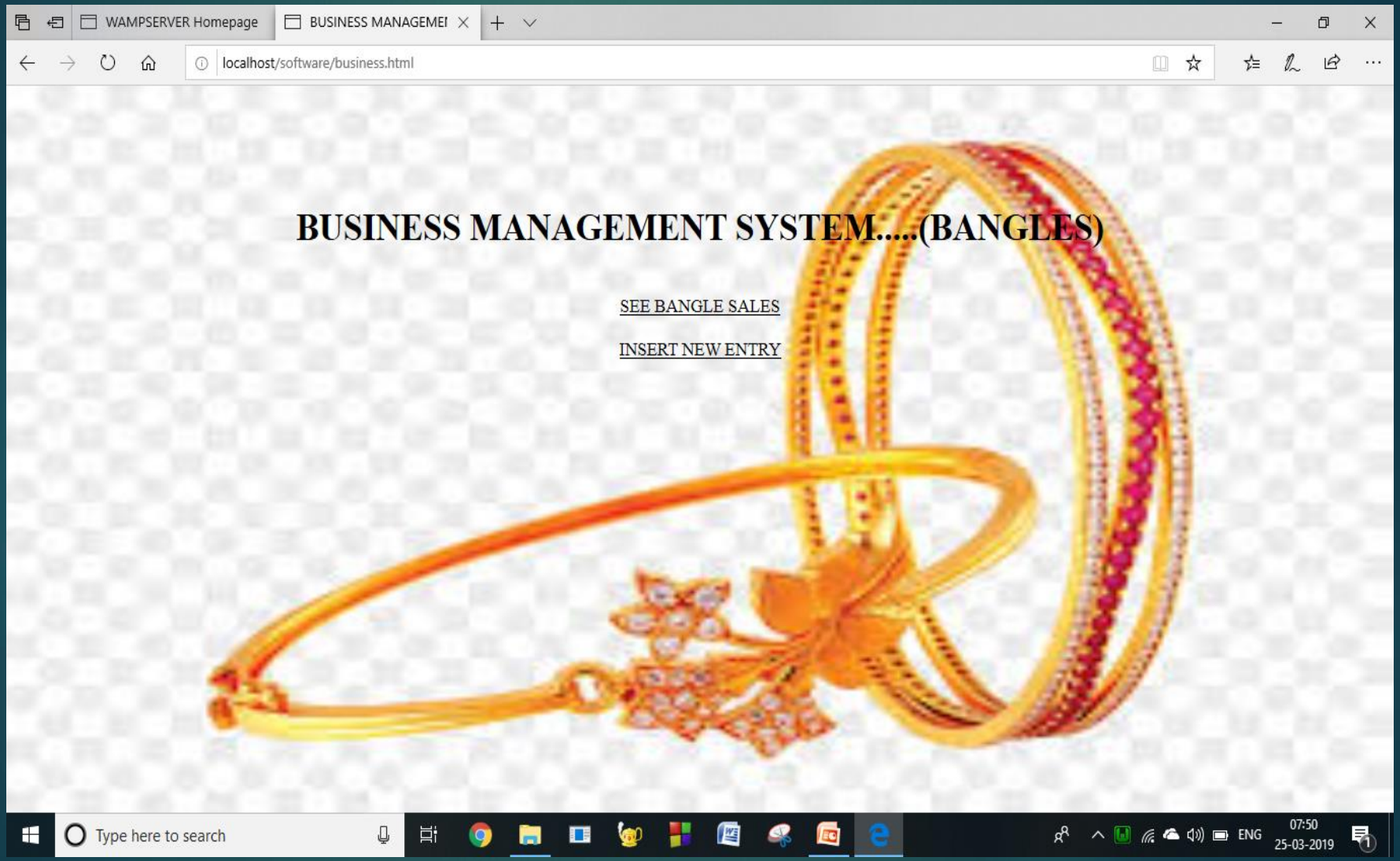
TEST PROCEDURE	TEST DATA	EXPECTED RESULT	ACTUAL RESULT
ENTER PASSWORD	PASSWORD: QWERTY123	ON ENTERING THE CORRECT PASSWORD HE SHOULD BE ABLE TO ACCESS THE SOFTWARE	ON ENTERING THE CORRECT PASSWORD HE SHOULD BE ABLE TO ACCESS THE SOFTWARE
ADD TASK	TASK DATA (ADDED FOR A TASK TO BE PERFORMED IN THE FUTURE)	WINDOW FOR TASK ADDITION SHOULD OPEN AND DATA SHOULD BE SAVED	WINDOW FOR TASK ADDITION SHOULD OPEN
ADD TASK	TASK DATA (ADDED FOR A TASK TO BE PERFORMED BEFORE THE CURRENT DATE)	WINDOW FOR TASK ADDITION SHOULD OPEN	WINDOW FOR TASK ADDITION OPENS BUT INPUT IS INVALID AS TASKS CANT BE CHANGED FROM PAST

