Department of Health Care Access and Information
Duty Statement

Employee Name	Organization	
Vacant	Office of Information Services Digital Services Branch Development Services Group	
Position Number 441-177-1402-XXX	**Location** Sacramento	**Telework Option** Hybrid
Classification Information Technology Specialist I	**Working Title** Senior Software Developer	

General Description

Under direction, incumbents perform a wide variety of complex tasks requiring innovative problem solving within broadly stated and non-specific guidelines. The scope typically spans multiple program areas and includes planning, developing, and implementing technological solutions that are essential to the organization's mission or that impact large numbers of stakeholders on a long-term and continuous basis. Work is performed in the domains of Software Engineering and Systems Engineering.

Typical tasks performed within each domain may include:

Software Engineering
- Define, design, and architect software solutions using industry standards, modern frameworks, and established methodologies.
- Develop and maintain software documentation throughout all phases of the system development life cycle (SDLC) to ensure maintainability and future enhancements.
- Perform software deployment, release management, and configuration management activities.
- Develop plans and execute tasks related to system design, coding, testing, defect management, integration, implementation, and documentation of software components.
- Develop, update, and implement coding standards, development procedures, automation strategies, and controls to ensure proper installation, configuration, security, reliability, and availability of applications and related databases.

System Engineering
- Advice, design, and participate in the development of system architecture, patterns, standards, and methods to support organizational needs.
- Conduct research and perform analysis to recommend system upgrades, cost-effective solutions, cloud services, and process improvements for current and future requirements.
- Consult with business and technical stakeholders to identify infrastructure and system requirements; recommend appropriate technologies, configurations, and implementation plans.
- Coordinate and support system installation, cloud deployments, operations, maintenance, repairs, and upgrades.
- Execute and validate test plans for system releases, upgrades, and cloud transitions.
- Install, configure, administer, test, and maintain systems, services, and communication components in cloud and hybrid environments.
- Troubleshoot, track, and conduct root cause analysis of system, application, or database issues using established processes, escalating issues when necessary.

The incumbent serves as a technical expert and business analyst within the Development Services Group (DSG), Digital Services Branch (DSB). They are part of a highly skilled team responsible for supporting and enhancing HCAI's core services by delivering enterprise IT solutions.

The incumbent is expected to operate effectively in a dynamic and fast-paced environment, quickly learn new technologies, adapt to changing priorities, communicate clearly with technical and non-technical staff, and provide excellent customer service.

The incumbent independently performs complex programming, system integration, and analysis tasks; serves as a subject matter expert; and collaborates with other technical staff on large-scale, multi-tier, cloud-based enterprise applications.

Desired Skills:
Strong, hands-on experience with:

Microsoft & Backend Technologies
- Microsoft Visual Studio .NET, .NET Framework & .NET 8/9
- C#, ASP.NET Core, Web APIs, MVC, Razor Pages
- ADO.NET, Entity Framework Core, Dapper
- WCF (for legacy systems), SOAP (legacy), REST/gRPC services

Modern Front-End Technologies
- Blazor, React, TypeScript/JavaScript
- HTML5, CSS3, Bootstrap, Tailwind
- jQuery (legacy support), AngularJS (legacy), AJAX
- GraphQL

Cloud & DevOps
- Microsoft Azure Cloud Services (App Services, Functions, Storage, Key Vault, Azure AD, Azure SQL)
- Azure DevOps, GitHub, Git, CI/CD pipelines
- Azure Monitor, App Insights, Log Analytics

Databases & Data Services
- MS SQL Server, Azure SQL, SQL Managed Instance
- T-SQL, stored procedures, optimization, indexing
- Power BI (data modeling, dashboards, embedded reports)

Automation & Testing
- Selenium
- Low-code automation platforms
- Unit testing frameworks (xUnit, NUnit)

Supervision Received	Under direction, incumbent reports to the Information Technology Supervisor II, Development Services Group (DSG).
Physical Demands	Must possess and maintain sufficient strength, agility, endurance, and sensory ability to perform the duties contained in this duty statement with or without reasonable accommodation.
Typical Working Conditions	Requires use of computing devices and phones, frequent face-to-face contact with management, staff, consultants and the public, verbal, written and digital (e-mail) communication, extensive review, analysis and preparation of electronic and written documents, assessment of practical demonstrations, mobility to various areas of the Department,

occasional travel and overnight stays to training/conferences or the Los Angeles field office may also be required, and work hours may deviate from core business hours based on the service requirements of the Department.

