Terms of Reference (ToR)

Position: Software Developer - Frontend

Deadline: November 20, 2024

Link to Application Form: https://forms.gle/v2euegVPgFgyDPBV6

About Open Learning Exchange Nepal

Open Learning Exchange Nepal (OLE Nepal) is a social benefit organization dedicated to enhancing teaching-learning in schools through the integration of technology and to provide uniform access to quality educational materials across different geographic areas and socio-economic strata.

OLE Nepal develops and distributes free educational content, trains teachers to integrate technology in classrooms, implements technology interventions in rural schools, and helps build local capacity in technology and education.

We are a team of social workers, educators, designers, developers, and individuals dedicated to leveraging technology to improve the quality of education in public schools across Nepal. To learn more about our team, visit: https://olenepal.org/our-team/.

Project Overview

This Terms of Reference (ToR) is based on two projects being implemented by OLE Nepal. One of the projects is titled "Empowering Local Communities through Local Language Education and Skill-Based Training," aimed at addressing the lack of educational materials in local dialects and providing skill-based training resources. The project will expand the **Hamro Ramailo Kathaharu** (HRK) app and develop new courses for **Seepalaya**, our skills-based personalized learning app.

The other project is titled "Expanding Educational Access and Skills through Technology" aimed at expanding OLE Nepal's ICT in Education programs in schools across Madhesh and Karnali provinces, and developing new content for **E-Paath**, our platform for curriculum aligned subject and grade specific interactive activities.

Specific goals for the three apps are listed below for reference:

Hamro Ramailo Kathaharu (HRK) App Goals:

katha.olenepal.org

- App Enhancement: Upgrade the HRK app to introduce a language-switching feature, enabling users to access content in multiple languages. Enhance the app to allow users to download content for offline usage, ensuring accessibility even in remote areas.
- Content Translation and Adaptation: Translate and adapt the existing catalog of animated stories and interactive digital activities into Newari, Maithili, Tibetan, and English, making the app a multilingual educational tool.
- Local Story Integration: Collaborate with the three partner language communities to source local indigenous stories, enriching the app's content and making these stories available in all supported languages.
- *Print-Ready Adaptations:* Adapt HRK stories into print-ready formats to facilitate physical book production, bridging digital and traditional reading experiences.
- *Community Training:* Conduct training workshops for parents and teachers to maximize the HRK app's effectiveness, coupled with workshops promoting holistic early childhood development strategies.

Seepalaya App Goals:

- App Upgrade: Enhance Seepalaya's features to cater to youth audiences, incorporating personalization options and progress tracking to foster a tailored learning experience.
- Community-Driven Content Development: Engage with partner communities to assess learning needs and source ideas for vocational and skill-based courses, ensuring relevance and local significance.
- Course Development: Create and integrate 10 new vocational and informal training courses into Seepalaya, expanding its educational scope and utility.
- Educational Integration Workshops: Organize training sessions for educators to facilitate the integration of vocational skills training into the standard curriculum using Seepalaya, promoting a comprehensive educational approach.

E-Paath App Goals:

epaath.olenepal.org

- App Upgrade: Develop an enhanced development platform for E-Paath activities with improved user experience and compatibility with mobile devices.
- Content Development: Create and integrate 150 new E-Paath activities for English, Science and Math subjects for Grades 6-8.

About the Position

The **Software Developer** will play a critical role in advancing OLE Nepal's digital education platforms: Hamro Ramailo Kathaharu (HRK), Seepalaya, and E-Paath. This individual will be responsible for developing user-centric applications that enhance the learning experience, focusing on usability, performance, and accessibility for diverse learners across Nepal.

The role involves close collaboration with UI/UX designers, multimedia developers, and subject matter experts to ensure seamless functionality and engaging educational content. The successful candidate will bring technical design ideas to life, document software processes, and continuously innovate within a cross-functional team. They should be adaptable, eager to learn, and proactive in problem-solving.

Responsibilities:

- **Software Development:** Execute full lifecycle software development, from planning to implementation, including testing and quality assurance.
- Code Quality: Write well-designed, efficient, and testable code while adhering to best coding practices.
- **Software Integration:** Integrate software components into a fully functional system, ensuring smooth interaction between front-end and back-end technologies.
- User Interfaces: Implement responsive, high-performance user interfaces with a strong focus on accessibility and usability across different devices and platforms.
- Collaboration: Work closely with product managers, designers, and backend developers to translate requirements into technical specifications and ensure seamless development workflows.
- **Debugging & Troubleshooting:** Analyze and debug web applications to improve performance, fix bugs, and resolve cross-browser compatibility issues.
- Code Review & Development Practices: Participate in code reviews, sprint planning, and architectural discussions to maintain high code quality and adherence to standards.
- **Localization:** Implement localization and translation mechanisms to support multiple languages within the apps.
- Release Coordination: Work with the DevOps or System Admin teams to facilitate both online and offline version releases of the applications.

