DESIGN DOCUMENT

ONLINE ECOMMERCE SHOPPING STORE

Version 1.0

Muhammad Mujtaba Khan (CS-18136)

Iqra Irfan (CS-18123)

Soniya Shafi (CS-18133)

Misha Akram Baig (CS-18118)

Department of Computer and Information Systems

NED University of Engineering and Technology

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Chapter 1

Introduction

Online shopping is the process whereby consumers directly buy dresses or accessories from online shop, without an intermediary service, over the Internet using a web browser . It is a form of electronic commerce. An online shop, or web shop evokes the physical analogy of buying products or services in a shopping centre. In this section, a brief overview of the software such as the scope of the product, definitions and an overall document overview is mentioned in detail.

1.1 Document Purpose

Creating design documentation is an important step in the project design process and has a direct impact on the outcome. The best design documentation gives a product team a framework for making design decisions. So the purpose of the Software Design Document is to provide a description of the design of a system fully enough to allow for software development to proceed with an understanding of what is to be built and how it is expected to built.

1.2 Product Scope

Online shopping is rising day by day in today's world where computer user's are increasing day by day so as the online shopping trends are also increasing. This project covers the online selling of dresses and accessories. The project shows the product category and then product details. From the product details, the product can be added to cart and can be bought.

1.3 Document Overview

The rest of this design document is organized as follows:

- Chapter 2 contains Object Oriented Design in which Class Diagram and Data Dictionary of the system are there.
- Chapter 3 contains Functional Modeling in which Level 0,1 and 2 DFD's of the system are there.
- Chapter 4 contains Behavioral Modeling in which State Transition Diagram of the system are there.
- Chapter 5 contains Interaction Modeling in which Usecase Diagram and Sequence Diagram of the system are there.

1.4 References

- IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

1.5 Definitions/Abbreviations

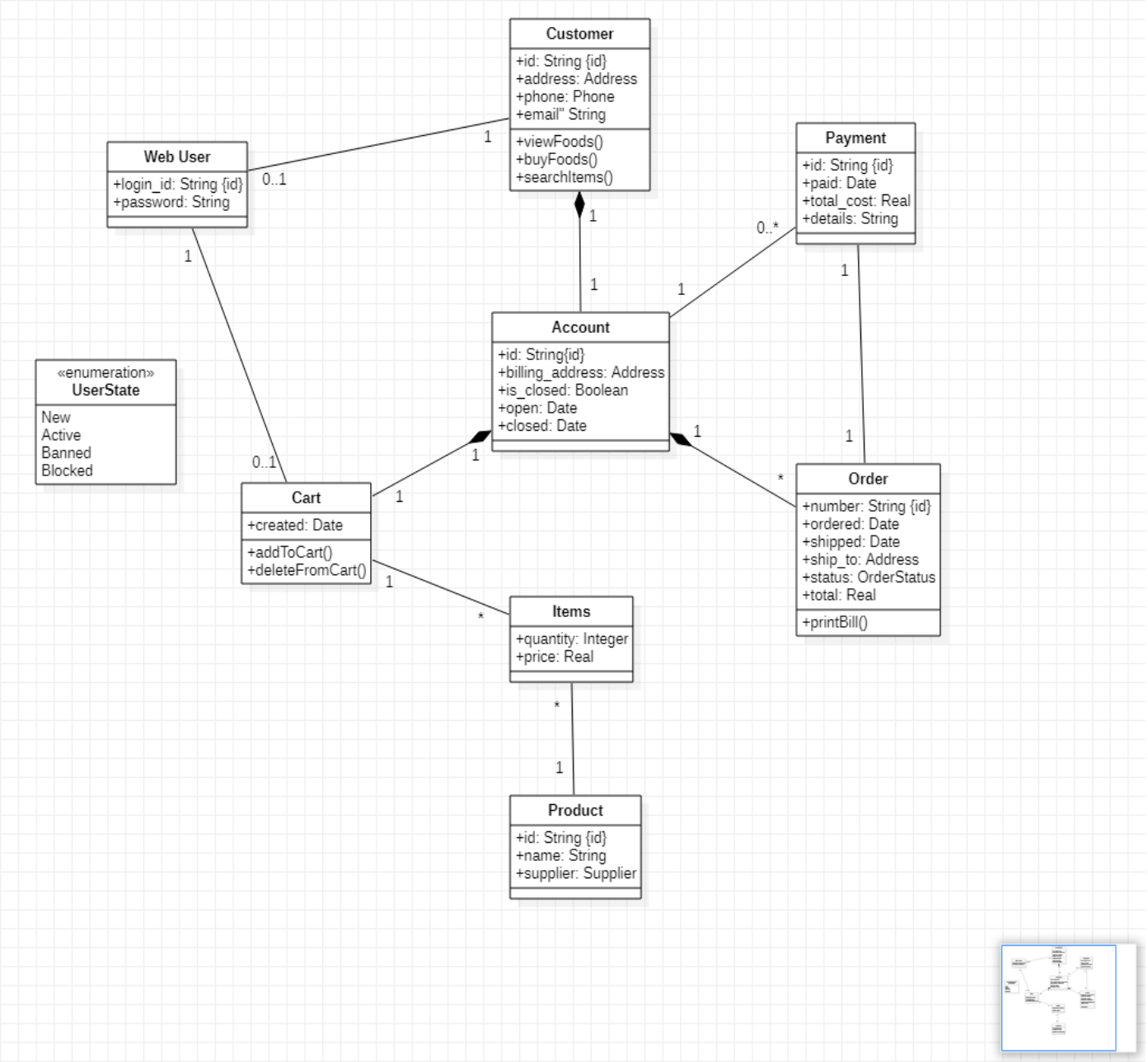
- **Object Oriented Design:** process of planning a system of interacting objects for the purpose of solving a software problem.
- **Class Diagram:** a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.
- **Data Dictionary:** A Data Dictionary is a collection of names, definitions, and attributes about data elements that are being used or captured in a database, information system, or part of a research project.
- **Functional Modeling:** ongoing testing of design concepts (ideas) to see if they work/function as intended.

