# Data Flow Diagram and User Stories

## Level-0 Context Diagram:

```
+----------------+
|    Customer    |
+--------+-------+
         |
         v
  +-------------+            +---------------+
  | Ticket      |<---------- | Support Agent |
  | Management  | ----------> +---------------+
  | System      |
  +---+------+---+
      |    |
      v    v
+-----------+--------------+
| Admin / Supervisor       |
+-------------------------+
```

## Level-1 Detailed DFD

```
    +------------------------+
    |        Customer        |
    +-----------+------------+
                |
```
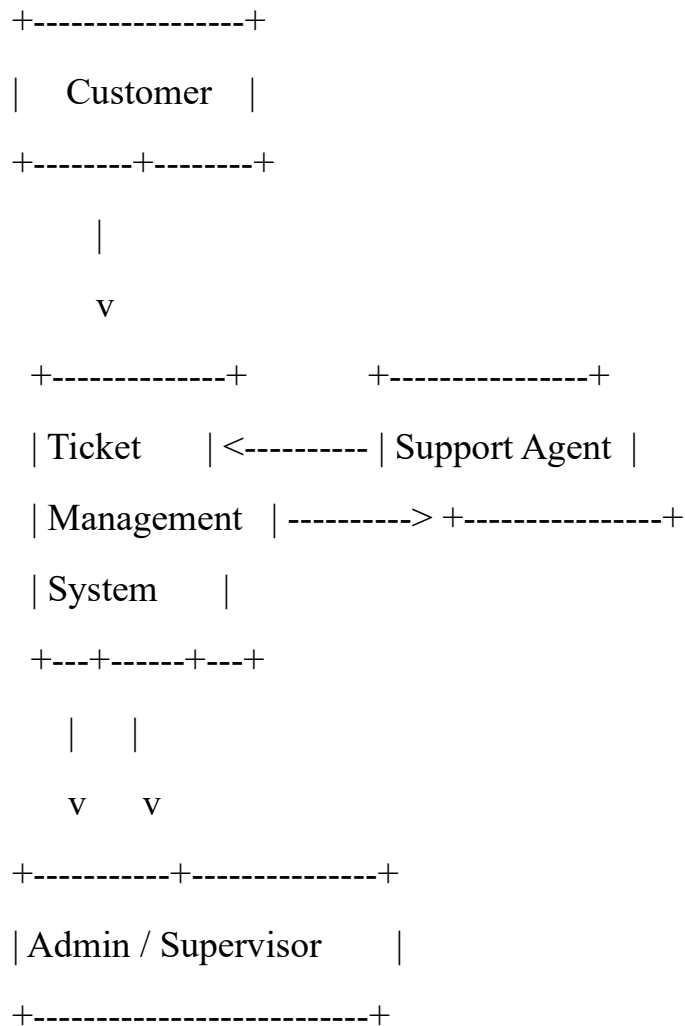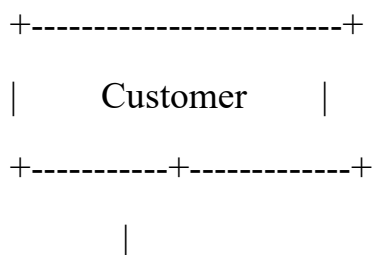
```
               v

          (1) Submit Ticket

               |

               v

      +---------------+

      | Ticket Intake |

      +-------+-------+

               |

               v

     +----------------------+

     | Ticket Prioritization |

     +-------+------+-------+

          |     |

          v     v

+---------------+  +----------------------+

| Auto Assignment|  | Manual Assignment    |

+--------+-------+  +--------+-------------+

         |                |

         v                v

+------------------+    +------------------+

| Support Agent    |    | Supervisor/Admin |

+--------+---------+    +---------+--------+

         |                  |

         v                  |

   (Update Status)          |

         |                  |
```

```
        v                |

+-----------------+           |

|  Ticket DB    |<-------------+

+--------+---------+

        |

        v

(Notify Customer)

        |

        v

+-----------------+

|   Customer    |

+-----------------+
```

## ✅ 2) USER STORIES

### Epic: Ticket Submission & Capture

1. **As a customer,**
   I want to submit a ticket easily,
   so that I can report issues quickly.

2. **As a customer,**
   I want to receive a confirmation notification,
   so I know my request is being processed.

---

### Epic: Ticket Prioritization & Routing

3. **As a system,**
   I want to classify tickets based on severity/keywords,
   so they can be routed appropriately.

4. **As an admin,**
   I want to define assignment rules (priority, team, skill),
   so tickets go to the correct agents automatically.

5. **As a support agent,**
   I want tickets prioritized in my queue,
   so I can address the most important tasks first.

---

## Epic: Intelligent Assignment

6. **As a system,**
   I want to auto-assign tickets to available qualified agents,
   to reduce delays in handling.

7. **As a supervisor,**
   I want to override assignments manually,
   so I can manage special cases and workload balance.

8. **As a support agent,**
   I want to auto-receive notification of assigned tickets,
   so I can respond quickly.

---

## Epic: Ticket Resolution & Status Tracking

9. **As a support agent,**
   I want to update ticket progress,
   so customers stay informed.

10. **As a customer,**
    I want to track my ticket status,
    so I know when the issue will be resolved.

11. **As a supervisor,**
    I want visibility into agent workloads,
    so I can optimize resource allocation.

---

## Epic: Reporting & Optimization

12. **As an admin,**
    I want reports on ticket resolution times and workload,
    so I can analyze performance.

13. **As a supervisor,**
    I want alerts when SLAs are at risk,
    so I can intervene before deadlines are missed.

14. **As a system,**
    I want to maintain logs of assignments and changes,
    for compliance and auditability.

---

---