Here's a detailed list of **client requirements** for the **AI-Powered Personal Assistant Web App** project:

1. User Authentication & Profile Management

- **User Accounts**: Users should be able to sign up and log in using email, social logins (Google, Facebook), or OAuth-based authentication.
- **User Profiles**: Each user should have a profile where they can manage personal details, preferences, and app settings.
- **User Roles**: Admin, premium, and free user roles with different feature access levels.

2. Task & Reminder Management

- **Task Creation**: Users can create tasks with titles, descriptions, priorities, and deadlines.
- **Due Dates & Reminders**: Ability to set due dates and schedule reminders via notifications (push, email, SMS).
- **Task Categories**: Organize tasks by categories (e.g., work, personal, shopping, etc.).
- **Recurring Tasks**: Option to set recurring tasks (daily, weekly, monthly).
- **Task Status**: Mark tasks as completed, in progress, or pending.
- **Priority Levels**: Assign priority levels (e.g., high, medium, low) to tasks.

3. Integration with Third-Party Apps

- **Calendar Integration**:
  - **Google Calendar**: Sync user tasks, events, and reminders with Google Calendar.
  - **Outlook Calendar**: Sync with Microsoft Outlook for scheduling.
- **Email Integration**: Option to receive task summaries, reminders, and notifications through email.

4. AI and Natural Language Processing (NLP)

- **NLP for Task Creation**: Users should be able to create tasks and ask questions using natural language (e.g., "Remind me to call John tomorrow at 3 PM").
- **Query Handling**: AI should be able to respond to user queries like "What's on my agenda for today?" or "Show me my pending tasks."
- **Personalized Recommendations**: AI should suggest tasks or events based on user history and behavior patterns (e.g., suggest task prioritization based on deadlines).
- **Contextual Awareness**: Ability to understand and process context for better task and time management (e.g., rescheduling meetings automatically based on calendar conflicts).

5. Speech Recognition & Voice Commands

- **Voice Input**: Users should be able to create tasks, set reminders, and ask queries via voice commands.
- **Speech-to-Text**: Convert speech to text for task management and other functionalities.

- **Voice Feedback**: Provide feedback or responses to users using text-to-speech for a hands-free experience.

6. Notification System

- **Push Notifications**: Send push notifications for upcoming deadlines, reminders, and urgent tasks.
- **Email Notifications**: Option to receive daily task summaries and reminders via email.
- **SMS Alerts**: For premium users, provide SMS alerts for important reminders or overdue tasks.
- **In-App Notifications**: Real-time in-app notifications for updates or task changes.

7. Personalized Dashboard

- **Task Overview**: A dashboard with a daily, weekly, and monthly task overview, including completed, pending, and upcoming tasks.
- **Progress Tracker**: Visual progress bars for tracking task completion.
- **AI Recommendations Section**: A section on the dashboard where AI suggests tasks, recommends improvements in scheduling, or offers tips on productivity.

8. Data Security & Privacy

- **Data Encryption**: Ensure end-to-end encryption for all personal data, including tasks, reminders, and user profile details.
- **Privacy Controls**: Users should have control over what data is collected and how it is used, with options to export or delete their data.
- **Compliance**: Ensure compliance with GDPR, CCPA, and other relevant privacy regulations.

09. Subscription & Monetization

- **Freemium Model**: Basic features should be available for free, with premium features (e.g., advanced AI, SMS notifications, priority support) behind a paywall.
- **Subscription Plans**: Create monthly or annual subscription tiers with varied levels of access.
- **In-App Purchases**: Provide options for purchasing additional services or features (e.g., personalized productivity reports).

10. Analytics & Reporting

- **Task Insights**: Provide users with insights into their productivity, such as tasks completed per week or month.
- **AI-Generated Reports**: Offer AI-driven productivity reports that analyze user activity and suggest ways to improve efficiency.
- **Usage Statistics**: Track app usage, feature engagement, and other metrics for both users and admins.

11. Admin Panel

- **User Management**: Admins should be able to manage user accounts, subscriptions, and permissions.
- **Content Moderation**: Admins can manage app content, announcements, and system alerts.
- **Analytics Dashboard**: A dashboard for tracking user engagement, subscription growth, and other app performance metrics.

12. Scalability & Performance

- **Scalable Architecture**: The web app should be designed to handle a large number of concurrent users with minimal latency.
- **Cloud Hosting**: Use cloud infrastructure (e.g., AWS, Azure, or Google Cloud) for hosting and data storage.
- **High Availability**: Ensure the app is available 24/7 with backup and failover solutions.

13. Testing & Maintenance

- **Cross-Browser Testing**: Ensure the web app works seamlessly on all major browsers (Chrome, Firefox, Safari, Edge).
- **Load Testing**: Perform load testing to handle high volumes of traffic.
- **Ongoing Support**: Provide ongoing maintenance, updates, and bug fixes post-launch.