- **Level 0 DFD:** also called a Context Diagram. It's a basic overview of the whole system or process being analyzed or modeled. It's designed to be an at-a-glance view, showing the system as a single high-level process, with its relationship to external entities.
- **Level 1 DFD:** A level 1 DFD notates each of the main sub-processes that together form the complete system.
- **Level 2 DFD:** 2-level DFD goes one step deeper into parts of 1-level DFD. It can be used to plan or record the specific/necessary detail about the system's functioning.
- **Behavioral Modeling:** Behavioral modeling uses available consumer and business spending data to estimate future behavior in specific circumstances.
- **State Transition Diagram:** State-transition diagrams describe all of the states that an object can have, the events under which an object changes state (transitions), the conditions that must be fulfilled before the transition will occur (guards), and the activities undertaken during the life of an object (actions).
- **Interaction Modeling:** Interaction models shows the interaction between the components of a system, or between the system being developed and other systems (or users).
- **Use Case Diagram:** A use case diagram is a behavior diagram and visualizes the observable interactions between actors and the system under development.
- **Sequence Diagram:** A sequence diagram shows object interactions arranged in time sequence. It depicts the objects involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario.

Chapter 2

Object Oriented Design

Class Diagram



Data Dictionary

Admin Login Table

Primary Key: ADMIN_ID

FIELDNAME	DATATYPE	DESCRIPTION	CONSTRAINTS
ADMIN_ID	INT(10)	Primary Key	Null
USERNAME	VARCHAR(255)	Login Admin	Null
PASSWORD	VARCHAR(255)	Login Password	Null

User Login Table

Primary Key: u_id

FIELDNAME	DATATYPE	DESCRIPTION	CONSTRAINTS
U_ID	INT(10)	Primary Key	Null
U_TXTUSER	VARCHAR(255)	Login User	Null
U_TXTMAIL	VARCHAR(255)	Email Id	Null
U_TXTPASS	VARCHAR(255)	Login Password	Null

Product Table

Primary Key: - PROD_ID.Foreign key: - BRAND_ID

FIELDNAME	DATATYPE	DESCRIPTION	CONSTRAINTS
PRO_ID	INT(11)	Profile ID	Null
FEATURES	VARCHAR(50)	Product Features	Null
IMAGES	VARCHAR(50)	Product Images	Null

Order Details Table

Primary Key: - O_Id , Foreign key: - U_Id

FIELDNAME	DATATYPE	DESCRIPTION	CONSTRAINTS
O_ID	INT(11)	Order ID	Null
U_ID	INT(11)	User ID	Null
QUT	INT(11)	Quantity	Null
PRICE	INT(11)	Price	Null
TOTAL PRICE	INT(11)	Total Amount	Null

