

Graduation Project

Learning Experience Platform.

Functional Requirements

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**Functional Requirements for the Learning Experience Platform (LXP)**

**1. Homepage**

1. Provide a brief introduction to the platform’s purpose and features.
2. Include "Sign Up" and "Log In" buttons prominently.
3. Offer navigation links to pages like “About Us,” “FAQs,” and “Contact Us.”
4. Display previews of community activities or success stories to encourage engagement.
5. Embed an introductory video or visual walkthrough of the platform.

**2. User Registration and Login**

1. Support account creation with email, password, and username.
2. Enable social login options (e.g., Google, LinkedIn, Facebook).
3. Provide password recovery via email.
4. Validate user inputs for email, username, and password.
5. Redirect authenticated users to their personalized Dashboard.

**3. Onboarding**

1. Use interactive tutorials to guide users through platform features.
2. Collect user preferences such as learning interests, goals, and skill focus areas.
3. Store user preferences securely for personalization.
4. Show a step-by-step progress bar to guide onboarding completion.

**4. Self-Discovery**

1. Provide a skills assessment quiz with multiple-choice and scenario-based questions.
2. Include a personality assessment to analyze learning styles and personality traits.
3. Generate a detailed report summarizing skills, personality traits, and learning preferences.
4. Allow users to save and revisit their self-discovery report.
5. Award gamification points or badges for completing self-discovery tasks.

**5. Dashboard**

1. Display user progress such as milestones, badges earned, and roadmap status.
2. Show upcoming tasks, deadlines, and roadmap milestones.
3. Highlight personalized recommendations for communities, roadmaps, or skill-building resources.
4. Provide quick links to explore progress, communities, and personalized roadmaps.
5. Include gamification widgets showcasing earned badges and points.

**6. Personalized Roadmap**

1. Generate step-by-step roadmaps for educational or career goals based on self-discovery results.
2. Visualize the roadmap with clear timelines, completed tasks, and pending milestones.
3. Allow users to add, remove, or adjust milestones in the roadmap.
4. Suggest roadmap updates based on user progress and feedback.
5. Allow users to set deadlines and prioritize roadmap tasks.

**7. Progress Tracking**

1. Display a visual progress tracker using charts, graphs, or bars.
2. List completed and pending tasks in the user’s roadmap.
3. Show earned milestones, badges, and certificates.
4. Offer actionable insights based on progress (e.g., revisit tasks, add new milestones).

**8. Communities**

1. Allow users to search for communities based on topics, member count, or relevance.
2. Provide detailed previews of communities, including descriptions, recent posts, and active members.
3. Enable users to join communities with one click and participate in discussions.
4. Recommend communities based on self-discovery results and interests.
5. Allow communities to host shared repositories for uploading/downloading resources.
6. Facilitate event announcements and live discussions within communities.
7. Display leaderboards for community engagement (e.g., posts, replies, shared resources).

**9. Certificates and Achievements**

1. Issue downloadable certificates for completing milestones, quizzes, or roadmaps.
2. Enable users to share certificates on social platforms (e.g., LinkedIn, Twitter).
3. Showcase earned badges and achievements in a visually engaging format.
4. Offer rewards for specific tasks, like completing a roadmap or engaging in community events.

**10. Notifications System**

1. Send alerts for roadmap deadlines, community activities, and gamification achievements.
2. Allow users to customize notification preferences (email, platform, or in-app).

**11. Search and Navigation**

1. Provide a global search bar for finding communities, tasks, or learning resources.
2. Offer a persistent navigation bar for quick access to the Dashboard, Progress, Communities, and Roadmap.
3. Support device-responsive navigation for desktop, tablet, and mobile views.

**12. Accessibility and Localization**

1. Ensure platform compliance with WCAG accessibility standards.
2. Support multiple languages to cater to a global user base.

**13. Advanced Analytics and Recommendations**

1. Use learning analytics to identify skill gaps and suggest actionable next steps.
2. Provide AI-driven recommendations for new courses, communities, or roadmap items.
3. Offer predictive insights on trending careers and skills based on global data.

**14. Continuous Engagement**

1. Allow users to retake quizzes and update their self-discovery profile.
2. Notify users of new career trends, educational opportunities, or community events.
3. Provide engagement rewards for active participation, such as exclusive content or discounts for premium features.

**15. External Integrations**

1. Integrate with platforms like Coursera, edX, and LinkedIn Learning to recommend relevant courses.
2. Allow integration with job boards or career sites to suggest internships or job opportunities.
3. Enable API support for third-party educational or career systems to connect seamlessly.

**16. Data Privacy and Security**

1. Ensure user data is encrypted both in transit and at rest.
2. Comply with data protection regulations (e.g., GDPR, CCPA).
3. Allow users to delete or download their data on request.

**Additional Requirements for Scalability and Innovation:**

1. Use cloud-based architecture to handle large-scale data and user traffic.
2. Incorporate virtual mentors or chatbots for real-time assistance.
3. Use gamified challenges or virtual internships to simulate real-world scenarios.
4. Offer premium features like personalized mentorship or exclusive certifications as monetization strategies.