

**Design Document**  
**For**  
**Urban Service System,**  
**a web portal of service provider system.**

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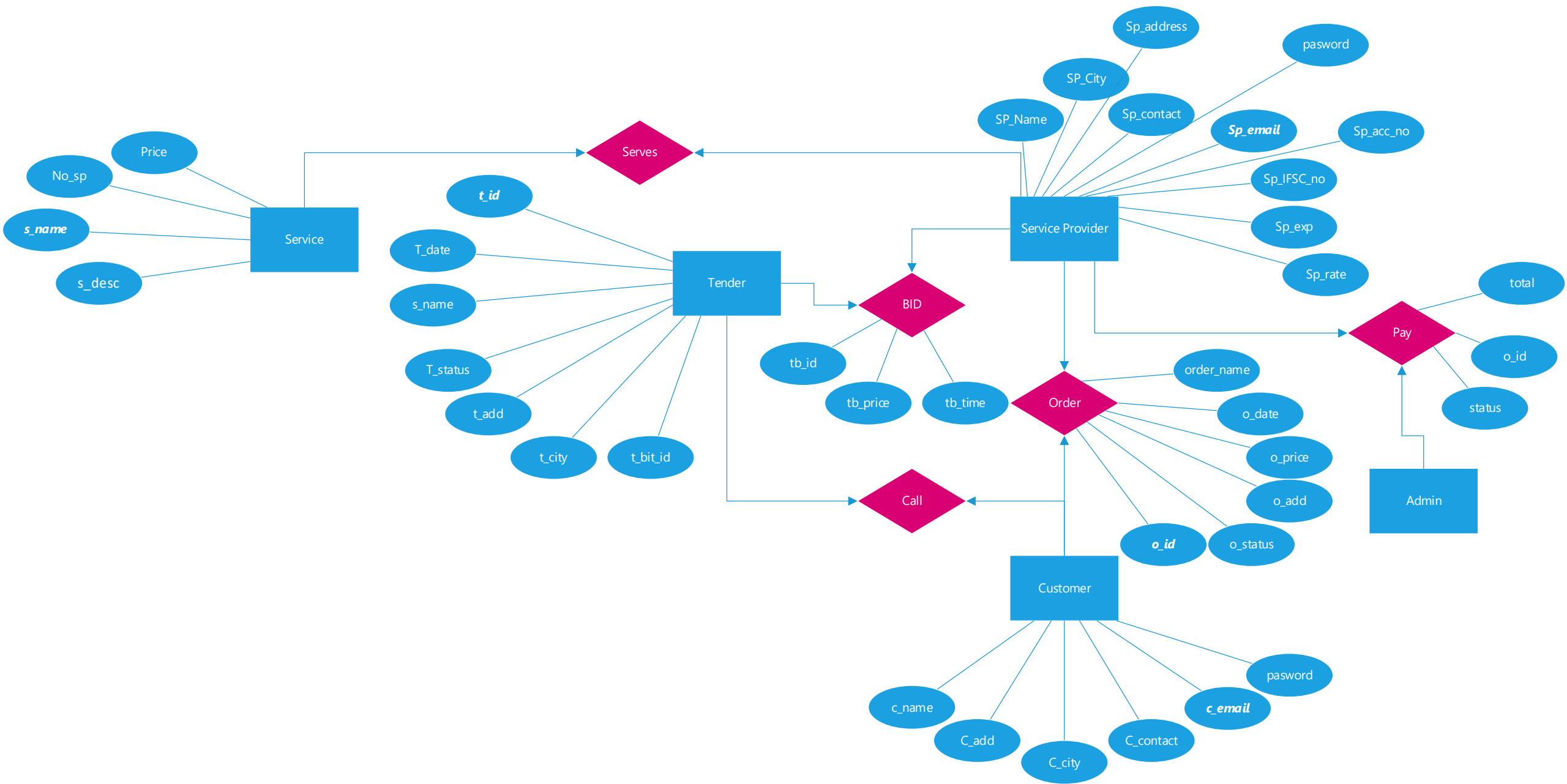
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## **Entity-Relationship Diagram**

An **entity–relationship model** (or **ER model**) describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between [entities](#) (instances of those entity types).

In [software engineering](#), an ER model is commonly formed to represent things a business needs to remember in order to perform [business processes](#). Consequently, the ER model becomes an abstract [data model](#), that defines a data or information structure which can be implemented in a [database](#), typically a [relational database](#).

