

Information Technology Position Description

For assistance completing this form, contact your supervisor/manager or your Human Resources (HR) Office. Complete form, obtain all signatures, scan and save using the following naming convention: [Agency/Institution]_IT_[Position Number]_[Date: YYYYMMDD]. Example: DSHS_IT_0480_20150621.

| Position Information | |
|--|--|
| Agency/HE Institution, Division, Unit Department of Health – HTS - ADS | Action Establish |
| Class Code and Title 483AD Application Development – Journey (Public Health Lab Covid-19 Development Specialist) (Project) | Current Salary Range 05IT |
| Proposed Class Code and Title 483AD Application Development – Journey (Public Health Lab Covid-19 Development Specialist) (Project) | Proposed Salary Range 05IT |
| Agency/HE Institution Position Number NEW | HRMS Position Number (if applicable) 71077216 |
| Project Title (if applicable) HTS Covid 19 Hiring | Assignment Pay Dual Language <input type="checkbox"/> Other <input type="checkbox"/> Enter text. |
| Incumbent's Name (If filled position) Enter text. | Address Where Position Is Located (Duty Station) 1610 NE 150th Street, Shoreline, WA 98155 |
| Work Schedule Part Time <input type="checkbox"/> Full Time <input checked="" type="checkbox"/> | HR Approved Overtime Eligible Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Position represented by a Master Agreement: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes , list Master Agreement: WFSE | Position has an approved In-Training Plan: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes , attach Position Description for each In-Training Level |
| Supervisor's/Manager's Name and Title Vacant, PHL IT Manager | Supervisor's/Manager's Phone Enter text |
| Date Completed 7/7/2020 | Date Previous Position Description Approved |
| Primary Job Family (select one) 1. Application Development | Secondary Job Family (select one, if applicable) 5. Data Management |
| Organizational Structure (Attach an organizational chart.) | |
| Summarize the functions of the position's division/unit and how this position fits into the organizational structure. | |
| <p>The Department of Health works with others to protect and improve the health of all people in Washington State. We lead changes in policies, systems and environments to prevent illness and injury, promote healthy families and communities, and encourage healthy lifestyles. We do this by focusing on places where people live, learn, work, recreate, seek healthcare, and worship.</p> <p>The Health Information Technology (HTS) team provides technology solutions and management in support of the agency's mission, strategic plan, and the agency's IT Portfolio. The Office of Applications and Data Services provides high quality technology services by developing and implementing reliable IT systems, providing and supporting mechanisms for collecting, managing, and presenting data to ultimately maximize its usefulness for public health decisions and business functions.</p> <p>This position is part of the Systems Development section in the Office of Applications and Data Services.</p> | |

Position Objective

Describe the main purpose of the position and the type and nature of the work performed.

This position is part of a team that is responsible for the implementation and management of various systems and the data that supports the Department of Health and Statewide response to the COVID-19 pandemic. The impact of these systems and the data supported is across the department, across the state and at the federal level. Impact is to the general public, Local Health Jurisdictions, laboratories, hospitals, clinics and the Centers for Disease Control and Prevention. The team will be working with various vendors and other state agencies as necessary to support this work

This position manages DOH's laboratory Information Technology Application development systems and data that flows to and from laboratory equipment to these application systems.

As a primary support for the laboratory to assist COVID-19 business processes, this position has responsibility for ensuring continuity of operations between various IT applications that span many critical business functions.

This position performs at the technical level development efforts related to Application services (including Application Development, Data Management, System Administration and IT Architecture) in supporting the systems under its direct area.

Position Objective:

This position in a functional level Software Developer within the Systems Development section in the Applications and Data Services Office of DOH's Health Information Technology (HTS). This position reports to the **PHL IT Development Supervisor** and supports the agency's mission, strategic plan, the agency's IT Portfolio, and the HTS Strategic Plan. Provides advanced technical level IT services by designing, developing, testing, implementing and maintaining multi-dimensional information systems used to provide, manage, monitor and assess data required to make informed decisions at the enterprise, division and business unit level. This position support's the business's ability to be a community health partner using innovative methods to provide quality health information, assessment services for taking public health actions, and conducting assessment activities to improve the health of the people of Washington.

