

[Product Backlog Item 224](#): 7.1.1 The system shall allow admins to assign shifts with date, start time, and end time.

Description

This feature allows system administrators to create and assign work shifts to staff members. Each shift must include a start date, start time, and end time (attached file for your reference)

Acceptance Criteria

- Admin can select a staff member and assign them a shift.
- Admin must input date, start time, and end time when creating a shift.
- The system should validate that the end time is after the start time.

[Product Backlog Item 225](#): 7.1.2 The system shall automatically calculate the number of hours from start to end time.

Description

This feature enables the system to automatically calculate the total duration of a shift based on the provided start and end times. The calculation should be precise, account for different time formats (e.g., AM/PM, 24-hour clock), and update dynamically whenever times are changed.

Acceptance Criteria

- When an admin enters a start time and end time, the system automatically calculates the total number of hours. For this sprint simply $\text{No hours} = \text{End Time} - \text{Start time}$.
- The calculation must handle both AM/PM and 24-hour formats.
- If the end time is earlier than the start time, the system must show an error and prevent calculation.
- The calculated hours must update immediately if the admin edits either the start or end time.
- The calculated total must be saved to the database along with the shift record.

[Product Backlog Item 226](#): 7.1.3 The system shall prevent overlapping shifts for the same staff member on the same day.

Description

This feature ensures that a staff member cannot be assigned multiple shifts that overlap on the same day. The system should validate shift timings during creation or update and prevent conflicts.

Acceptance Criteria

- When an admin assigns a shift, the system must check for existing shifts for the same staff member on the same date.
- If the new shift's start or end time overlaps with an existing shift, the system must block the assignment.
- The system must display an error message explaining the conflict when an overlapping shift is attempted.
- Non-overlapping shifts on the same day should still be allowed (e.g., morning and evening).
- Valid shifts must be saved successfully to the database once no conflict is detected.

[Product Backlog Item 227](#): 7.1.4 The system shall log all roster assignments and edits with timestamp and admin ID.

Description

This feature ensures that every roster assignment and edit made by an administrator is recorded in the system. Each log entry must include the admin's ID, the action performed (create, update, delete), the timestamp of the action, and the details of the roster affected.

Acceptance Criteria

- Whenever an admin creates, updates, or deletes a roster assignment, the system must generate a log entry.
- Each log entry must include:
 - Admin ID (who performed the action)
 - Action type (create, update, delete)
 - Timestamp of the action
 - Roster details affected (staff name/ID, date, shift time)