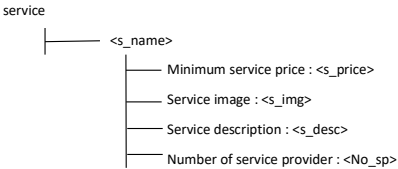


## Relational Schema

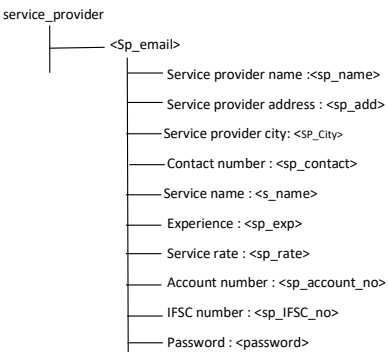
Relation schema defines the design and structure of the relation like it consists of the relation name, set of attributes/field names/column names. every attribute would have an associated domain.

A **relational schema** is a set of **relational** tables and associated items that are related to one another. All of the base tables, views, indexes, domains, user roles, stored modules, and other items that a user creates to fulfill the data needs of a particular enterprise or set of applications belong to one **schema**.

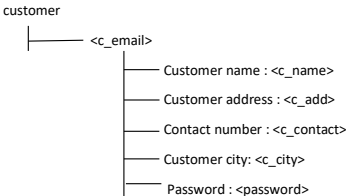
**Service:**



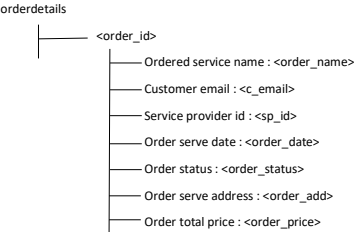
**Service Provider:**



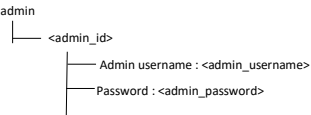
**Customer:**



**Order Details:**



**Admin:**



## Data Dictionary

A **data dictionary** contains metadata i.e **data** about the database. The **data dictionary** is very important as it contains information such as what is in the database, who is allowed to access it, where is the database physically stored etc. . Physical information about the tables such as where they are stored and how.



| Table | Column         | Data Type    | Primary key | Nullable | Default | Comments                        |
|-------|----------------|--------------|-------------|----------|---------|---------------------------------|
| admin | admin_id       | int(10)      | YES         | No       |         | Admin's valid email ID          |
| admin | admin_username | varchar(500) |             | No       |         | Admin's user_name               |
| admin | admin_password | varchar(500) |             | No       |         | A valid password given by Admin |

| Table    | Column    | Data Type   | Primary key | Nullable | Default | Comments                         |
|----------|-----------|-------------|-------------|----------|---------|----------------------------------|
| customer | c_name    | text        |             | No       |         | Customer's full name             |
| customer | c_add     | text        |             | No       |         | Customer's address               |
| customer | c_city    | text        |             | No       |         | Customer's city                  |
| customer | c_contact | varchar(13) |             | No       |         | Customer's contact number        |
| customer | c_email   | varchar(50) | YES         | No       |         | Customer's valid email ID        |
| customer | password  | varchar(15) |             | No       |         | Valid password given by Customer |

| Table   | Column  | Data Type    | Primary key | Nullable | Default | Comments                              |
|---------|---------|--------------|-------------|----------|---------|---------------------------------------|
| service | s_name  | varchar(50)  | YES         | No       |         | Service name                          |
| service | s_price | int(10)      |             | Yes      | NULL    | Service minimum price                 |
| service | s_desc  | text         |             | No       |         | Service description                   |
| service | s_img   | varchar(255) |             | Yes      | NULL    | Service demo images                   |
| service | No_sp   | int(11)      |             | No       | 0       | Number of service provider in service |

