

Ideation Phase

Define Problem Statement

Date	7.11.2025
Team ID	NM2025TMID00037
Project Name	Streamlining ticket assignment for efficient support operation
Maximum mark	2

Problem statement :

In many organizations, customer support systems rely heavily on manual ticket assignment, where incoming service requests or issues are assigned to support agents by supervisors or through simple round-robin methods. This manual process often results in delayed responses, uneven workload distribution, and inefficient utilization of resources. As the number of support requests increases, it becomes difficult to ensure that each ticket is handled by the most suitable agent based on skill, availability, and priority. This leads to longer resolution times, lower customer satisfaction, and reduced overall productivity of the support team.

Problem statement and solution table:

S.no	Problem	Description	Solution
1.	Manual Ticket Assignment	Tickets are assigned manually by supervisors, leading to delays and inconsistency.	Implement an automated ticket assignment system using predefined rules or AI-based logic.
2.	Uneven Workload Distribution	Some agents handle more tickets while others remain underutilized.	Introduce a workload balancing algorithm that monitors active tickets per agent and assigns new ones accordingly.
3.	Slow Response and Resolution Time	Manual routing causes delays in acknowledging and resolving customer issues.	Enable automatic ticket routing to available and skilled agents for faster responses.
4.	Lack of Skill-Based Assignment	Tickets are not always assigned based on the agent's area of expertise.	Integrate a skill-matching module that assigns tickets based on issue category and agent skill set.

Example

Manual vs. Automated Ticket Assignment

Scenario: A software company receives 50–100 customer support tickets daily. Currently, a support manager manually assigns each ticket to an available agent.

Manual Process Example:

Ticket ID	Issue type	Assigned agent	Problem
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T001	Login issue	Agent A	Agent A already has 8 tickets — delayed response
T002	Payment error	Agent B	Agent B doesn't specialize in payment issues
T003	Bug report	Agent C	Correct assignment, but done after 15 mins delay

Result:

- Response time is slow.
- Some agents are overloaded.
- Customer satisfaction drops.

Automated System Example (Your Project's Approach):

Ticket id	Issue type	System action	Assigned agent	Outcome
T001	Login issue	Checked agent workload & skill	Agent C	Resolved quickly
T002	Payment error	Matched with finance skill agent	Agent E	Solved within SLA
T003	Bug report	Prioritized as high severity	Agent A	Escalated immediately

Result:

- ✓ Workload evenly distributed
- ✓ Faster ticket resolution
- ✓ Improved customer satisfaction