This position must understand business problems and opportunities in the context of state and federal rules, requirements and guidelines and recommend solutions that lead to strategic planning deliverables and enable the organization to achieve its goals.

Core Processes: This position performs work through four supporting core processes. By developing systems for our internal users in multiple divisions, this position works in ***Supporting and Developing Our Agency Workforce***. This position directly contributes to the core process of Leveraging Technology by conducting cost-benefit analysis of system upgrades and maintenance requests to ensure time spent is both time effective and meets long-term business goals. Competency in the core process of ***Communicating Effectively*** is required of this position to ensure the business owners, stakeholders, and users clearly understand the impacts of decisions made regarding requests and maintenance needs. By reviewing all work to ensure the systems are secure in protecting the data stored, this position carries out its work by ***Proactively Managing Risk***.

Outcome Measures: By leveraging technology and communicating effectively to staff to ensure these systems provide the services needed in the most efficient way, this position helps create a more ***optimized operation***. By proactively managing the risk of these systems so that all external stakeholders and user organizations are confident that they are secure and will do what they need them to do, this position helps create more ***engaged stakeholders***. By leveraging our technology to create and maintain these systems that allow the Department of Health to meet our guiding principles of ***Evidence-based Public Health Practice, Stakeholder and Partnership Engagement, Transparency, Health Equity and Seven Generations***.

Key Goals: By carrying out work through the above core processes and contributing to making visible differences in the above outcome measures, this position contributes to three key goals of the agency. In creating more optimized operations, by making sure the applications work for the people who use them, this position helps contribute to an agency goal of ***Integrate continuous improvement and performance management systems***. By proactively managing risks, fixing errors before they occur, and making the system function better and faster, this position helps contribute to ***Ensuring core business services are efficient, innovative and transparent*** with the many organizations and stakeholders using and impacted by these application systems.

Assigned Work Activities (Duties and Tasks)

Describe the duties and tasks, and underline the essential functions. Task statements should describe the **action** performed; to **whom or what**; using what **tools, equipment, methods, and/or processes**; and the **final product or outcome**.

For more guidance, see [Essential Functions Guide](#) and [Examples of Work Statements](#)

List the assigned work in order of importance including the final product or outcome for each, with essential functions underlined.

Duty: Software/Application Development

As a functional Level Specialist tasks include:

- Develop, test, and maintain all agency and business unit applications supported by the PHL IT unit, or as assigned by management, based on application design documents and/or existing knowledge base, using technologies such as NET Framework (C#, VB.NET, VB Script), JavaScript (jQuery, Ajax, Bootstrap, AngularJs), PERL, MS SQL Server, HTML, CSS, XML, PowerShell and MS-Office VBA and product suite .
- Configure Internet Information Services in hosting environments to enable use of web-enabled applications by external or internal users and to ensure DOH security standards are met.
- Effectively utilize agency configuration management tools and systems to request modification, implementation of new products or track and manage identified issues with supported systems.
- Ensure DOH standards for Security are adhered to for all products developed.

Expected outcome:

Agency managed applications are kept current with technological life-cycles, business driven changes and on-going maintenance necessary to continue operations so that HTS actively manages, monitors and updates our systems.