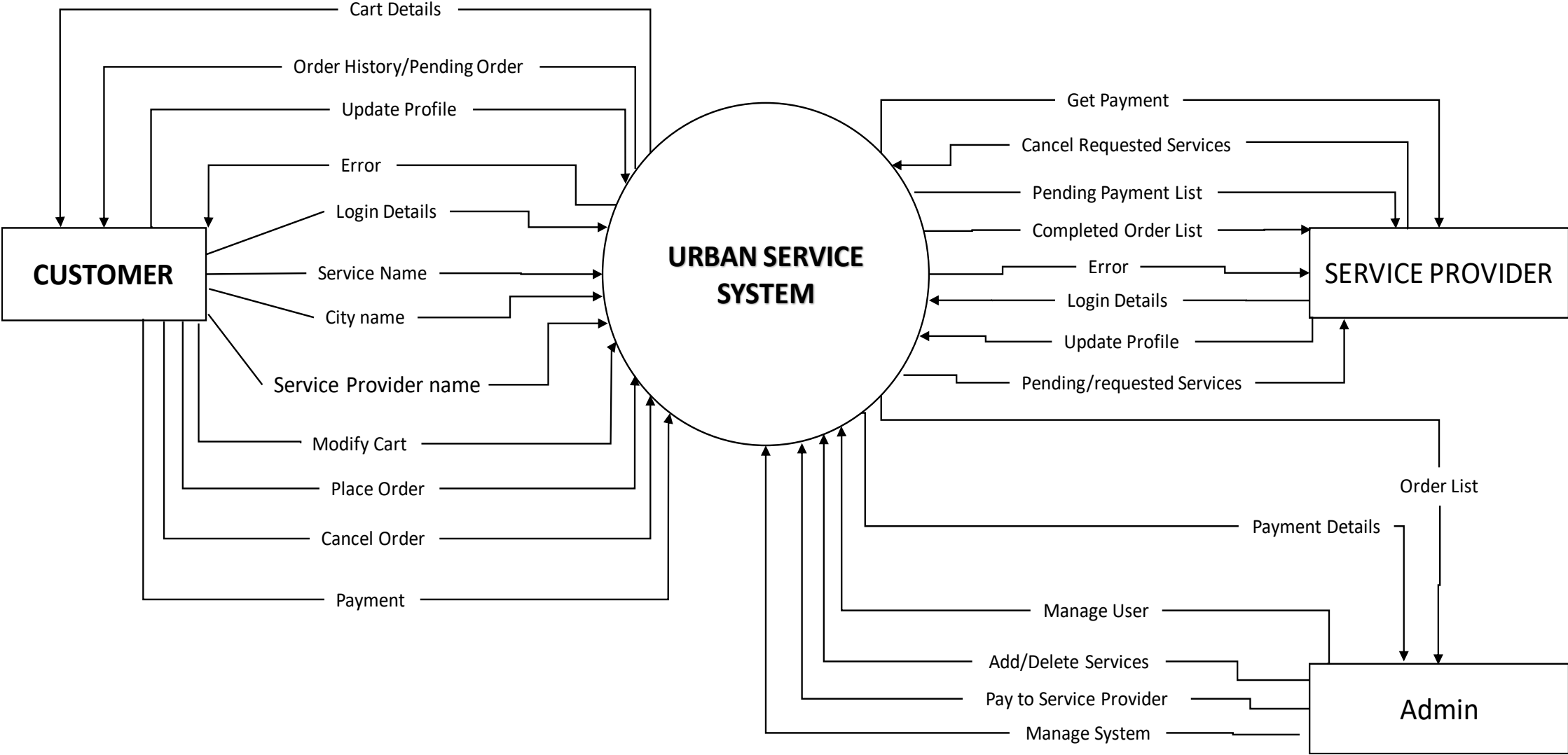
| Table            | Column        | Data Type    | Primary key | Nullable | Default | Comments                                     |
|------------------|---------------|--------------|-------------|----------|---------|--|
| service_provider | sp_name       | text         |             | No       |         | Name of service provider                     |
| service_provider | sp_add        | text         |             | No       |         | Address of service provider                  |
| service_provider | sp_contact    | varchar(13)  |             | No       |         | Contact number of service provider           |
| service_provider | sp_email      | varchar(50)  | YES         | No       |         | Valid email ID of a service provider         |
| service_provider | sp_exp        | int(11)      |             | No       |         | Year of experience of a service provider     |
| service_provider | sp_rate       | int(11)      |             | No       |         | Rate of a service provider for a service     |
| service_provider | sp_account_no | varchar(20)  |             | No       |         | Service provider's bank account number       |
| service_provider | sp_IFSC_no    | varchar(11)  |             | No       |         | Service provider's bank account's IFSCNumber |
| service_provider | sp_city       | text         |             | No       |         | Service provider's service city              |
| service_provider | s_name        | varchar(50)  |             | No       |         | Service name                                 |
| service_provider | password      | varchar(255) |             | No       |         | Valid password given by service provider     |

| Table        | Column       | Data Type    | Primary Key | Nullable | Default    | Comments   |
|--------------|--------------|--------------|-------------|----------|------------|--|
| orderdetails | order_id     | int(10)      | YES         | No       |            | Unique id for a particular order                   |
| orderdetails | order_name   | varchar(50)  |             | No       |            | Order service name                                 |
| orderdetails | c_email      | varchar(50)  |             | No       | 0          | Customer's email Id for a particular order         |
| orderdetails | sp_email     | varchar(50)  |             | No       |            | Service provider's email Id for a particular order |
| orderdetails | order_add    | varchar(255) |             | No       |            | Order serve address                                |
| orderdetails | order_price  | double       |             | No       | 0          | Price for a particular order                       |
| orderdetails | order_status | varchar(45)  |             | No       |            | Order status for a particular order                |
| orderdetails | order_date   | date         |             | No       | 0000-00-00 | Order delivery date for a particular order         |

