**Core Attendance Tracking:**

* **Clock-in/Clock-out:**
  + Simple and intuitive interface for employees to record their start and end times.
  + Multiple clock-in/out methods (e.g., web, mobile app).
  + Timestamping to accurately record the time of each action.

**(Implemented already but may need review & improvement)**

* **Attendance Records:**
  + A centralized database to store all employee attendance logs.
  + Ability to view individual employee attendance records. **(Add filter on the data table) 2-days 17th-18th April**

**GUI: Dropdown of column list ([column name] [comparator(=><)] [texbox])**

* + Clear display of clock-in time, clock-out time, and total hours worked for each day. **(Add a log only table (WorkHours) with needed columns(userId, clock-in time, clock-out time, total hours, remark(missing punch in/out, ok) 1-days 18th-19th April**

**User Management: Plan implementation 20th**

* **Employee Profiles:**
  + Basic storage of employee information (name, employee ID). (**Implement user profile with user access & Admin access modes)**
  + Ability to add and manage employee accounts.**(Implement user management)**

**Basic Reporting:**

* **Attendance Summary:**
  + Generation of basic reports showing total hours worked by each employee for a selected period (e.g., daily, weekly, monthly).
  + Ability to filter reports by employee and date range.
  + Simple export functionality (e.g., CSV).

**(Review the reporting module) Plan implementation 20th**

* **Admin Access:**
  + Secure login for administrators to manage the system, view reports, and manage employee data. (**Implement user dashboard & Admin dashboard)**

**Notifications and Alerts (Optional but Recommended for MVP):**

* **Missed Clock-out Alerts:**
  + Notifications to employees who forget to clock out.
  + Notifications to managers about missed clock-outs.
  + (**Track closing hours and Flag staff with a miss punch)**

**Key Considerations for an MVP:**

* **Simplicity and Ease of Use:** The interface should be straightforward for all users, regardless of their technical proficiency.
* **Reliability:** Accurate tracking of attendance is crucial.
* **Scalability:** While it's an MVP, the underlying architecture should be capable of handling more features and a larger number of users in future iterations.
* **Security:** Basic security measures to protect employee data.
  + (**To be implemented later after deployment)**

**Why these features are crucial for an MVP:**

* They address the fundamental need for any attendance management system: recording and summarizing employee work hours.
* They allow for basic monitoring of attendance and identification of potential issues (e.g., missed clock-outs).
* They provide a foundation upon which more advanced features can be built in subsequent development phases.

A Minimum Viable Product (MVP) for an attendance management software module should focus on the core functionalities needed to track employee attendance effectively. Here are the essential features:

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**Features that can be considered for later iterations (not essential for the initial MVP):**

* **Advanced Reporting and Analytics:** More detailed reports, trends analysis, absence tracking.
* **Leave Management Integration:** Ability for employees to request and manage leaves.
* **Payroll Integration:** Seamless transfer of attendance data to payroll systems.
* **Scheduling:** Features for creating and managing employee work schedules.
* **Geofencing/GPS Tracking:** Location-based attendance tracking for field employees.
* **Biometric Integration:** Support for fingerprint or facial recognition for clock-in/out.
* **Self-Service Portal:** More comprehensive portal for employees to manage their attendance and personal information.
* **Compliance Features:** Tracking breaks, overtime according to labor laws.
* **Integration with other HR systems.**
* **Real-time monitoring dashboards.**
* **Automated overtime calculations.**
* **Policy configuration for late arrivals, early departures, etc.**
* **Mobile app with advanced features.**
* **Kiosk-based attendance.**
* **Integration with communication tools for notifications.**

By focusing on these minimum viable features, you can quickly develop and deploy a functional attendance management module, gather user feedback, and iteratively add more advanced capabilities.