Duty: Software/Application Design

As a functional Level Specialist tasks include:

- Design small to enterprise level N-Tier agency and business unit web applications that interact with multiple data source types, web services or data warehouses, from software requirements specifications and other related business analysis artifacts using NET Framework (C#, VB.NET, VB Script), JavaScript (jQuery, Ajax, Bootstrap, AngularJS), PERL, HTML, CSS, XML, PowerShell, MS-Office VBA, and MS SQL Server.
- Participate in small to enterprise level development projects for DOH supported applications and systems by developing application design documentation in accordance with standards and practices, completing assigned development tasks, contributing to monthly project status reports and attending regularly scheduled project team meetings.
- Analyze and define data for use by applications.
- Conducting capacity planning for all PHL IT supported information systems to determine if future organizational needs are efficiently addressed.
- Analyze and assess industry direction and new capabilities to determine if they are applicable to any PHL IT supported information system.
- Conduct research to identify solutions for development challenges and to enhance coding skills.

Expected outcome:

Development lifecycle processes for HTS mature becoming more efficient allowing HTS to provide more valuable service to our customers. Agency information system landscape continually leverages new technology and industry standards and practices increasing in efficiency and overall effectiveness.

Duty: Implementation & Deployment

As a Technical Level Specialist tasks include:

- Design, implement and support pre-production environments such as development, test and quality assurance for small to enterprise level systems as directed.
- Develop and manage plans and individual tasks and schedules.
- Assign and manage resources, in the absence of the PHL IT supervisor and where necessary, ensuring delivery dates are met, resources are efficiently used and standards, procedures and processes are followed.
- Develop communication plans and manage expectations of business units and HTS staff.

- Develop and maintain logs for capturing issues, concerns, decisions and change requests that pertain to projects.
- Produce project status reports for the executive sponsor or information technology manager.

Expected outcome:

Specific tasks that are necessary to implement changes are thoroughly thought out and documented so that appropriate resources are understood. Time management is planned to ensure we meet expected delivery of project deadlines and commitments to customers and supervisory/management expectations.

Duty: Testing & Quality Assurance

As a Technical Level Specialist tasks include:

- Plan and develop test plans, cases and scenarios for all products developed or supported by the PHL IT unit or as directed by management.
- Conduct system and Unit Testing for all PHL IT supported systems or as directed by management.
- Appropriately use commercial testing tools, such as Microsoft Visual Studio Unit Testing, and Open Source tools to ensure code developed meets coding, security and functional testing requirements.
- Conduct research to identify solutions for resolution of testing failures, work with business owner to repair and retest.

Expected outcome:

Code being updated will be adequately tested so that minimal bugs and defects are implemented through the code life-cycle and change management procedures

Duty: Data Management

As a Technical Level Specialist tasks include;

- Utilize DBMS software (MS SQL Server, MS Access, MySql, MongoDB) to design, develop, & maintain databases & applications using simple to highly complex database queries and statements.
- Compile simple to highly complex procedures, user defined functions, and queries using database querying syntax that are well-structured and re-usable.
- Use database querying skills to efficiently and accurately analyze data models and complete simple to highly complex ad-hoc data requests under time constraints.
- Extract, transform and load data from external sources and partners to DOH supported applications.
- Utilize standard methodologies and quality assurance processes to verify data accuracy and completeness ensuring data quality meets specified business requirements before loading into DOH supported systems and applications.
- Development and support of simple to highly complex automated processes to replace manual data extract, transformation, import and export processes for DOH supported systems and applications.
- Utilize reporting software (SQL Reporting Services, Business Intelligence Studio, Crystal Reports) to develop & maintain simple to highly complex reports.
- Conversion of simple to highly complex Microsoft Access based relational databases and their respective data interfaces to relational and noSQL databases.

Expected outcome:

Agency managed data sources are kept current with technological life-cycles, business driven changes and on-going maintenance necessary to continue operations so that HTS actively manages, monitors and updates our systems. Agency business units are provided information about the IT applications we support with respects to the data stored. This can be done in either a graphical/reporting representation or by a tabular data extract of the data stores.