Requirements:

- Relevant Experience: Minimum of 3 years of proven experience with JavaScript and React technology, including experience in JavaScript Frameworks like Jquery, React, and Next.js, as well as Redux.
- **Educational Background:** Formal education in Computer Science, Information Technology, or an equivalent field is beneficial but not mandatory. Significant relevant practical experience and ability to demonstrate required skills can substitute for formal education.
- **Web Development Skills:** Expertise in web markup languages (HTML/HTML5, XML) and CSS. Hands-on experience with responsive design frameworks such as Bootstrap, Tailwind, and Material UI.
- API Integration: Strong knowledge of RESTful APIs and asynchronous request handling.
- **Cross-Browser Compatibility:** Experience in resolving cross-browser compatibility issues and ensuring consistent performance across devices.
- Backend Knowledge: Familiarity with backend technologies (Python/Django) is a plus.
- Animation Tools: Experience in animation tools like Manim (python library) and GSAP Animation (javascript library).
- Math & Science Skills: Strong background in mathematics and science, with knowledge of libraries like Plotly.js and Graph.js for developing interactive math content.
- Development Tools: Experience with modern Front-End development tools such as NPM, WebPack, Babel, etc.
- **Version Control:** Proficiency in code versioning tools like Git and SVN.
- Agile Development: Experience working in SCRUM environments and familiarity with Agile methodologies.
- **Problem-Solving & Detail-Oriented:** Strong analytical skills, with a high attention to detail and a proactive approach to troubleshooting.
- **Collaboration & Communication:** Excellent communication skills and the ability to work effectively in a cross-functional team.
- Willingness to Travel: Flexibility to travel to remote parts of Nepal as needed for project implementation work.
- **Ability to Multitask:** Capability to work under pressure and manage multiple projects simultaneously.

What We Offer

- Work Schedule: 5-day work week (Monday to Friday, 9:00 AM to 5:30 PM), with Saturday and Sunday as holidays.
- Festival Allowance: Special allowances provided during festivals.
- Insurance Benefits: Accidental and medical insurance coverage of up to Rs 700,000.
- Leave Entitlements: 21 days of annual leave, 7 days of casual leave, and 7 days of sick leave.
- National and Global Exposure: Opportunity to collaborate with national and international organizations.
- Performance Review: Annual performance evaluation and salary review.
- Positive Work Culture: Supportive and dynamic work environment.

How to Apply

- Step 1 Application
 - Fill out the application form by the application deadline. Ensure your documents and responses comprehensively reflect your qualifications and experience relevant to the position.
- Step 2 Assessment
 - Once we receive your application, our team will review your documents to shortlist candidates. This process includes phone interviews to further narrow down the candidate pool. Selected candidates will then be invited for in-person interviews.
- Step 3 Awaiting and Response
 - If you are shortlisted for an in-person interview, you will receive a notification via email.
 The email will detail the interview date and time. Please confirm your attendance or address any concerns by the specified deadline before the interview date.
- Step 4 Physical Interview
 - The in-person interview will involve discussions with team members engaged in related projects. You may also be asked to complete a short assignment relevant to the role. For additional information, please visit our website at olenepal.org.
- Step 5 Final Selection and Onboarding
 - Successful candidates will receive an offer letter via email, outlining the next steps for onboarding. Please respond to the offer by the indicated close of business to confirm your acceptance and prepare for onboarding.
 - On your joining date, you will need to bring some necessary documents to our office, including a police report, academic certificates, national identification, PAN, and proof of resignation from your previous job (if applicable). Digital copies are acceptable. Additionally, have a professional digital photo ready for inclusion on our website's team

page.

o If you are not selected, we encourage you to stay connected with O.L.E. Nepal for future opportunities. Check the "Work With Us" page on our website regularly for updates.

We appreciate your interest in contributing to O.L.E. Nepal's mission. We look forward to exploring how your skills can enhance our educational technology initiatives and impact learning communities across Nepal.