Boxfusion
Rocket fuel for government

Job Title: Graduate Software Engineer

Accountable to: VP of Engineering

Based: Midrand

Salary: Market related

Contract type: Fixed Term (12 months)

Overview:

The job purpose of a graduate software engineer is to contribute to the development and implementation of software solutions within a company or organization. They work under the guidance of more experienced engineers and collaborate with cross-functional teams to analyse requirements, design, code, test, and debug software applications. Their role involves learning and applying programming languages, tools, and methodologies to deliver high-quality software products. Graduate software engineers also actively participate in the continuous improvement of software development processes and contribute to the growth of their technical skills and knowledge.

Key responsibilities:

Software Development: Graduate software engineers are involved in the development of software applications. They work on coding, testing, debugging, and modifying software components to meet project requirements. This includes writing clean, efficient, and maintainable code following coding standards and best practices.

Requirement Analysis: They collaborate with stakeholders, such as business analysts or project managers, to understand and analyse software requirements. They participate in discussions to gather requirements, propose technical solutions, and ensure that software development aligns with project objectives.

Problem Solving and Troubleshooting: Graduate software engineers encounter technical challenges during software development. They are responsible for identifying issues, investigating root causes, and proposing effective solutions. This involves applying problem-solving skills and leveraging technical knowledge to debug and resolve software defects or performance issues.

Collaboration and Teamwork: Graduate software engineers work as part of a development team. They collaborate with team members, including software architects, senior engineers, and quality assurance professionals, to deliver software projects successfully. They contribute to team discussions, share ideas, and actively participate in code reviews and knowledge sharing.

Documentation and Reporting: They document software designs, code changes, and project-related information. This includes maintaining technical documentation, such as system requirements, design documents, and user manuals. Graduate software engineers may also provide progress reports and updates to supervisors or project managers.

Continuous Learning and Skill Development: Keeping up with emerging technologies and industry trends is crucial for a graduate software engineer. They should engage in continuous learning, explore

new tools and frameworks, and stay updated with advancements in software engineering. This helps them improve their skills, stay relevant in the field, and contribute to the growth and innovation of the organization.

Behavioural Skills:

Strong Problem-Solving Skills: Software engineers should possess excellent problem-solving abilities to analyse complex issues, identify the root causes, and develop effective solutions. They should be able to think critically, break down problems into smaller components, and approach them systematically.

Attention to Detail: Paying close attention to detail is crucial for software engineers to ensure accuracy and quality in their work. They need to meticulously review code, specifications, and requirements, as even small errors or oversights can have significant consequences in software development.

Analytical Thinking: Software engineers must think analytically to understand requirements, evaluate different approaches, and make informed decisions. They should be able to analyse data, consider various factors, and weigh pros and cons to determine the best course of action.

Creativity and Innovation: Developing software often requires creative thinking and innovation. Software engineers should be able to come up with unique solutions, think outside the box, and propose new ideas to enhance the software's functionality, user experience, or efficiency.

Strong Communication Skills: Effective communication is essential for software engineers to collaborate with team members, understand requirements, convey ideas, and discuss technical concepts. They should be able to articulate their thoughts clearly, actively listen to others, and adapt their communication style for different stakeholders.

Adaptability and Flexibility: The field of software engineering is dynamic, with evolving technologies, changing requirements, and shifting priorities. Software engineers should be adaptable and flexible, willing to learn new skills, embrace new tools or methodologies, and adjust their approach based on project needs.

Time Management and Organization: Software engineers often work on multiple tasks, projects, or components simultaneously. They should possess strong time management and organizational skills to prioritize work effectively, meet deadlines, and balance competing demands efficiently.

Collaboration and Teamwork: Software engineers rarely work in isolation. They often collaborate with other developers, testers, designers, and stakeholders. They should be able to work well in a team, actively contribute to discussions, share knowledge, and respect diverse perspectives.

Continuous Learning and Curiosity: The field of software engineering evolves rapidly, and successful software engineers demonstrate a commitment to continuous learning. They should have a curiosity to explore new technologies, stay updated on industry trends, and seek opportunities for professional growth.

Integrity and Professionalism: Software engineers should uphold high ethical standards, maintain the confidentiality of sensitive information, and demonstrate professionalism in their interactions with colleagues, clients, and users. They should also adhere to industry best practices, coding standards, and comply with relevant regulations or guidelines.

Qualification and Experience:

Education: Bachelor's degree, diploma or certificate in Computer Science, Information Systems, Software Engineering or IT related field.

Technical and Business Acumen:

- Knowledge of software development principles.
- Knowledge of programming languages such as C#, JavaScript, TypeScript.
- Knowledge of .Net Core framework.
- Strong analytical and critical thinking and problem-solving skills.

Soft Skills:

- Passion for software development and technology.
- Willingness to learn.
- Able to collaborate with others.

***NOTE**

Job Description:

Please note that this job description does not include all duties, responsibilities or qualifications associated with the job. Additional duties may be assigned as required.

Application Process:

If you possess the necessary knowledge, skills, and qualifications for this position, we invite you to apply by taking the following assessments:

- Problem Solving
- Coding: Entry-Level Algorithms (C#, JavaScript or TypeScript)
- Software Engineering Fundamentals
- Clean Code
- Big 5 (Personality Assessment)
- 5 Video Interview question

Things to consider before taking the assessment:

- Find a quiet environment with a stable internet connection.
- This assessment platform will alert us of any cheating or misconduct during the assessment.
- Complete the assessment in one sitting.
- Once you open the assessment you have 7 days to complete it.

Assessment Link: https://app.testgorilla.com/s/cghoo5ku

Please note that only shortlisted candidates will be contacted to proceed with the next step in the selection process. We appreciate the time and effort you have taken to apply for this position and thank you for your interest in Boxfusion.

Company Overview: Government Software Solutions | Boxfusion