Cart Table

Primary Key: - CART_ID , Foreign Key: - U_ID

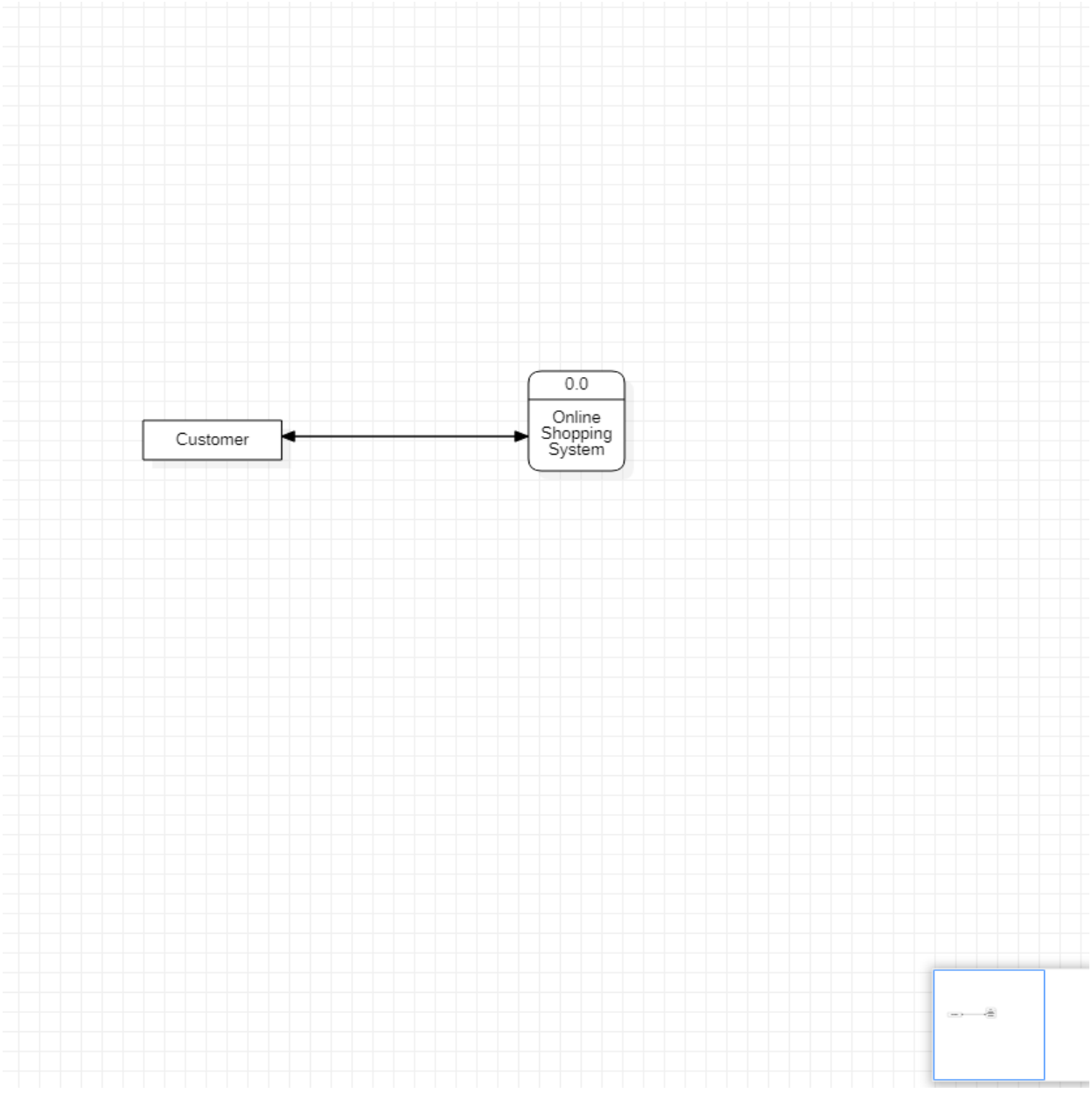
,Foreign Key: - PROD_ID

FIELDNAME	DATATYPE	DESCRIPTION	CONSTRAINTS
CART_ID	INT(11)	Cart ID	Null
U_ID	INT(11)	User ID	Null
PROD_ID	INT(11)	Product ID	Null
PRICE	VARCHAR(125)	Price	Null
QUT	VARCHAR(25)	Quantity	Null
TOTAL	VARCHAR(25)	Total Amount	Null

