Here are the **functional** and **non-functional** requirements for the **DIY Crafts** module in your Skill-Sharing & Learning Platform.

**Functional Requirements**

**1. Skill Sharing Posts**

* Users can upload up to **3 images** or **short videos (max: 30 sec)** showcasing their DIY crafts.
* Users can add descriptions, materials used, and step-by-step instructions.
* Users can categorize posts (e.g., woodworking, paper crafts, knitting, painting).

**2. Learning Progress Updates**

* Users can post updates on their DIY projects.
* Users can use predefined templates to share progress (e.g., "Materials Collected," "Halfway Done," "Project Completed").
* Users can edit or delete their progress updates.

**3. Learning Plan Sharing**

* Users can create **structured learning plans** for DIY crafts.
* Learning plans include:
  + Topics (e.g., Basic Wood Carving, Handmade Jewelry)
  + Resources (links to tutorials, materials list)
  + Estimated completion timelines
* Users can update progress within their learning plan.

**4. Interactivity & Engagement**

* Users can **like and comment** on DIY craft posts.
* Users can **edit or delete their comments** on any post.
* Post owners can **delete comments** on their posts.
* Users can share DIY craft posts with others.

**5. User Profiles & Social Features**

* Users have a profile page displaying their **DIY craft posts and learning progress**.
* Users can follow others to see their craft projects and updates.
* Publicly visible profiles to encourage community engagement.

**6. Notifications**

* Users receive notifications for:
  + New likes and comments on their DIY craft posts.
  + Updates from followed users.
  + Completion of milestones in their learning plans.

**7. Authentication & Security**

* Users can sign up/log in using **OAuth 2.0** (Google, Facebook, etc.).
* Password reset option using email verification.

**Non-Functional Requirements**

**1. Security**

* Use **OAuth 2.0** for authentication.
* Data encryption for user credentials and personal information.
* Role-based access control to prevent unauthorized actions.

**2. Performance & Scalability**

* API should support **high concurrency** (many users accessing posts at the same time).
* Caching for frequently accessed posts and learning plans.
* Optimized database queries for faster response times.

**3. Usability & UI/UX**

* Intuitive and responsive UI with **clear navigation**.
* Mobile-first design to support different screen sizes.
* Accessibility features for users with disabilities.

**4. Reliability & Availability**

* The system should have **99.9% uptime** for smooth user experience.
* Auto-recovery in case of server failures.

**5. Maintainability & Extensibility**

* Modular architecture for easy updates and new feature additions.
* Well-documented REST API and front-end code.

**6. Compliance & Legal**

* Adhere to **GDPR** and **privacy policies** for user data protection.
* Users must have control over their data, including deleting accounts.

Would you like me to create an **architecture diagram** or **ER diagram** for your DIY Crafts module? 🚀

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