Duty: Research, Analysis & Problem Resolution

As a Technical Level Specialist tasks include:

- Solve simple to highly complex IT problems, including defining & analyzing the problem, identifying & testing solutions, choosing & implementing the best solution, documenting the changes in the agency configuration management tracking system, and evaluating the outcome.
- Participate in comprehensive research and analysis by querying knowledge bases and other resources to resolve application development, database or component issues for all PHL IT supported applications or as directed by management. Make recommendations to the PHL IT Supervisor or manager when the identified solution requires a decision above this positions level of authority.
- Escalate problems or issues to the next higher level when available resources have been expended or a decision outside this position's level of authority is required.
- Analyze and assess industry direction and new capabilities to determine if they are applicable to any PHL IT supported information system.
- Analyze and determine impacts of requested modifications to IT applications and systems supported by this position or the PHL IT section.
- Review and approve products developed by junior or peer positions.

Expected outcome:

Application specific problems are analyzed and the best solution implemented to address the defined issues. Good analysis is conducted to ensure the solutions being implemented meet the requirements outlined by supervisor or business units. Information produced will be address all relevant aspects so that sound decisions can be made based on the information provided.

Duty: Documentation

As a Technical Level Specialist tasks include:

- Develop system and user documentation for supported systems by properly documenting code, functions and system processes.
- Participate in the development and maintenance of standards, guidelines and best practices for information system development in test, quality assurance and production enterprise environments.
- Author "After Action Reports" or other explanatory documents after recovering from incidents and system failures.
- As assigned conduct analysis of industry-wide trends and makes recommendations for improvements and efficiencies in system and operational performance to management.
- Develop White Papers on emerging technologies as assigned
- Review and approve system documentation developed by junior or peer positions.

Expected outcome:

Products produced will be of standard quality and have a have predictable results so that all unit staff will be able to understand the logic and how the solutions meet the desired business needs

Duty: Other Duties as required

As a Technical Level Specialist tasks Include:

- Attend, participate, and contribute to weekly PHL IT Development team meetings.
- Attend, participate, and contribute to Health Technology Solutions meetings.
- During a public health emergency, assists with emergency response activities as assigned.

Expected outcome:

A collaborative and flexible approach to working within the technical support unit so that a team environment is displayed within the support unit.

Problem Solving

What are the most complex and/or challenging issues addressed by this position? Give 3 to 4 examples and how each is resolved.

| Complex/Challenging Issue | How Resolved | Frequency |
|---------------------------|--------------|-----------|
|---------------------------|--------------|-----------|

| | | |
|---|---|---|
| Managing expectations of 3 rd party vendors, maintaining open lines of communication and helping to ensure vendors meet/produce critical deadlines, deliverables and support for vendor supported systems maintained by PHL IT unit. | Meets with customers, vendor, and support staff at regular intervals during projects to ensure deliverables are clearly understood and mitigate any impacts to project scope, schedule or budget. HTS management ensures vendor contracts clearly outline vendor support options; these options are clearly documented and included as part of the overall System Support Plan. Support Plans are reviewed annually to ensure contact information for vendor is valid and vendor support options have not been altered. | On-going as each application supported is on a planned release cycle with enhancements for any one application in the queue at all times. |
| Translating user requirements into design specifications and functioning software that meets those requirements and users successfully test and approve the new function/feature. | Meets with the customer and/or agency Business Analysts to obtain an understanding of the requirements. Create design documentation and specifications to address the need. Reviews with the customer/BA to make sure the designs are correct. Develops prototype(s) and reviews with the customer for accuracy, then once approved, writes the program(s) for implementation. Once users approve through User Acceptance Testing (UAT) the new feature/function is moved into the production environment. | On-going as each application supported is on a planned release cycle with enhancements for any one application in the queue at all times. |
| Web browser applications are used by external users who may use different browsers than internal users. When they are using an outdated browser, applications might not function correctly | Develop applications in all browsers and retest each time a browser comes out with an upgrade. Have internal users ask external users to test on different browsers to make sure they still work. | Each time a browser upgrades. This happens at least once a month if you take into consideration all the different browsers. |
| Application and reporting performance degrades to where users call the help desk because the system is too slow. | Use appropriate diagnostic tools to locate the issue. Depending on location, either use appropriate development tools to make corrective action, or open communication with HTS partner sections to take further corrective action. | Intermittent |
| Bug Fixes | Use appropriate diagnostic tools to locate the issue. Attempt to successfully re-create issue in debug environment in order to evaluate root cause of the error(s). Analyze cause and determine best solution. Implement fix using appropriate development tools making sure to follow correct deployment processes for code changes. | When reported. During quality assurance testing before a planned release. After a release bugs may be reported in production. |
| Decision Making | | |
| <p><i>What duties are performed that require the position to make choices, determinations or judgments?</i></p> <p>Makes independent decisions to balance workload, based on determined work priorities and in meeting determine deliverable dates as determined by supervisor or management.</p> <p>In the absence of the PHL IT supervisor, makes independent decisions to balance workload for all PHL IT resources, based on determined work priorities and in meeting determine deliverable dates as determined by management.</p> | | |