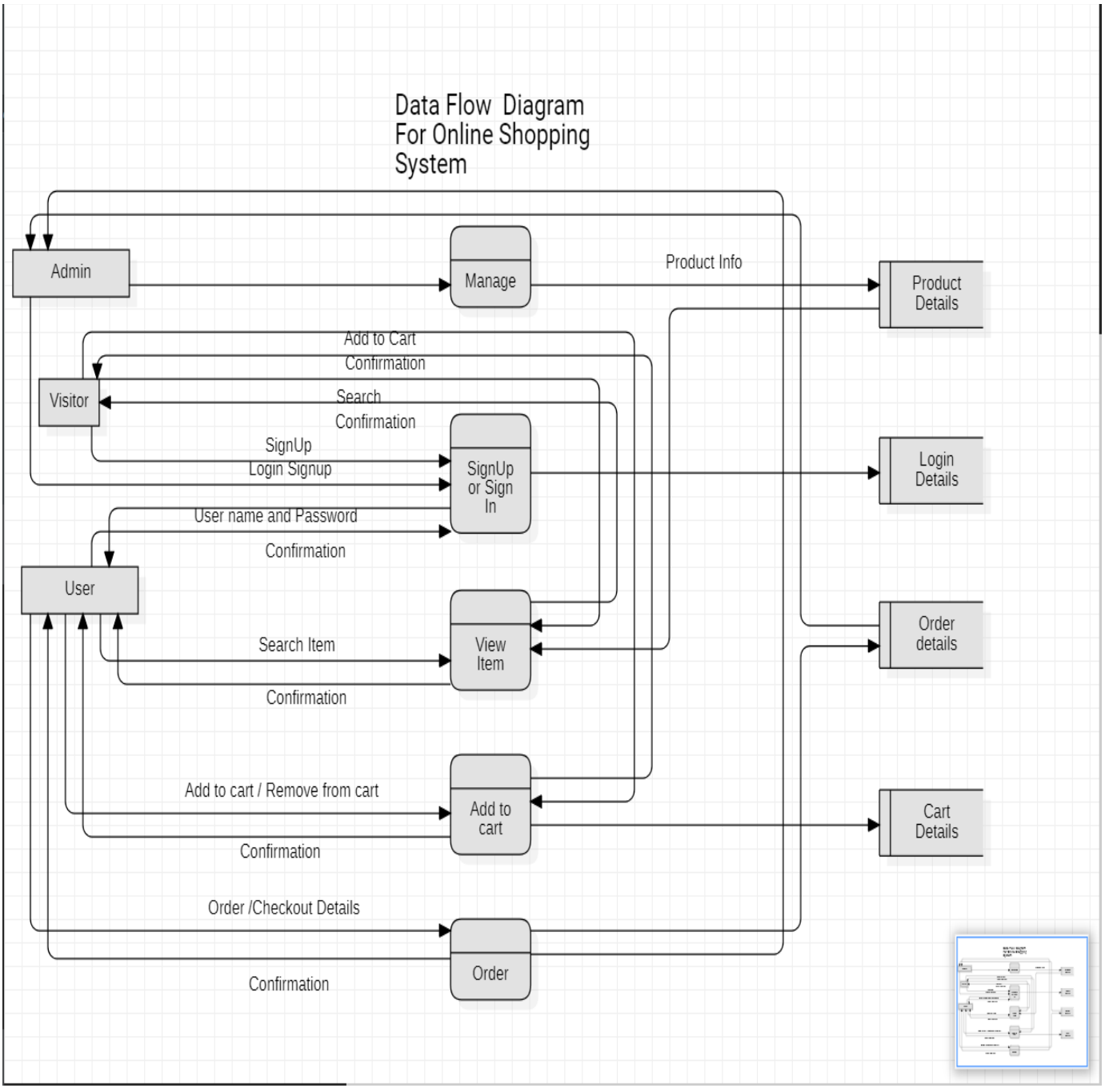
Chapter 3

Functional Modeling

Level 0 DFD



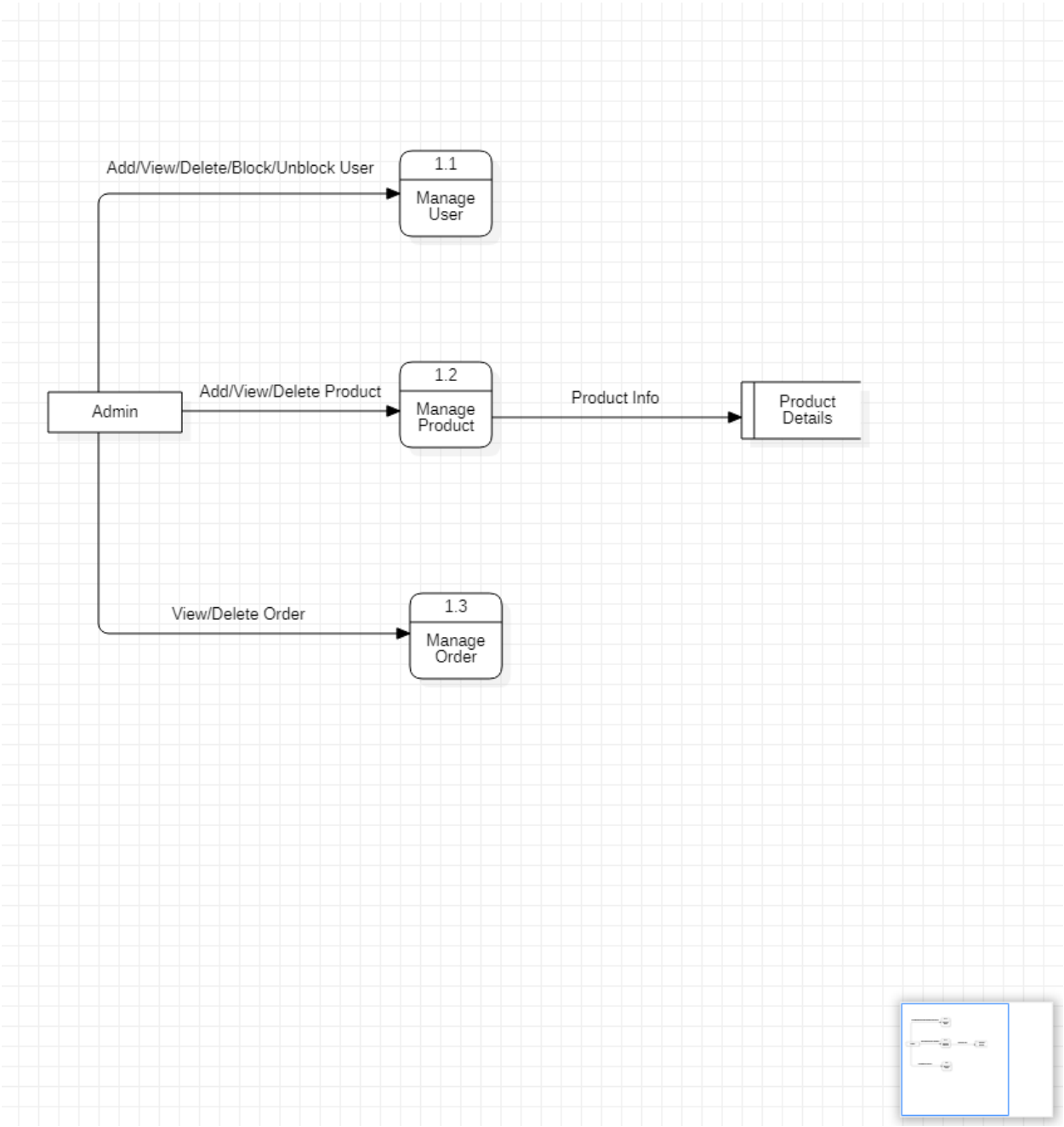
Level 1 DFD



The processes have id 1.0,2.0,3.0,4.0 and 5.0 respectively in the diagram above.