Job Duties
E = Essential, M = Marginal

35%   E

Server-Side Application Programming and Support
The incumbent serves as a key member of the Digital Services Group (DSG) responsible for designing, developing, securing, and supporting mission-critical applications using Microsoft and cloud-native technologies.
Duties include:
- Analyze, design, and implement scalable server-side applications using .NET Framework & .NET 8/9, ASP.NET Core, C#, REST APIs, gRPC, and microservices patterns.
- Integrate internal and external system components including web services, APIs, message queues, and cloud resources.
- Maintain and support application services on Azure App Services, Azure Functions, Linux App Services, and container-based environments.
- Troubleshoot complex code, database, API, network, and system issues end-to-end using tools such as Azure Monitor, App Insights & Log Analytics.
- Collaborate with developers, QA, DevOps, solution architects, network, and business users in design reviews, code reviews, and architectural discussions.
- Lead or participate in requirements gathering, technical design meetings, sprint planning, and user acceptance testing.
- Analyze existing application logic and recommend modernization strategies, refactoring, or migration to cloud-native patterns.
- Create and maintain technical documentation, design diagrams, API specifications, and operational runbooks.

35%   E

Web Application Development & Automation Testing
The incumbent develops and enhances enterprise web applications and ensures quality through modern software engineering and automated testing practices.
Duties include:
- Develop responsive, accessible, and secure web applications using:
  - HTML5, CSS3, Bootstrap, Tailwind
  - JavaScript/TypeScript, React.js, Blazor, jQuery
  - ASP.NET MVC, ASP.NET Core Razor Pages, REST/GraphQL APIs
- Build and maintain front-end components using modern UI frameworks, state management patterns, and API integrations.
- Integrate with backend data services, identity systems (Azure AD), and cloud APIs.
- Create automated functional and regression tests using:
  - Selenium, xUnit, NUnit, BrowerStack LCA and GitHub Actions test runners.
- Develop test plans, reusable automation scripts, and quality gates to support continuous integration and delivery.
- Recommend new testing tools, frameworks, and engineering practices to improve reliability, performance, and delivery speed.

20%   E

Database Development, Administration, and Data Services

Duties include:
- Design, develop, and administer transactional and analytical databases using Microsoft SQL Server, Azure SQL, SQL Managed Instance, and Entity Framework/Dapper.
- Ensure data quality, performance, security, access integrity, and alignment with business requirements.
- Perform query optimization, index tuning, performance diagnostics, and schema reviews.
- Support backup/restore processes, disaster recovery planning, and database capacity management.
- Develop stored procedures, views, functions, and data-access layers for enterprise applications.
- Evaluate database technologies, cloud storage options, and modernization opportunities.

5%   E   **Emerging Technology Research, Prototyping, and Innovation****
Duties include:
- Evaluate emerging technologies including AI-assisted development, low-code automation, API standardization, cloud-native architectures, and DevOps toolchains.
- Conduct technical feasibility studies and develop proofs-of-concept for new solutions.
- Recommend new tools, frameworks, automation capabilities, and modern engineering practices to support continuous improvement.
- Engage with vendors, industry partners, and technical experts to assess potential technologies and solutions for departmental needs.

5%   M   **Other Duties**

- Perform related technical and administrative duties as required, including documentation, operational support, internal consultation, and participation in cross-functional initiatives.

Other Expectations
- Demonstrate a commitment to performing duties in a service-oriented manner.
- Demonstrate a commitment to building an inclusive work environment that promotes HCAI's diversity, equity and belonging where employees are appreciated and comfortable as their authentic selves.
- Demonstrate a commitment to maintaining a work environment free from workplace violence, discrimination, and sexual harassment.
- Demonstrate a commitment to HCAI's Mission, Vision, and Goals.
- Demonstrate a commitment to HCAI's Core Values and Guiding Principles.
- Maintain good work habits and adhere to all HCAI policies and procedures.

To Be Signed by the Employee and Immediate Supervisor

I have read and understand the duties and expectations of this position

I have discussed the duties and expectations of this position with the employee.

_____   _____
Employee Signature/Date   Supervisor Signature/Date