Test Cases

TEST PROCEDURE	TEST DATA	EXPECTED RESULT	ACTUAL RESULT
DELETION OF TASK	ENTER A TASK TO BE DELETED (THAT EXISTS)	THE TASK GETS DELETED	THE TASK GETS DELETED
DELETION OF TASK	ENTER A TASK TO BE DELETED (THAT DOES NOT EXISTS)	THE TASK SHOULD GETS DELETED	CANNOT PROCESS THE REQUEST
MODIFYING THE TASK	MODIFYING THE DATE OF COMPLETIONOF THE TASK (TO FUTURE)	THE TASK GETS RESCHEDULED	THE TASK GETS RESCHEDULED
MODIFYING THE TASK	MODIFYING THE DATE OF COMPLETIONOF THE TASK (TO A PAST DATE)	THE TASK GETS RESCHEDULED	CANNOT PROCESS THE REQUEST

TEST PROCEDURE	TEST DATA	EXPECTED RESULT	ACTUAL RESULT
PAYMENTS	MODE OF PAYMENT: ABB	ORDER PLACED	ORDER PLACED
PAYMENTS	MODE OF PAYMENT: COD(CASH ON DELIVERY)	ORDER PLACED	CANNOT PROCESS THE REQUEST
SEARCHING THE TASK	TASK 1	DISPLAY THE TASK FOUND	DISPLAY THE TASK FOUND
SEARCHING THE TASK	TASK AGA	DISPLAY THE TASK FOUND	CANNOT PROCESS THE REQUEST AS TASK DOESNT EXIST

SAMPLE SCREENSHOTS



WAMPSERVER Homepage | BUSINESS MANAGEMEI

localhost/software/view.html

BUSINESS MANAGEMENT SYSTEM

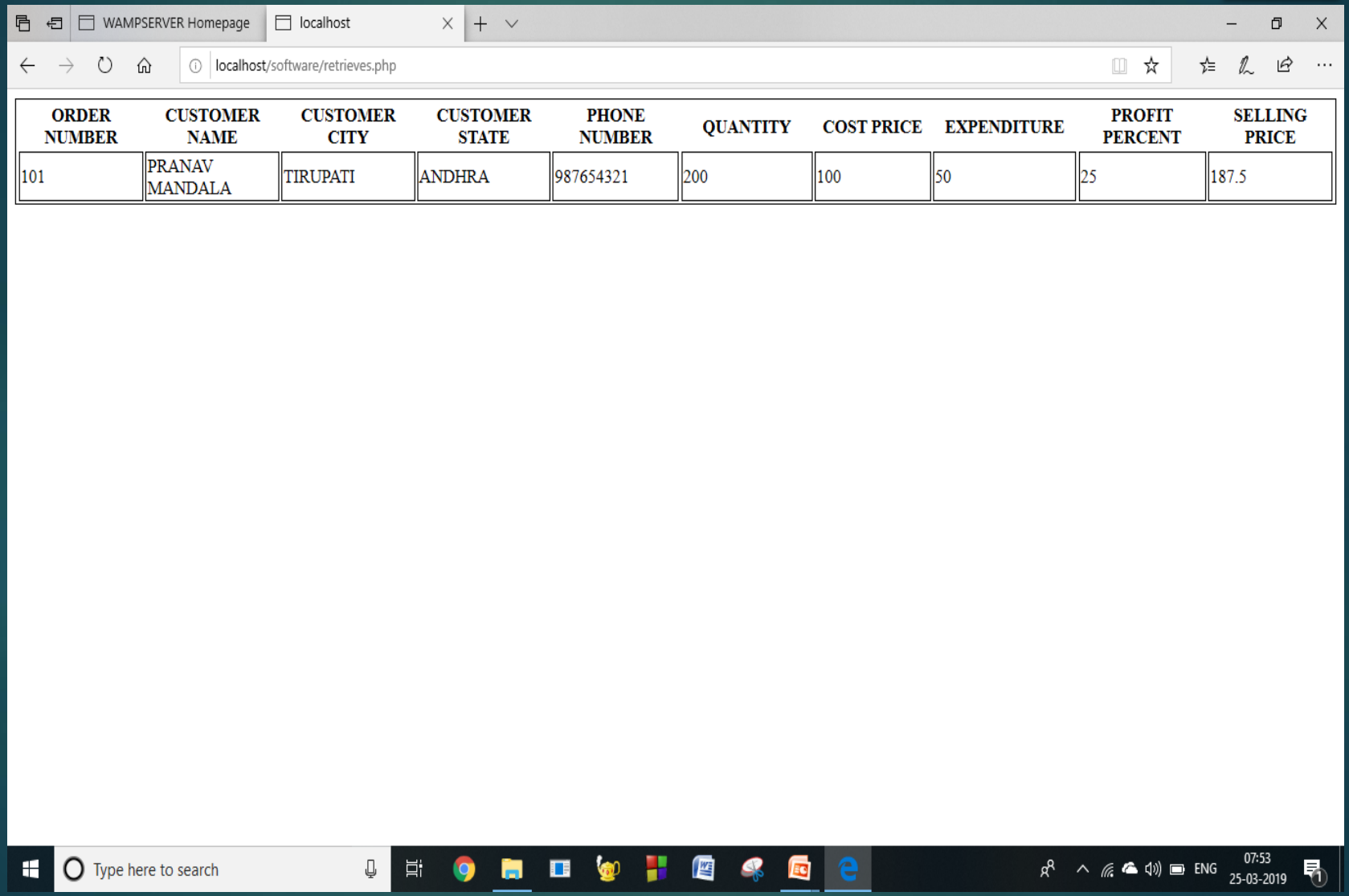
GIVE THE ORDER NUMBER OF THE ORDER
FOR WHICH YOU WANT TO RETRIEVE THE RECORDS:

