**User Requirements for the Backend features.**

1. **User Management**

-Authentication and Authorization**:**

- Support for secure user login (e.g., OAuth, email-password, multi-factor authentication).

- Role-based access control for users (admin, team member, guest).

- Profile Management:

- Ability for users to update their profile (name, email, avatar, preferences).

2. **Task Management**

- Task Creation and Assignment:

- APIs to create, assign, and delete tasks.

- Support for task prioritization (e.g., low, medium, high).

- Task Status Updates:

- Real-time tracking of task statuses (e.g., to-do, in progress, completed).

- Recurring Tasks:

- Backend logic for recurring tasks with specified intervals.

- Attachments:

- Support for file uploads and linking to tasks (e.g., images, documents).

3. **Team and Collaboration Features**

- Team Creation and Management:

- Ability to create, join, and manage teams.

- Assign roles within teams.

- Comments and Discussion Threads:

- Backend for adding and fetching task-related comments.

- Notification system for comment updates.

4. **Notifications System**

- Push Notifications:

- Backend support for sending push notifications for task updates, deadlines, etc.

- Email and SMS Notifications:

- Scheduled reminders for due tasks.

5. **Scheduling and Deadlines**

- Calendar Integration:

- APIs for integrating third-party calendars (e.g., Google Calendar, Outlook).

- Time Tracking:

- Track time spent on tasks with start/stop functionality.

6. **Analytics and Reporting**

- Task Performance Metrics:

- APIs to generate productivity and task completion reports.

- Activity Logs:

- Track and log all actions for audit trails.

7. **Data Management and Storage**

- Database Design:

- A scalable database structure for tasks, users, and teams.

- Search and Filtering:

- Backend support for advanced search (e.g., task names, deadlines) and filtering options.

- Data Backup and Recovery:

- Regular backups and disaster recovery plans.

8. **Integration and API Support**

-Third-Party Integration:

- APIs for integrating productivity tools like Slack, Trello, or Asana.

- Public APIs:

- Support for custom integrations via public APIs.

9. **Security and Compliance**

- Data Encryption:

- Ensure secure storage and transmission of user data.

- Compliance:

- Adhere to GDPR, CCPA, or other relevant data protection regulations.

10. **Scalability and Performance**

- Load Balancing:

- Handle high volumes of concurrent users without performance degradation.

- Caching:

- Implement caching for frequently accessed data (e.g., task lists).

These backend requirements ensure the app is reliable, scalable, and meets user needs efficiently. Each feature aligns with the overall business goals and provide a seamless user experience.