## Context Diagram

A **context diagram**, sometimes called a level 0 data-flow **diagram**, is drawn in order to define and clarify the boundaries of the software system. It identifies the flows of information between the system and external entities. The entire software system is shown as a single process.

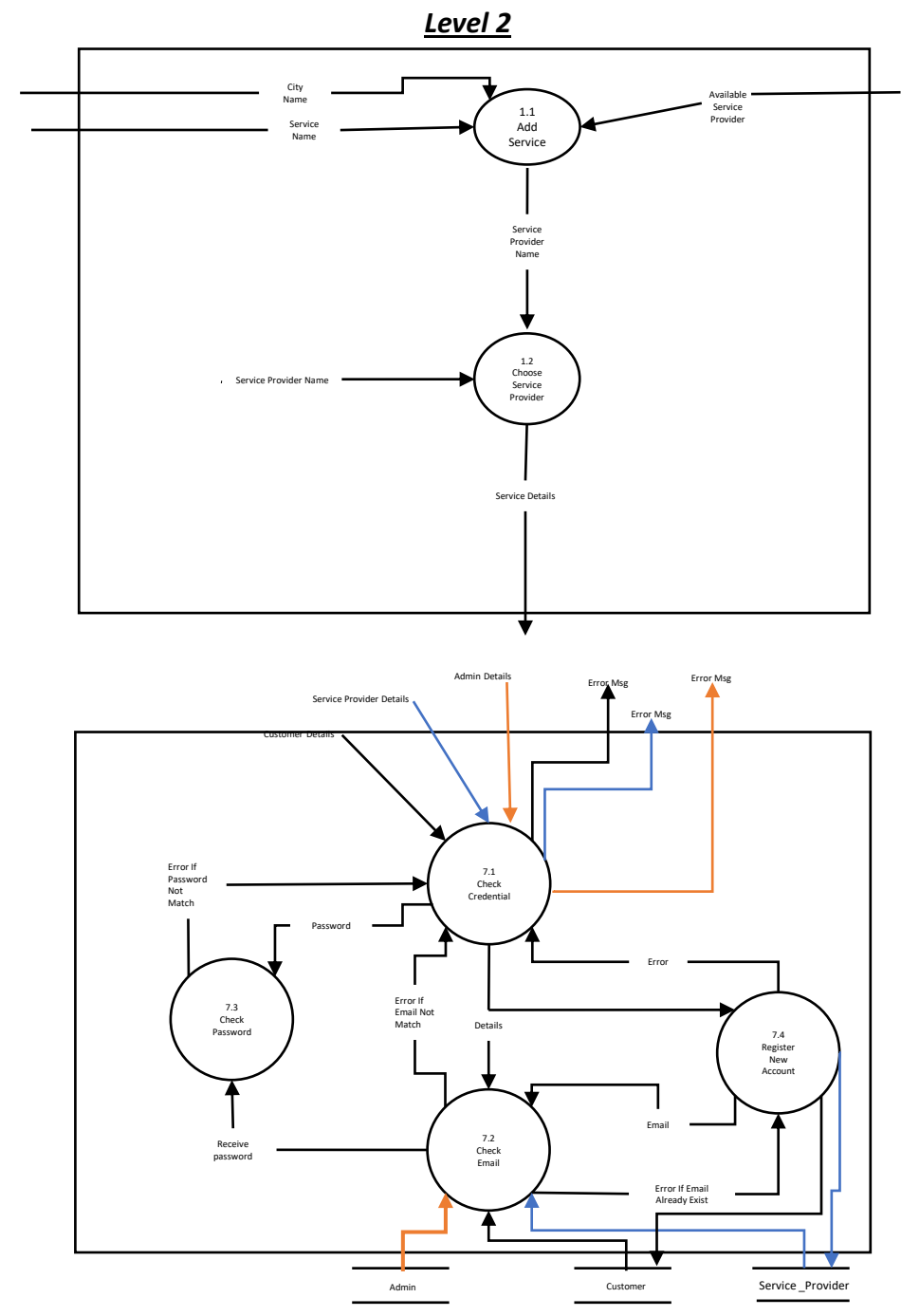
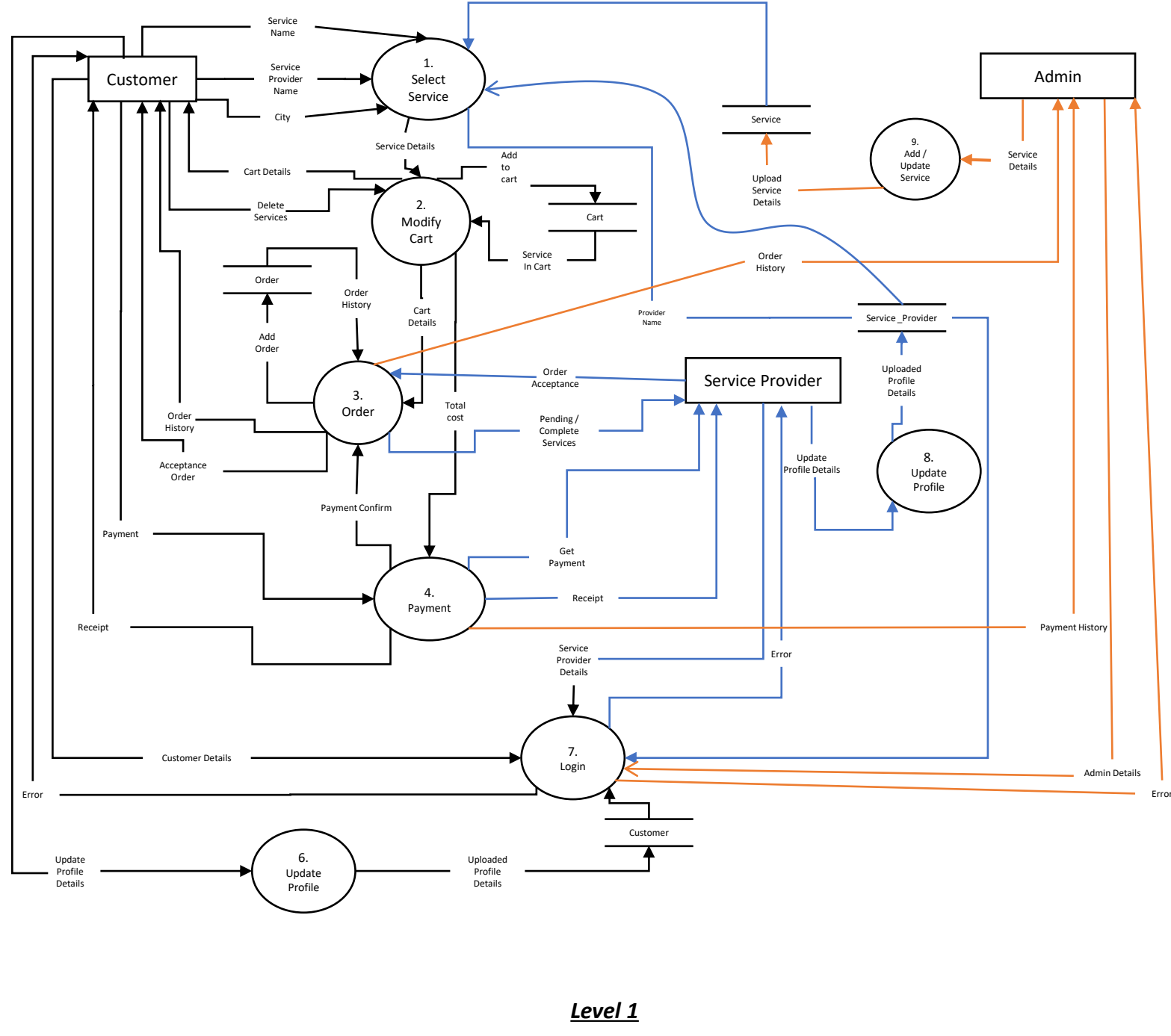
Context Diagram



## Data Flow Diagram

A **data-flow diagram** is a way of representing a **flow** of **data** through a **process** or a system (usually an information system). The **DFD** also provides information about the outputs and inputs of each entity and the **process** itself. Specific operations based on the **data** can be represented by a **flowchart**.





**Data Flow Diagram**