ORDER NUMBER: 101

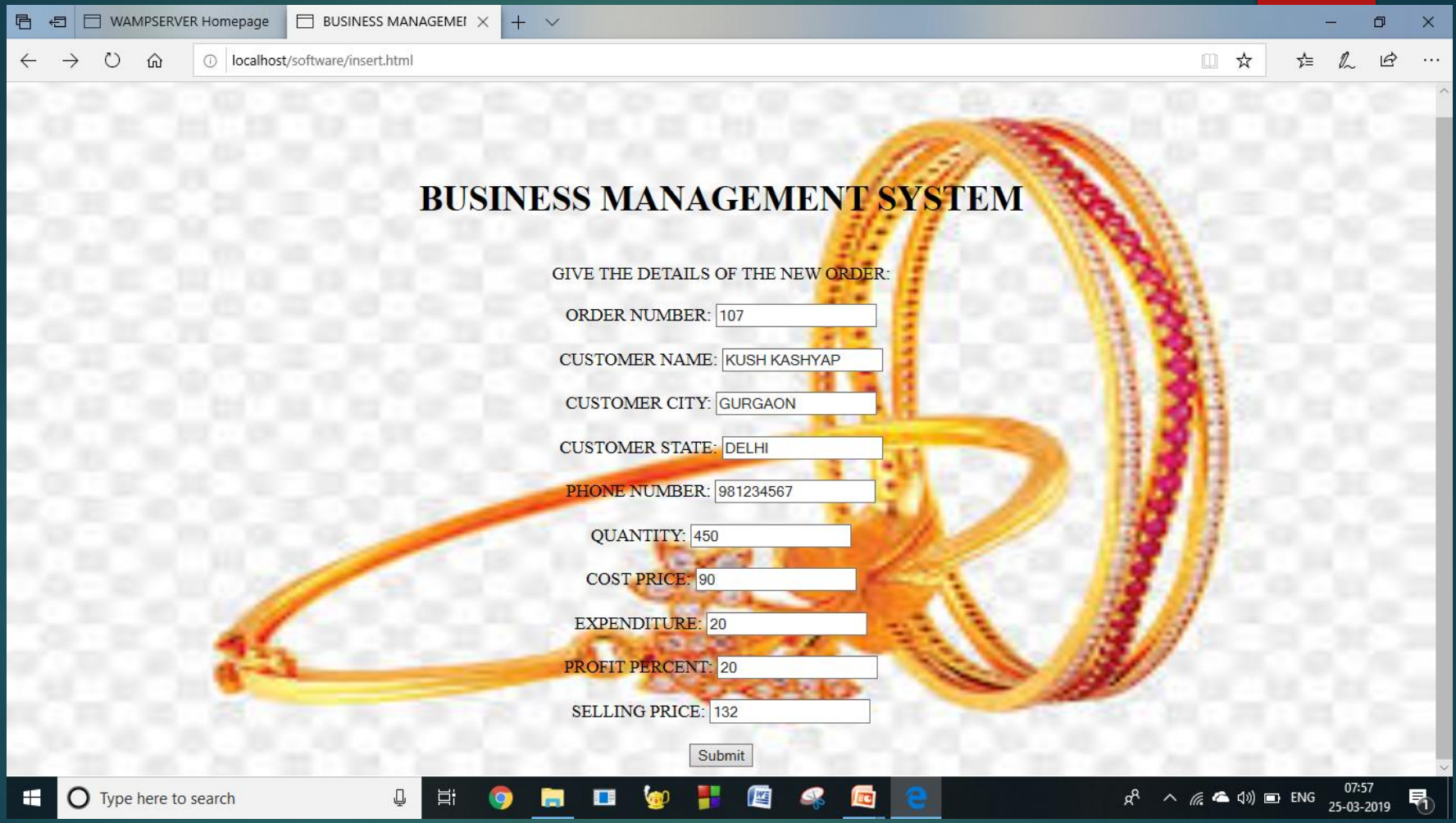
Submit

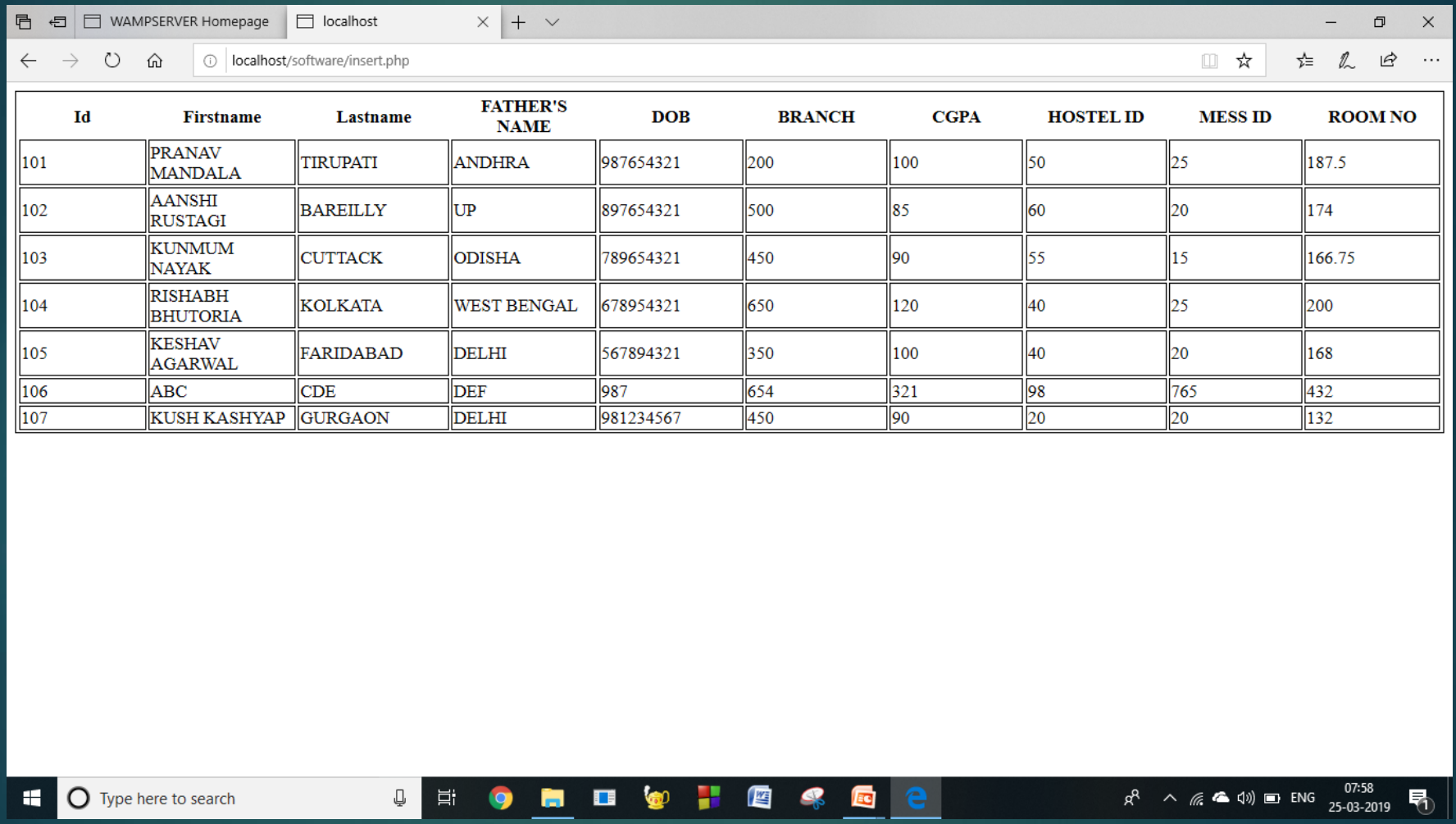
Type here to search

ENG 08:05 25-03-2019



ORDER NUMBER	CUSTOMER NAME	CUSTOMER CITY	CUSTOMER STATE	PHONE NUMBER	QUANTITY	COST PRICE	EXPENDITURE	PROFIT PERCENT	SELLING PRICE
101	PRANAV MANDALA	TIRUPATI	ANDHRA	987654321	200	100	50	25	187.5


WAMPSERVER Homepage
BUSINESS MANAGEMEI
localhost/software/insert.html
BUSINESS MANAGEMENT SYSTEM
GIVE THE DETAILS OF THE NEW ORDER:
ORDER NUMBER: 107
CUSTOMER NAME: KUSH KASHYAP
CUSTOMER CITY: GURGAON
CUSTOMER STATE: DELHI
PHONE NUMBER: 981234567
QUANTITY: 450
COST PRICE: 90
EXPENDITURE: 20
PROFIT PERCENT: 20
SELLING PRICE: 132
Submit
Type here to search
ENG
07:57
25-03-2019



Id	Firstname	Lastname	FATHER'S NAME	DOB	BRANCH	CGPA	HOSTEL ID	MESS ID	ROOM NO
101	PRANAV MANDALA	TIRUPATI	ANDHRA	987654321	200	100	50	25	187.5
102	AANSHI RUSTAGI	BAREILLY	UP	897654321	500	85	60	20	174
103	KUNMUM NAYAK	CUTTACK	ODISHA	789654321	450	90	55	15	166.75
104	RISHABH BHUTORIA	KOLKATA	WEST BENGAL	678954321	650	120	40	25	200
105	KESHAV AGARWAL	FARIDABAD	DELHI	567894321	350	100	40	20	168
106	ABC	CDE	DEF	987	654	321	98	765	432
107	KUSH KASHYAP	GURGAON	DELHI	981234567	450	90	20	20	132

SOFTWARE REQUIREMENT SPECIFICATION

For

BUSINESS MANAGEMENT SYSTEM: Bangle Business

Version 1.0 approved

Prepared by Group 14

VIT Vellore

10th March'19

Table of Contents

Revision History

Name	Date	Reason For Changes	Version

1. Introduction:

1.1) Purpose:

This document is made in order to present a detailed description about the business management system of small and medium scale businesses. This document explains the purpose and characteristics of the system in order to exhibit the first version of the product for better understanding to the customer in order to gain feedback.

1.2) Document Conventions:

The standards or topologic conventions that were followed were 12 font size Times New Roman.
Bold text is used to differentiate the headings and subheadings from the text.