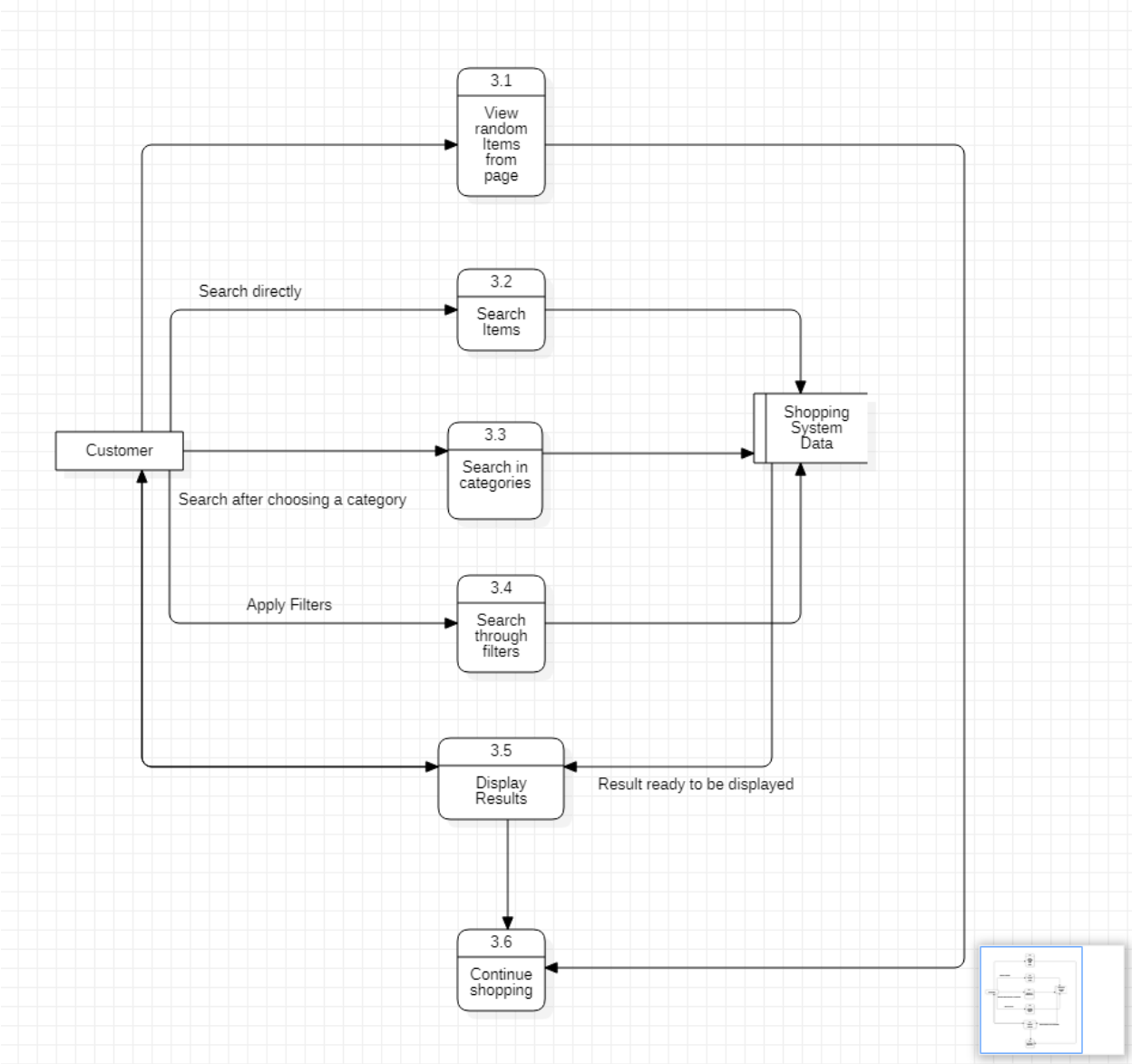
Level 2 DFD

Level 2 DFD of process "Manage"



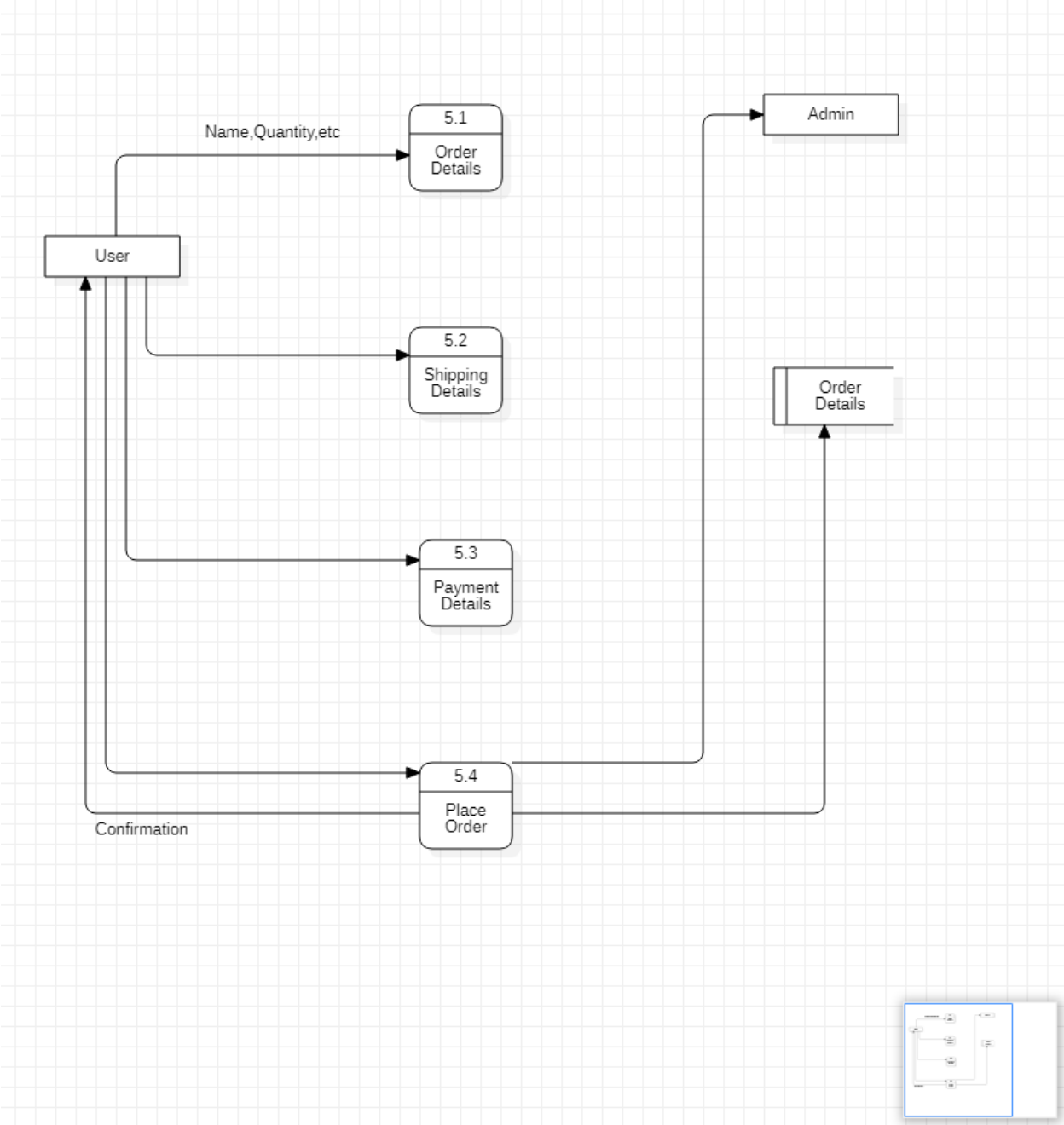
- The process “Signup or sign in” doesn’t require any Level 2 DFD as it is self-explanatory that any non-registered can sign up either on beginning or just before order, and registered user can sign in and complete shopping. This specific detail will go to data store “Login Details”.

