#### CALIFORNIA PUBLIC UTILITIES COMMISSION

Information Technology Services	EFFECTIVE DATE
BRANCH/SECTION Web/App Development	CLASS TITLE Information Technology Specialist I
WORKING DAYS AND WORKING HOURS  Monday through Friday 8:00 a.m. to 5:00 p.m.	PHYSICAL WORK LOCATION San Francisco/Sacramento
INCUMBENT (If known)	CURRENT POSITION NUMBER (Agency - Unit - Class - Serial) 680-406-1402-046

YOU ARE A VALUED MEMBER OF THE DEPARTMENT'S TEAM. YOU ARE EXPECTED TO WORK COOPERATIVELY WITH TEAM MEMBERS AND OTHERS TO ENABLE THE DEPARTMENT TO PROVIDE THE HIGHEST LEVEL OF SERVICE POSSIBLE. YOUR CREATIVITY AND PRODUCTIVITY ARE ENCOURAGED. YOUR EFFORTS TO TREAT OTHERS FAIRLY, HONESTLY AND WITH RESPECT ARE IMPORTANT TO EVERYONE WHO WORKS WITH YOU.

#### BRIEFLY (1 or 2 sentences) DESCRIBE THE POSITION'S ORGANIZATIONAL SETTING AND MAJOR FUNCTIONS:

The Information Technology Specialist I (ITS I) works under the direction of the Web/App Development Manager. The ITS I provides maintenance and operations support for existing Websites, Web Applications, and Databases. The ITS I designs and develops new websites, web applications/services, and databases. The ITS I provides IT consultation to CPUC stakeholders to support business programs. The ITS I remains current with technologies, conducts research and analysis, makes recommendations, and develops and provides training for web related technologies. The ITS I may act as a lead over lower-level staff.

The ITS I primarily works in the **Software Engineering and Business Technology Management** domains with limited work in the **Information Security Engineering** and **Systems Engineering** domains.

% of time performing duties

Indicate the duties and responsibilities assigned to the position and the percentage of time spent on each. Group related tasks under the same percentage with the highest percentage first. (Use additional sheet if necessary)

## **ESSENTIAL FUNCTIONS:**

#### 40%

### Website / Web Application / Database - Maintenance and Operations

Support the continued operations of existing websites, web applications/services, and database systems, including required monitoring and maintenance activities in compliance with State and departmental rules and regulations, policies, procedures, guidelines, and standards.

- Resolve and respond to client incidents or requests.
- Consult with business users on content design.
- Troubleshoot, track, and conduct root cause analysis of system / program / database / operational issues utilizing standard procedures (monitors, logs, user input, debugging processes, etc.), until resolved or escalated to restore normal operations.
- Manage security, administer accounts/permissions and investigate/report security incidents.
- Ensure software/hardware complies with security policies.
- Develop and execute test plans for system/database upgrades or releases.
- Coordinate system/database installation, operations, maintenance, repairs, and/or upgrades.
- Perform software product deployment and release management activities.
- Install, configure, and/or maintain systems.
- Configure and/or modify software programs.
- Document and update design specifications, installation instructions, and other system-related information.
- Develop, update, document and implement standards, procedures, processes, and controls to ensure proper installation, configuration, maintenance/operations, security, reliability, and availability of systems/databases.

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## Website / Web Application / Database - Maintenance and Operations (continued)

- Monitor Mission Critical and/or large complex IT systems and databases using modelers, profilers, scripts, log outputs, and automated testing tools to ensure integrity and tune the system to meet performance requirements.
- Provide metrics on services to support service level agreements.
- Implement policies, procedures, guidelines and standards to ensure compliance with State and departmental rules and regulations utilizing various defined technology governance processes.
- Perform data import and export activities.
- Manage data functions including: define, extract, transform, load, sync, and archive data.

# Website / Web Application / Database – Design and Development

Define and design software solutions and services in support of business program requirements in compliance with State and departmental rules and regulations, policies, procedures, guidelines, and standards.

- Develop plans to execute IT systems relating to design, coding, testing, defect management, system integration, implementation, and documentation of software components by outlining tasks, and developing timelines and schedules.
- Identify common program functions and design, develop, and code shared services utilizing Service-Oriented Architecture principles.
- Design, develop, and code software components and services using industry standards and methodologies which adhere to organizational enterprise architecture standards while ensuring secure, reliable, and accessible solutions.
- Develop and maintain software documentation for each phase of the systems development life cycle to ensure maintainability.
- Develop and maintain software product documentation.
- Coordinate and consult administrators, and engineers to identify business and technical requirements for proposed new systems/databases.
- Develop test cases and test data to verify defined functional and non-functional requirements.
- Test software systems using test cases and test data to meet defined functional and nonfunctional requirements.