1.3) Intended Audience and Reading Suggestions:

This project targets the small-scale businessmen in order to define their product management for easy access and documentation.

1.4) Product Scope:

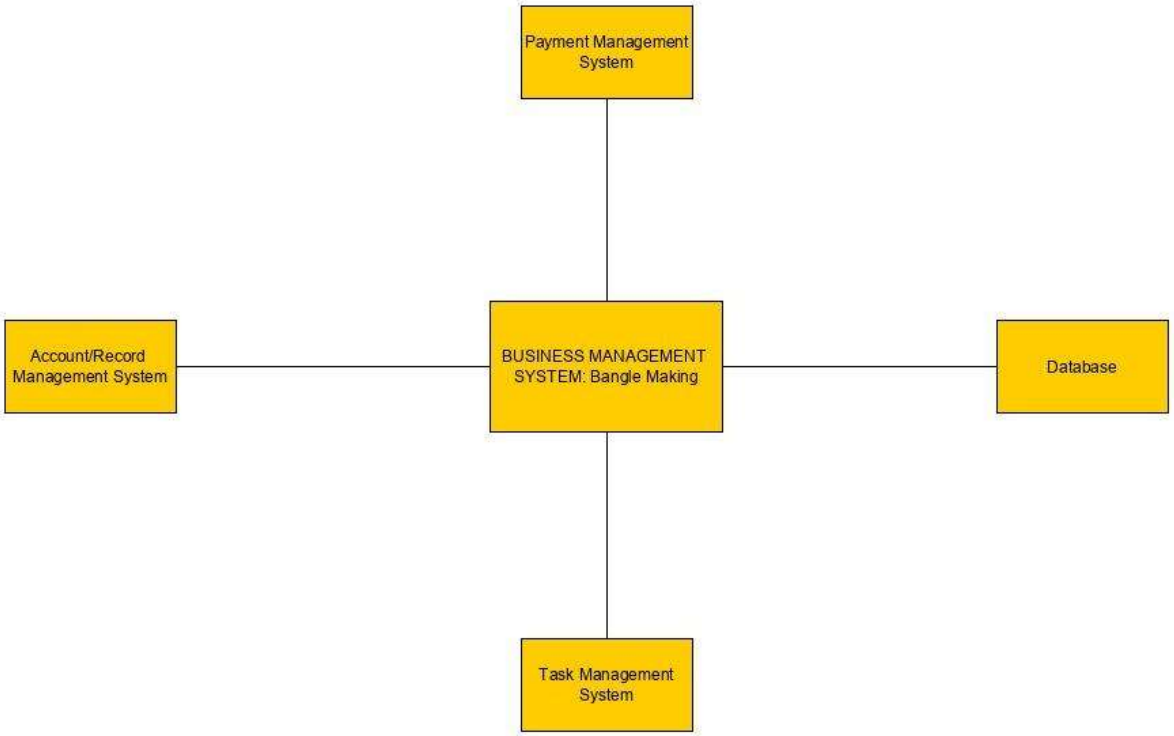
To design and deploy reliable, interactive, within Budget application for small scale businessmen which could provide certain tools that can be used to keep track of their meetings as well as records of various cash turnovers, so as to avoid manual calculations and to make them focus on other important tasks. The main objective is to save time and effort

1.5) References:

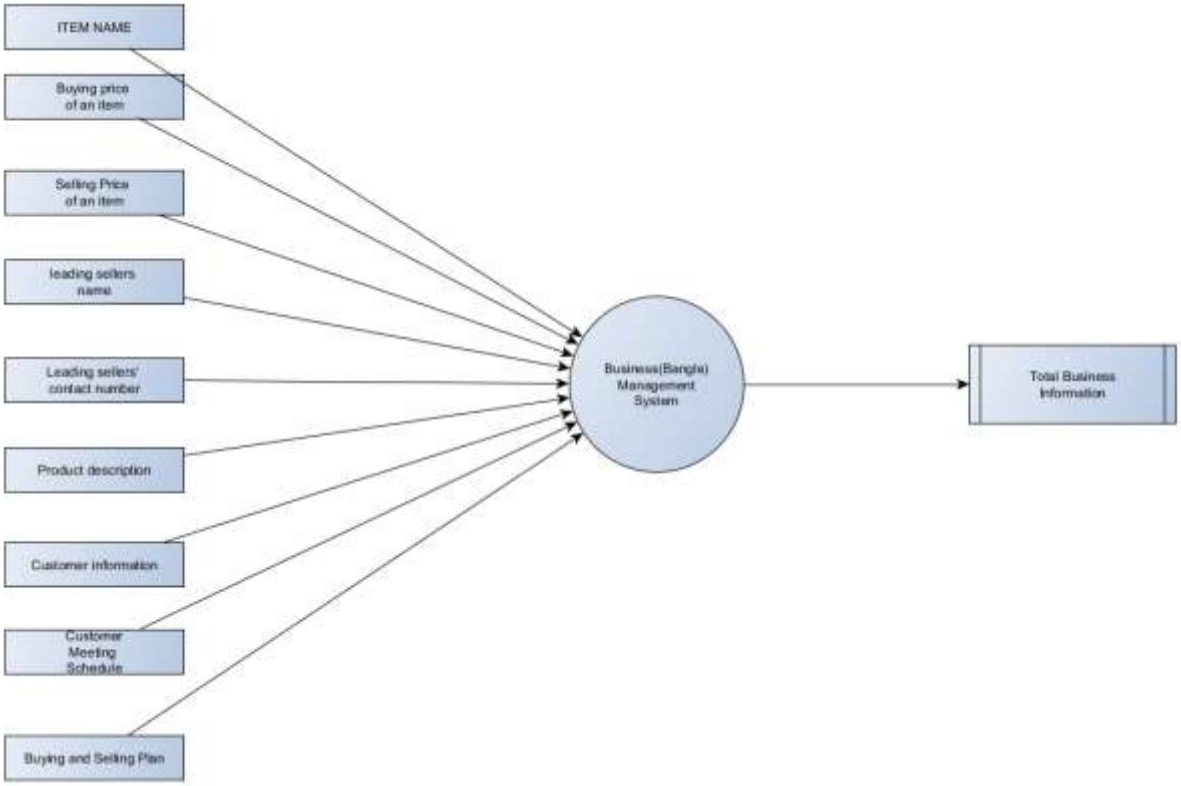
https://www.perforce.com/blog/alm/how-write-software-requirements-specification-srs-document