Level 2 DFD of process “View Items”



- The process “Add to Cart” doesn’t require Level 2 DFD as it is self-explanatory that any user either registered or non-registered can add items to cart and the details of added items in cart will go to data store “Cart Details”.

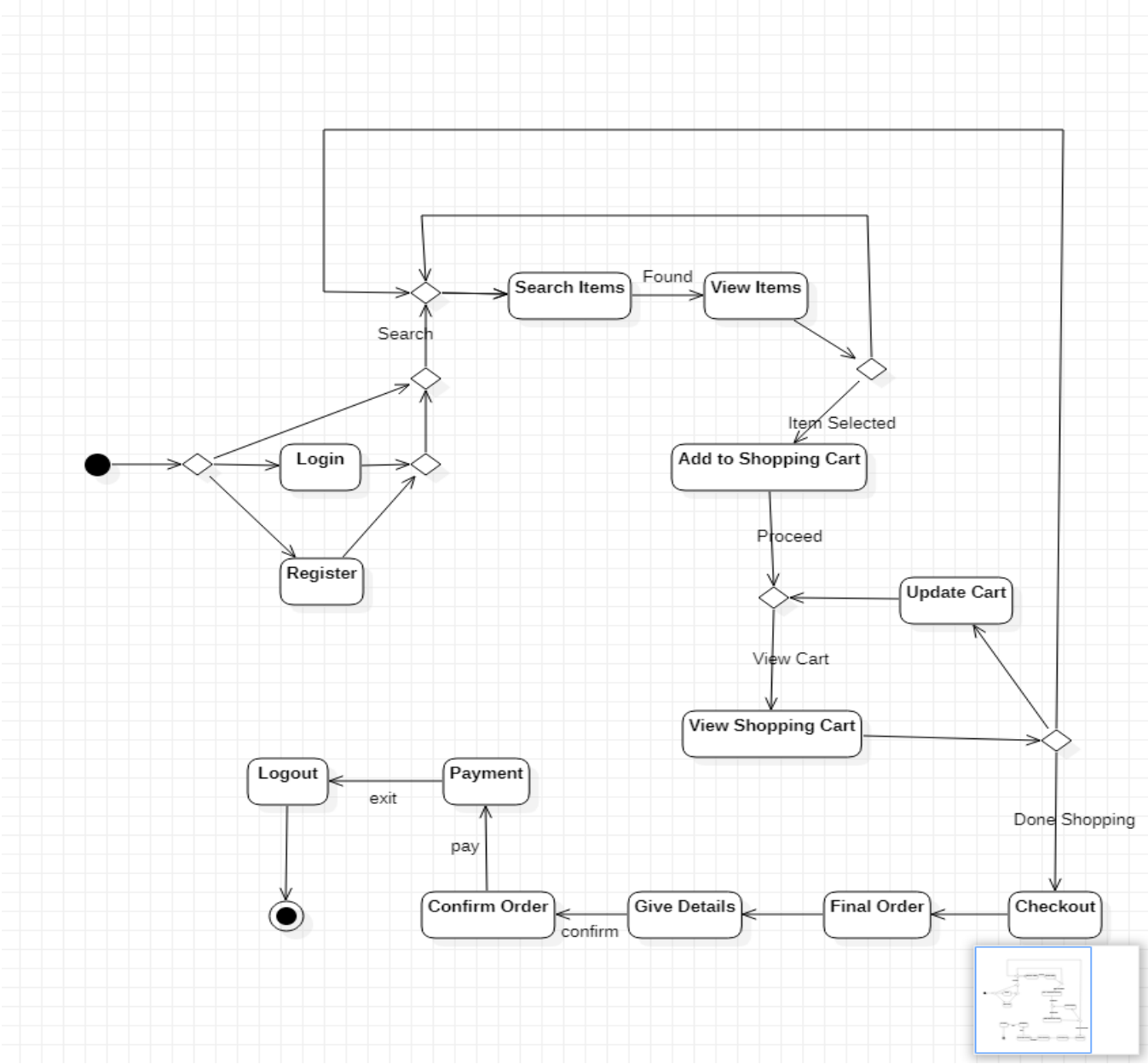
Level 2 DFD of process “Order”



