Terms of Reference: Database-Driven Product Developer

Duty Station: Sri Lanka, Colombo

Introduction:

We are seeking a skilled and experienced database-driven product developer who specializes in utilizing open-source tools such as PHP and MySQL. The ideal candidate should possess a strong background in database development, data visualization, and have a working knowledge of statistics. This individual will play a crucial role in designing, implementing, and maintaining a robust database infrastructure while developing user-friendly products with exceptional data visualization capabilities.

Responsibilities:

The selected candidate will be responsible for the following tasks:

a. Database Development:

- Design, develop, and maintain a scalable and efficient database infrastructure preferably MySQL.
- Collaborate with cross-functional teams to identify and understand product requirements.
- Ensure data integrity, security, and optimal performance of the database system.
- Implement data models and database schemas that align with the product requirements.

b. Product Development:

- Develop database-backed products using PHP and other relevant open-source technologies.
- Write clean, efficient, and maintainable code to implement product features.
- Conduct thorough testing and debugging to ensure the reliability and stability of the developed products.
- Collaborate with UI/UX designers to create intuitive user interfaces for seamless user experiences.

c. Data Visualization:

- Utilize appropriate tools and techniques to transform raw data into visually appealing and meaningful representations.
- Develop interactive dashboards, charts, and graphs to present complex data in a user-friendly manner.
- Incorporate statistical analysis techniques to extract insights from data and communicate them effectively through visualizations.
- Stay updated with the latest data visualization trends, best practices, and emerging tools in the field.

d. Documentation and Collaboration:

- Document the developed systems, including database schemas, APIs, and product features.
- Collaborate effectively with team members, including developers, designers, and stakeholders, to ensure successful project outcomes.
- Participate in code reviews, provide constructive feedback, and assist in continuous improvement efforts.

Qualifications

The ideal candidate should possess the following qualifications:

a. Required Skills:

- Strong proficiency in PHP and MySQL or other product suite for developing database driven applications.
- Proficiency in data visualization techniques and tools such as D3.js, Tableau, or similar.
- Solid understanding of database design principles, data modeling, and query optimization.
- Knowledge of front-end technologies like HTML, CSS, and JavaScript for UI development.
- Familiarity with version control systems such as Git for code management.
- Excellent problem-solving skills and ability to work independently as well as part of a team.

b. Preferred Skills:

- Knowledge of statistics and statistical analysis techniques.
- Familiarity with other open-source technologies and frameworks related to database development and data visualization.
- Experience in working with large-scale databases and handling big data.
- Understanding of cloud-based databases and associated services (e.g., AWS RDS, Google Cloud SQL).
- Strong communication skills and ability to convey complex concepts to both technical and non-technical stakeholders.