2. Overall Description

2.1) Product Perspective



2.2) Product Functions



2.3) User Classes and Characteristics

Stake Holder: Bangle makers.
1. Can modify C.P. of raw products.
2. Delete tasks
3.Modify profit percentage based on vendors
4. Create schedule of tasks
5. Maintain profit and loss
6. Generate reports

2.4) Operating Environment

The operating environment is:

Operating system: Windows.

Database: sql+ database

Platform: PHP

2.5)

Design and Implementation Constraints

Language Requirement: English is used in the software, and thus is necessary.

Time Constraint: Due to time constraints, this system is made to be simple and easy and contains basic functionalities with the UI being simple as well.

Reliability Requirements: The backend server has to provide relevant data which is up to date and thus should keep syncing the changes made to avoid loss of data.

2.6) User Documentation

For easy understanding, the bangle makers will be provided with proper explanation and tutorials before they start using this system.
Also, an easy explanation of how to manage and handle the system will also be given that can be referred by them.

2.7) Assumptions and Dependencies

The user is considered to be well literate to be able to operate the application.

It is assumed that the system developed will function properly under Windows OS, and Apache Server with sql+ database. If there are any miscalculations, The SRS document should be flexible enough to change accordingly.

3. External Interface Requirements

3.1) User Interfaces

Front-end software: HTML
Back-end software: SQL+

3.2) Hardware Interfaces

Windows.
A browser which supports HTML & PHP

3.3) Software Interfaces

Software used	Description
Operating system	Windows is chosen since its user friendly and easier to use.
Database	SQL+ database is chosen for the storage of data.
PHP	PHP language is chosen for implementation because of its interactive support.

3.4) Communications Interfaces

This project supports all types of web browsers. This business manage system shall be using HTTP/HTTPS for communication over Internet and TCP/IP protocol for intranet communication.

4. System Features

4.1 Payment Management System:

4.1.1 Description and Priority

It is a system to generate various payment types depending on the vendor and is of utmost priority.

4.1.2 Stimulus/Response Sequences

Stimulus: It is triggered by entering vendor details and pricing by user, i.e. numeric data.

Response: The input is accepted by the system and required report is generated

4.1.3 Functional Requirements

REQ-1: System should allow numeric inputs.

REQ-2: System should be capable of basic mathematic functions.

REQ-3: The output file should be generated in specified format.

4.2 Task management system

4.2.1 Description and Priority

It is a reminder tool to make aware the user of pending tasks and also delete them. It is of medium priority.

4.2.2 Stimulus/Response Sequences

Stimulus: Task name is entered by user.

Response: A schedule table is generated by the system.

Stimulus: Each task is assigned a schedule by the user.

Response: System starts a timer for each task.

4.2.3 Functional Requirements

REQ-1: System shall allow user to enter schedule and task

REQ-2: System shall allow user to delete tasks

REQ-3: System must be able to display task and generate notification after expiry of timer.

REQ-4: For invalid input system must ask for input again.

4.3 Record Management System

4.3.1 Description and Priority

It is a system to modify Cost Price of raw materials and generate profit and loss reports. It is of High priority.

4.3.2 Stimulus/Response Sequences

Stimulus: User gives the numeric input.

Response: The system modifies the required value.

4.3.3 Functional Requirements

REQ-1: User should be able to input numeric value.

REQ-2: System shall be able to do basic mathematical operation.

REQ-3: System must be able to do modification tasks to the database.

REQ-4: For invalid input system must ask for valid input again.

5. Other Nonfunctional Requirements

5.1Performance Requirements

- Real-time database must be used.
- Database must return query results within 5 seconds.
- Mathematical operations must not take more than 2 seconds.
- UI should be light and responsive and should not take more than 5 seconds to load.
- Login Validation should be done within 3 seconds.
- Response to customer inquiry must be done within 5 minutes.
- System should be able to deal with disastrous situations in times of danger or threat to security.
- The system should be easy to manage & user friendly.

5.2 Safety Requirements

Recovery systems for the database must be in place, if the database gets corrupted due to human error or natural disaster. Data must be backed up regularly to an off site server so as to recover data in case of catastrophe.