Chapter 4

Behavioral Modeling

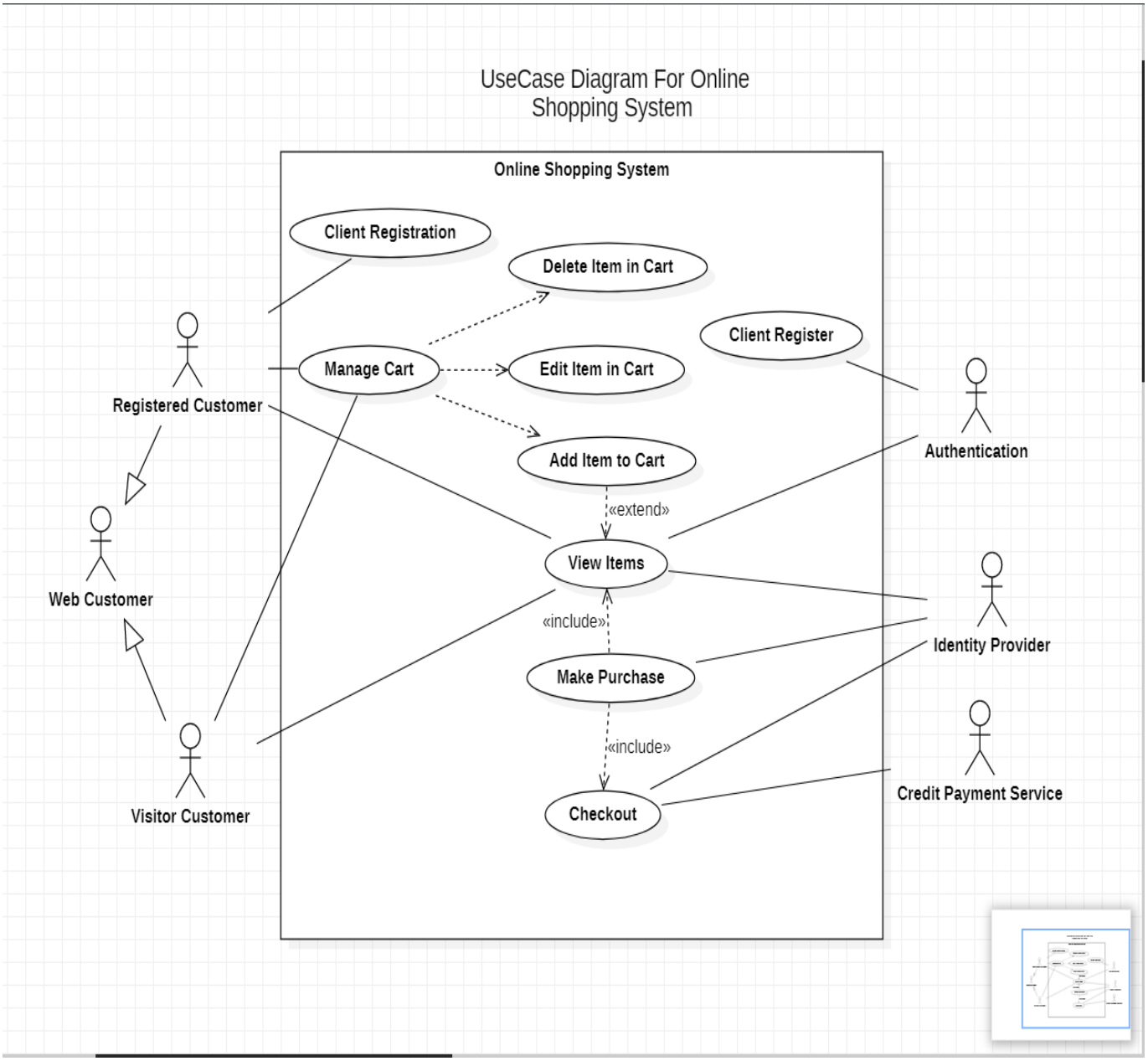
State Transition Diagram



Chapter 5

Interaction Modeling

Use Case Diagram



Sequence Diagram