### 15% Consulting, Research & Development, and Training

Provide IT consultation to CPUC stakeholders to support business programs. Conduct research and testing related to emerging technologies, technology trends, user experience & interface design, and industry best practices. Perform analysis to recommend system upgrades, cost-effective solutions, and process improvements. Pursue training, certification, and ongoing education appropriate to maintain and enhance the level of service provided to the CPUC. Develop and provide training related to web projects and technologies.

- Analyze, develop and document business processes utilizing industry best practices and standard methodologies.
- Consult with stakeholders to identify, document, and analyze business processes, problems, and requirements. Recommend technology, hardware, software, and plan installation of solutions to meet business needs.

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# **Consulting, Research & Development, and Training (continued)**

- Coordinate with users, administrators, and engineers to gather, review, and document technical requirements and specifications for new technology solutions/enablers or proposed modifications to existing systems/databases to ensure alignment with functional and nonfunctional requirements and support organizational needs.
- Conduct research and analysis of new and evolving technologies and industry best practices.
   Recommend system upgrades, cost-effective solutions, and process improvements to meet current and future needs.
- Formulate business cases, feasibility studies and research analysis reports related to technology endeavors.
- Analyze business impact and exposure, based on emerging security threats, vulnerabilities and risks to recommend IT solutions.
- Analyze information and evaluate results to choose the best solution and solve problems.
- Analyze data to identify trends or relationships among variables.
- Review data sharing agreements prior to release of confidential information.
- Develop, maintain, and conduct end user training related to Websites / Web Applications /
  Database technologies. Formulate, deliver, and coordinate education and communication to
  optimize the use of applied technologies using various instructional aids and communication
  media.
- Review current literature, white papers, and technical documentation.
- Attend meetings, workshops, tutorials, labs, and training classes.
- Participate in professional organizations or conferences.
- Study for industry standard certification exams.
- Talk with colleagues and provide written and verbal reports and analysis of technology best practices, methodologies, and issues.

## **MARGINAL FUNCTIONS:**

### 5% Marginal Functions

- Perform other job-related duties as assigned.
- Occasional travel via private or public transportation (i.e., drive an automobile, take an airplane flight, etc.) including overnight lodging inside California may be required.

### **KNOWLEDGE AND ABILITIES** [From Class Specs]

#### All knowledge and abilities of the Information Technology Associate classification; and

**Knowledge of:** Information technology governance principles and guidelines to support decision making; complex and mission critical business processes and systems; principles, methods and procedures for designing, developing, optimizing, and integrating systems in accordance with best practices; system specifications design, documentation, and implementation methodologies and techniques.

**Ability to:** Formulate and recommend policies and procedures; perform effectively in a fast- paced environment with constantly changing priorities; establish and maintain project priorities; apply federal, state, department, and organizational policies and procedures to state information technology operations; apply systems life cycle management concepts used to plan, develop, implement, operate, and maintain information systems; positively influence others to achieve results that are in the best interests of the organization; consider the business implications of the technology to the current and future business environment; communicate change impacts and change activities through various methods; conduct end-user training;

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## KNOWLEDGE AND ABILITIES [From Class Specs] (continued)

collaborate closely with technical subject matter experts such as database administrators, network engineers, and server administrators to ensure systems are secure and meet compliance requirements; assess situation to determine the importance, urgency, and risks to the project and the organization; make decisions which are timely and in the best interests of the organization; provide quality and timely ad hoc project information to executives, project team members, and stakeholders; develop decision making documents; and assess and understand complex business processes and customer requirements to ensure new technologies, architectures, and security products will meet their needs.

#### **WORK ENVIRONMENT, PHYSICAL OR MENTAL ABILITIES:**

- Work in a climate-controlled office under artificial lighting. There will be occasional fluctuations in temperature. Sit at a desk during core office hours. Use a computer, keyboard, mouse, monitor, and printers for prolonged periods of time. Bend and stoop to retrieve and replace files and records weighing up to 20 pounds. Move about the office and stand or sit during in person meetings.
- Proficiently use standard office technologies, including computer applications, phone equipment, Internet, voicemail, email, etc.
- With direction, organize and prioritize a wide variety of tasks requiring regular innovative problemsolving within broadly stated and non-specific guidelines under deadline situations and adapt behavior and work methods in response to new information, changing conditions or unexpected obstacles. Utilize sustained mental activity for analysis, reasoning and problem solving.
- This position may require some work outside of normal business hours.

SUPERVISOR'S STATEMENT: I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE			
SUPERVISOR'S NAME (Print)	SUPERVISOR'S SIGNATURE	DATE	
Harsharan Kaeley			
EMPLOYEE'S STATEMENT: I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT			
The statements contained in this duty statement reflect general details as necessary to describe the principal functions of this job. It should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including work in other functional areas to cover absence of relief, to equalize peak work periods or otherwise balance the workload.			
EMPLOYEE'S NAME (Print)	EMPLOYEE'S SIGNATURE	DATE	