5.3 Security Requirements

All communications must be encrypted using RSA and the data in the server must be hashed using latest techniques like MD5 or SHA3.

5.4 Software Quality Attributes

Reliability: The software should be reliable and not breakdown under edge conditions.

Availability: The software should be in a committable and operable state whenever called upon.

Flexibility: System should be flexible and accommodating enough to support addition of new features.

Efficiency: Max number of resources must be made available to reduce lag and ensure hassle free and efficient operation.

Integrity: System should focus on securing the customer information and avoid data losses as much as possible.

Maintainability: The system should be easy to modify and maintain.

5.5 Business Rules

The customer should have a valid payment method.

The user should have a PAN card.

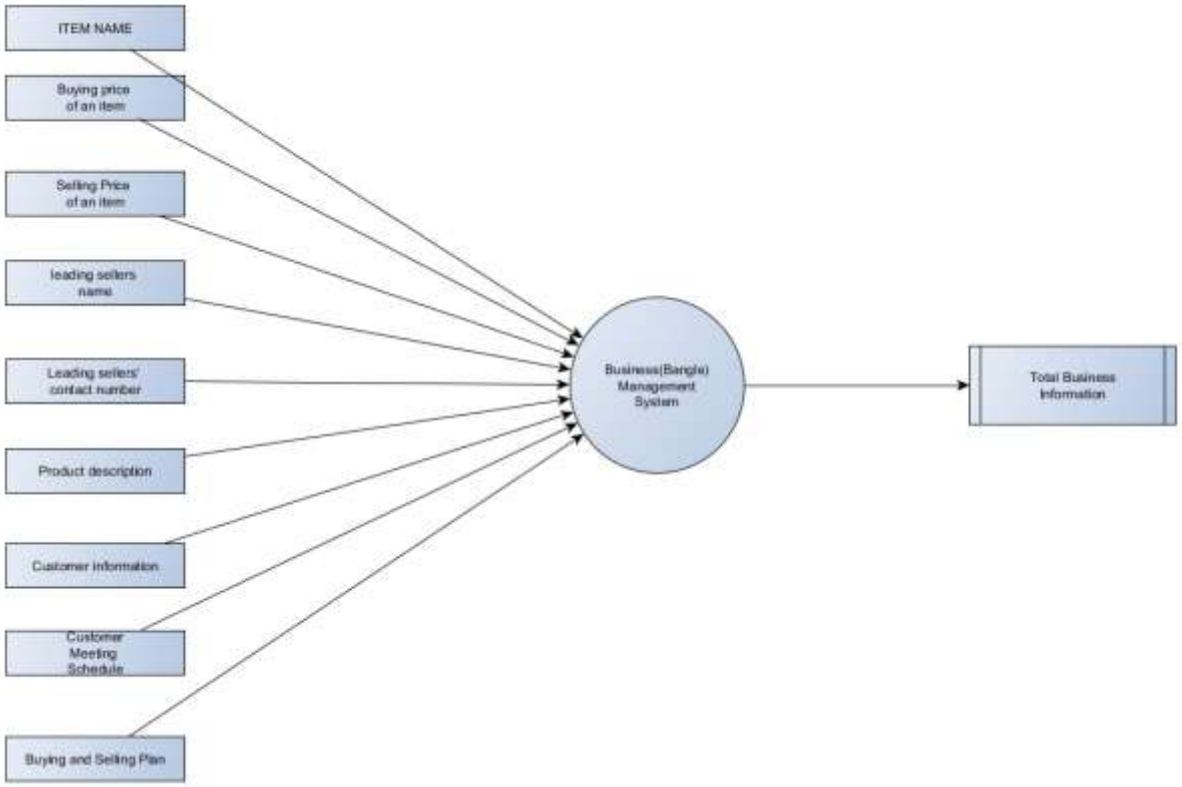
The user must have an Adhaar card and GST number.

APPENDIX A:

