

**POSITION DUTY STATEMENT**

PROPOSED

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Associate Programmer Analyst (Specialist)	OFFICE/BRANCH/SECTION D20/IT Solutions Division/Java Applications	
WORKING TITLE Application Developer	POSITION NUMBER 900-170-1579-924	EFFECTIVE DATE

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

**GENERAL STATEMENT:**

Under the general supervision of the Data Processing Manager II (DPM II), the incumbent will independently, or as part of a team, provide support to all customers who rely upon the Information Technology Solutions Division for application maintenance, enhancements and new application development. The incumbent is responsible for performing analysis, design, development, implementation, and maintenance tasks for custom web based systems. The incumbent is involved with developing, maintaining and enhancing existing custom web based applications developed in, but not restricted to web 2.0 and open source technologies. The application development technologies utilized include Java programmer language, mobile platforms Java (Android), Javascript, SQL, CSS, and Java development environment software tools such as JDeveloper, Netbeans, and Eclipse, Designer, Struts and Grails frameworks, Subversion and the Oracle database.

**TYPICAL DUTIES:**

Percentage Essential (E)/Marginal (M) <sup>1</sup>	Job Description
55% E	The incumbent will analyze, plan, design, code, debug, test, and document the custom web based systems in accordance with the California Department of Transportation (Caltrans) software development life cycle best practices. The incumbent participates in efforts to review program requests, translates the request into the best solution for the existing system, develops a plan, and writes program code for the requests. The incumbent participates in efforts to troubleshoot problems in systems and debugs programs as needed. The incumbent participates in estimation efforts required to implement systems and identifies the gap between the requirements and the technology implemented.
15% E	The incumbent coordinates and works closely with customers, analysts, database administrators, system administrators, network support, and other areas within Information Technology (IT) to ensure that the technical deliverables meet the specified customer requirements.
10% E	Incumbent will research, recommend, establish, and maintain new software development tools, test automation software tools, web application frameworks, and development methodologies to increase technical efficiencies of staff, help speed project delivery, and improve software quality.
10% E	The incumbent will perform application security scans on Caltrans web and mobile applications prior to deployment. The incumbent will scan applications, evaluate, and research application security vulnerabilities. The incumbent will recommend security best practices to reduce web and mobile application security threats to Caltrans.
10% M	Incumbent will provide technical input on project deliverables to help the project team define project scope, objectives, requirements, activity definition, project schedule, resource plans, cost estimates, risk identification, procurement plans, roles and responsibilities. The incumbent will assist with task coordination of technical activities and distribute performance information to the project manager, management, team members and stakeholders. The incumbent will perform administrative duties as required.

<sup>1</sup>ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.  
MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

**ADA Notice**

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### **SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS**

This is non-supervisory position. The incumbent will provide guidance to less experienced staff assigned to the project.

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### **KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS**

Knowledge of: generally accepted information technology concepts, practices, methods and principles; development of web server and client/server applications utilizing relational databases; application development technologies including Java, mobile platforms Java (Android), SQL, CSS, and Java development environment software tools such as JDeveloper, Netbeans, and Eclipse, Designer, Struts and Grails frameworks, Subversion and the Oracle database, test automation software tools; application security best practices for web and mobile application development.

The incumbent must also be fully knowledgeable of good practices of data processing system design, programming and documentation. The incumbent must have knowledge of principles of IT project management processes, procedures, and methodologies. The incumbent must have an understanding of, and currency with respect to evolving industry trends and standards. The incumbent must be capable of studying work processes for the design of new systems and the revision of existing data processing systems.

Ability to: Analyze information and situations, identify and resolve problems, and reason logically; apply creative thinking in the design of methods of processing information with information technology systems; monitor and resolve problems with information technology systems hardware, software, and processes; establish and maintain effective working relationships with others; communicate effectively, both verbally and in writing with peers, clients, and customers at all levels; use standard office automation tools to develop reports, charts, and other documents; and make oral presentations.

Analytical Skills: The incumbent must be able to determine appropriate techniques to satisfy work requirements; analyze methods to achieve good results, and recognize proper usage of appropriate technology consistent with job requirements and cost effectiveness.

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### **RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR**

Technical accountability for work done and decisions taken is expected. The Department's project managers will depend on the incumbent's work products to effectively and successfully conduct their projects. Bad judgment and or decisions may prevent the incumbent from effectively supporting the Department's IT projects. This may contribute to the cancellation of projects, schedule delays, cost overruns, technical issues, and products that do not fulfill all of a customer's requirements and expectations. Should this occur, the Department may lose credibility relative to its ability to track and manage its IT projects. This may lead to a further loss of funding for other current and future IT projects, along with increased schedule delays and project overhead costs due to increased control agency reporting, technical, and financial and project management requirements.

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### **PUBLIC AND INTERNAL CONTACTS**

The incumbent works closely with client personnel outside of the Information Technology organization. This will include all levels of management and staff within Caltrans and those of external agencies, private companies and consultants. In performing the responsibilities of this position, the incumbent may initiate contact with other departments, governmental agencies or private companies concerning information technologies and methodologies.

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### **PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS**

In terms of physical requirements, the incumbent may be required to sit for long periods of time using a keyboard, video display terminal and telephone.

In terms of mental requirements, the incumbent must: be open to change and new information; adapt behavior and work methods in response to new information, changing conditions, or unexpected obstacles. Employee must have the ability to multi-task, to adapt to changes in priorities, and complete tasks or projects with short notice.

In terms of emotional requirements, the incumbent must: be able to value cultural diversity and other individual differences in the workforce; adjust rapidly to new situations warranting attention and resolution; consider and respond appropriately to the needs, feelings, and capabilities of different people in different situations; be tactful and treat others with respect.

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**WORK ENVIRONMENT**

While at their base of operation, employee will work in a climate-controlled office under artificial lighting using a personal computer. Employee may be required to travel to conduct the internal and public contacts identified above and to attend training.

I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

EMPLOYEE (Print)

EMPLOYEE (Signature)

DATE

I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)

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SUPERVISOR (Signature)

DATE