JOB TITLE – Software Development Engineer
          Back End Python Web Developer

Position reports to   :   Product Owner
Office Location   :   Adapt IT Johannesburg Campus

PURPOSE OF THE POSITION

The Software Development Team of Adapt IT Education delivers solutions for higher education on a global basis. As a developer you will be responsible for developing, maintaining and supporting our solutions. In the role you will be influential in guiding, contributing and development of a variety of technically challenging projects. In the role you will provide architectural input into our scalable web-based solutions deployed in the cloud.

PRIMARY RESPONSIBILITIES FOR THE ROLE

a) Design, Implement and Maintain world-class web applications and workflows

- Ensure that the front-end website architecture and back-end applications are **functionally complete** to deliver a correct, complete and an appropriate solution which covers all the agreed specified tasks and user objectives.

- Ensure the solution **performs efficiently** delivering a solution in which throughput rates, response and processing times meet stated requirements. Effectively and efficiently utilise resources to ensures the maximum operational capacity requirement is achieved or exceeded.

- Ensure the solution is **compatible** and effectively/efficiently **exchange information** with other products. Deliver an interoperable solution which can exchange and use information between different solutions not necessarily on the same environment.

- Ensure the solution has a **high usability** factor, the solution can achieve specified goals with effectiveness, efficiency, and satisfaction, user of the system can comfortably recognise the systems flow and the system logically supports user self-learning.

- Ensure the solution is **reliable, robust, maintainable** and **durable**. The solution simplifies support and maintenance through traceability and effective error messaging.

b) Ensure Quality Software Solutions are developed

- Use diagnostic tools/techniques to identify the root cause of software failures.
- Ask pertinent questions and obtain answers where possible.
- Perform trouble shooting and effectively resolve issues to increase solution stability and reduce intervention required over time.
- Recommend and execute improvements to software.
- Provide resolutions to app/system issues, driving stability, efficiency and effectiveness.

c) Design Fit for Purpose Solutions & Algorithms

- Ensuring cross-platform optimization for mobile phones.
- Actively contribute to design and planning meetings, discussions, and documentation.
- Design solutions using most appropriate approved architectural pattern.
- Design solutions for multi-tier architectures.
- Meeting both technical and consumer needs.

d) Developer Testing and Verification

- Ensure the solution is test friendly by creating effective mechanisms for test data, automated testing hooks and simulations.
- Ensure reported defects are categorised by priority and fixed as appropriate.
- Ensure the project management team is informed of potential risks stemming from defects.

e) Mentorship / Training

- Provide mentorship and guidance to internal staff on technical and system processes.
- Perform internal training for technical staff as required.
- Ability to mentor and assist others, and to lead internal training sessions
- Mentor junior resources on specialised knowledge

QUALIFICATION AND EXPERIENCE REQUIREMENTS

- Back-end Python developer with a focus on AWS Technologies (Python, Web API)
- BSc (Computer Science or Information Systems) /B Com (Information Systems)/Diploma in Information Systems

SKILLS

- Expert in Python, with knowledge of AWS SDK (Boto3) for Python.
- Familiarity with some ORM (Object Relational Mapper) libraries
- Able to integrate multiple data sources and databases into one system.
- Understanding of the threading limitations of Python, and multi-process architecture
- Good understanding of the AWS CloudFormation template
- Server-side templating languages such as Django, Jinja 2, Mako, etc depending on your technology stack
- Basic understanding of front-end technologies, such as JavaScript, HTML5, and CSS3
- Understanding of accessibility and security compliance {depending on the specific project}
- Knowledge of user authentication and authorization between multiple systems, servers, and environments
- Highly experienced in building front-end web applications using web technologies such as React, RESTful Services, JSON and Micro-Services, SQL Server, HTML5, JavaScript, CSS3
- Deep understand React concepts, core principles and workflows
- Databases & web storage – MySQL, Dynamo DB, Amazon RDS, Oracle
- Must have strong UI/UX design skills

- Solid understanding of MSSQL with proven experience with Data Modelling, Design, SQL Function, Stored Procedures and other common MSSQL features
- High Proficiency in object-oriented analysis and design patterns
- Understanding SaaS Cloud based concepts
- CI/CD Tools
- Git/GitHub

ATTRIBUTES

a) Personal Attributes and Qualities

- Mature individual with high level of emotional intelligence.

  o Ability/Capacity to be aware of, control, and express emotions.

  o Handle interpersonal relationships judiciously and empathetically.

- Demonstrate positivity, mental toughness and stability during stressful periods and periods of low activity.

  o Flexibility – adapt to new concepts and ideas, ability to collaborate.

  o Resilience – demonstrate ability to move forward despite setbacks.

  o Endurance – consistently deliver at peak performance over the long term.

  o Self-motivated, with the ability to motivate others.

- Ability to work independently and as part of a team.

- Ability to work under pressure.

- Admit to errors and takes corrective action to avoid repetition

- Approach own work with dedication and high sense of responsibility

- Identify, analyse, organize, and solve problems and issues in a timely and effective manner

- Anticipate problems, identify root causes, and take corrective action

- Take caution in preparing the details relevant to the process

- Follow process to ensure high quality output

- Set and achieve goals, consistently complies with quality standards, and meets deadlines

Contact Person: Quraisha Moola

Apply Here: https://www.dittojobs.com/jobs/view/2965667543

Vacancy Status: Open