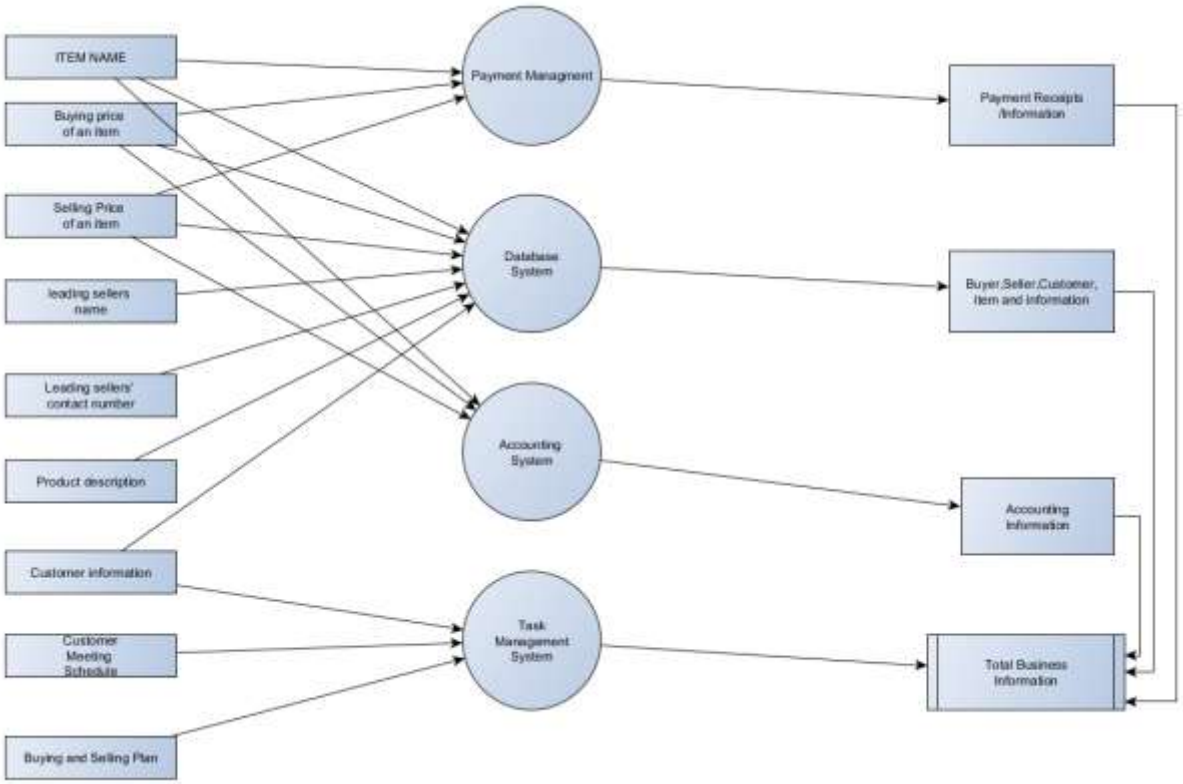
BMS – Business Management System
HTML – Hyper Text Markup Language
PHP- Personal Home Page
SQL- Structured Query Language
OS- Operating System
DFD- Data Flow Diagram
UI- User Interface

APPENDIX B:

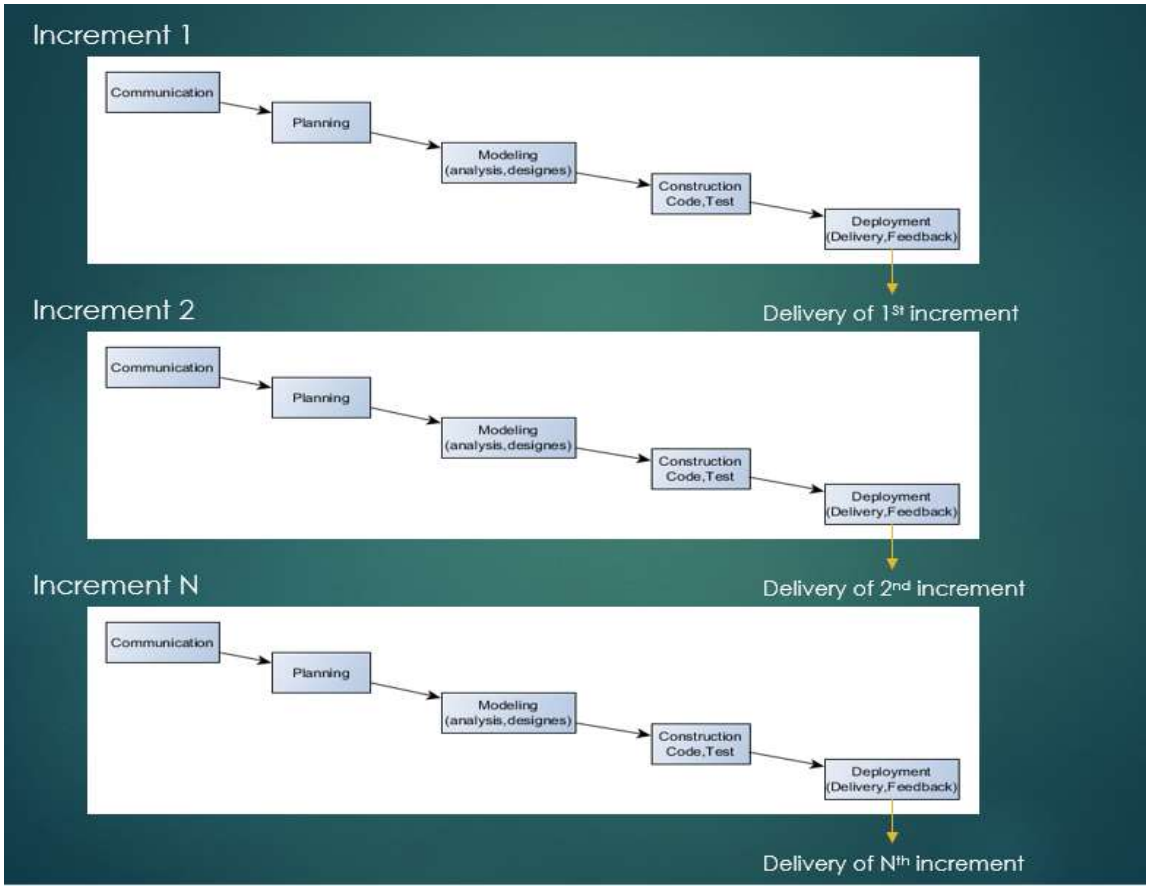
Data Flow diagram level 0



Data Flow diagram level 1



Incremental Model:



Deployment Model: