**Project Documentation: Teachers & Consultants Education Platform**

**Overview**

This platform aims to provide a collaborative environment for teachers and consultants, enabling them to create educational resources, engage with students, and provide professional coaching. The long-term goal is to offer students a dynamic learning experience, supported by expert teachers and consultants.

**Key Goals**

1. **Support for Teachers**: Enable teachers to create and share resources such as lessons, quizzes, and interactive videos to foster an engaging learning environment.
2. **Consultant Services**: Provide consulting services for teachers to offer personalized coaching, mentoring, and professional development.
3. **Future Student Engagement**: Expand the platform to allow students to access materials, take quizzes, and interact with teachers and consultants in a future release.
4. **Community Building**: Create a community for teachers to connect, share insights, and collaborate on resources.
5. **Monetization**: Implement a payment system for paid consulting sessions, premium resources, and other services.

**Features and Functionalities**

**For Teachers**

* **Lesson Creation**: Teachers can create, edit, and share lessons with students and other teachers. Lessons can include multimedia content such as videos, text, quizzes, and interactive activities.
* **Quizzes**: Teachers can design and assign quizzes to assess student understanding. Quiz results are stored and can be reviewed by both teachers and students.
* **Interactive Videos**: Teachers can upload or link to interactive videos, enabling students to engage more deeply with the material through embedded questions or activities.
* **Dashboard**: Teachers can manage all their created content, including lessons, quizzes, and videos, from a unified dashboard. They can also track how students interact with their content.
* **Track Resource Use**: Teachers can track which materials have been created, imported, shared with, or used/liked by others.

**For Consultants**

* **Consulting Services**: Consultants can provide personalized coaching to teachers via the platform, offering one-on-one sessions or group workshops.
* **Session Management**: Consultants can schedule and manage coaching sessions with teachers, offering both free and paid services.
* **Content Reviews**: Consultants can review and provide feedback on lesson plans, quizzes, and other resources created by teachers.
* **Payments**: Consultants can charge for their services, with payments processed through PayPal.

**For Admins**

* **User Management**: Admins can manage user accounts for teachers, consultants, and students. They can assign roles, deactivate users, and manage permissions.
* **Content Moderation**: Admins can review and approve content before it is published. They can also manage reported content and take appropriate actions (e.g., removing inappropriate resources).
* **Community Management**: Admins can manage forums and discussions within the community, ensuring that conversations are productive and appropriate.

**Future Features (For Students)**

* **Access to Content**: Students will be able to browse lessons, watch interactive videos, and take quizzes created by their teachers.
* **Progress Tracking**: Students will be able to track their progress through lessons and quizzes, receiving feedback from teachers.
* **Discussion and Interaction**: Students will be able to ask questions and participate in discussions with teachers and other students.

**Community Features**

* **Forums & Discussions**: Teachers and consultants can participate in community discussions, share best practices, and collaborate on teaching strategies.
* **Resource Sharing**: Teachers can share lessons, quizzes, and videos with the wider community, encouraging collaboration and peer learning.
* **Peer Review**: Teachers can review and rate resources shared by others, offering feedback and suggestions for improvement.

**Payment System**

* **Payment Gateway**: The platform integrates with PayPal to handle payments for consulting services and premium resources.
* **Subscriptions and One-Time Payments**: Teachers and consultants can offer both subscription-based services (e.g., monthly coaching sessions) and one-time purchases (e.g., access to a premium lesson plan).
* **Secure Transactions**: All transactions are handled securely, ensuring user information is protected.

**Technologies**

**Frontend**

* **React**: Used for building the interactive user interface of the platform.
* **Tailwind CSS**: Used for styling and ensuring the platform is fully responsive across different devices.
* **Figma**: For UI/UX design and prototyping before development.
* **Lucide Icons**: For consistent iconography across the platform.

**Backend**

* **Node.js**: Used for the server-side logic, handling API requests, and connecting the frontend to the database.
* **Express.js**: Framework used with Node.js for routing and managing HTTP requests.
* **Knex.js**: Used for query building and database management.

**Database**

* **PostgreSQL**: Used as the relational database to store user information, lesson data, quiz results, and payment transactions.

**Tools**

* **Trello**: For project management, task tracking, and team collaboration.
* **Figma**: For wireframing, prototyping, and UI/UX design.

**User Roles**

1. **Admin**
   * Manage users (Teachers, Consultants, and future Students)
   * Oversee payments and subscriptions
   * Moderate community discussions and content
2. **Consultant**
   * Offer coaching services to teachers
   * Review and provide feedback on teacher-created content
   * Manage their own schedule and payment settings
3. **Teacher**
   * Create and manage lessons, quizzes, and videos
   * Share resources with students and the community
   * Track student progress and provide feedback
   * Access coaching services from consultants
4. **Future Role: Student**
   * Access lessons, quizzes, and videos created by teachers
   * Participate in discussions and ask questions
   * Track progress through lessons and quizzes

**Future Plans**

1. **Student Onboarding**: Enable students to register, view lessons, take quizzes, and engage in discussions with teachers and consultants.
2. **Mobile Application**: Expand the platform to mobile devices to allow students and teachers to access content on the go.
3. **Advanced Analytics**: Implement a robust analytics system to track student performance, teacher content engagement, and consultant feedback.
4. **Internationalization**: Expand the platform to support multiple languages, allowing teachers and students from around the world to participate.