Reviews the problems and develops solutions on how to address those problems in all areas of the application development and maintenance life-cycle (i.e. planning, analysis, design, programming, and problem solving) for all PHL IT supported systems or as assigned by management.

This position assists in making the decisions for all PHL IT supported systems regarding architecture and infrastructure development and changes, keeping into consideration current standards, practices and pre-determined architecture and infrastructure considerations.

This position keeps PHL IT supervisor and management informed of timeline changes but has general control of how the positions work is being performed related to the application, database environment, authorizing environment, and assists in determining when and how changes will be implemented by working with specific support groups impacted as part of the changes being completed.

Which decisions are sent to the next level of supervisor/manager or technical authority for recommendation/decision?

This position will bring decisions, with recommendations, regarding excessive costs, potential schedule slippages, resource augmentation, security risks, or any perceived need for an increase in resources, to their Supervisor, Manager or Project Manager for discussion. Some cases require additional discussions with subject matter experts.

Priorities are determined by supervisor or management as defined by deliverable commitments to business units and key stakeholders. The supervisor or management team determines assignment of new projects for this position.

The position will provide estimates on work tasks being assigned, but the estimates are to be validated through the supervisor or lead technician.

Requests for procurement are made to Supervisor or Manager.

Request for staff training that have a costs are made to Supervisor or Manager.

Potential Impact of Results

Describe the potential impact of error (What potentially could happen in the event that the individual were to fail to perform their job correctly?).

List who (citizens, other department/unit personnel, statewide-personnel, etc.) would be impacted and the degree of impact.

If the system were to fail or experience work stoppages, the Department of Health business units and external organizations (other state agencies, local health jurisdictions, non-profits, etc.) couldn't report out what is federally required and could result in a loss of funding.

The positions in this section manage and maintain systems that directly impact these groups. Some of these systems could result in direct impacts to business units within DOH that would cause performance impacts resulting in fiscal and staffing consequences.

List what (dollars, larger systems, processes, other resources, etc.) would be impacted and the degree of impact.

The Department of Health employs over 1600 people and a combined operating and capital budget of nearly \$1.3 billion. There would be significant economic impacts to DOH, local agencies, governments, and citizens receiving funding from health related data form the Department of Health if these systems were to fail as a result of this position failing to do the job, or if the position was to be cut.

Financial Dimensions (if applicable)

Describe the type and annual amount of all monies that the position directly controls, administers or manages (*excluding employee salary and benefits*) for example: delegated signature authority amount, invoice approval for contract expenditures.

Lead Work/Supervisory Responsibilities

| | | | |
|---|---------------------------------------|--|---|
| Lead Position: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | <input type="checkbox"/> Assigns Work | <input type="checkbox"/> Instructs Work | <input type="checkbox"/> Checks Others' Work |
| Supervisory Position: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | <input type="checkbox"/> Plans work | <input type="checkbox"/> Evaluates Performance | <input type="checkbox"/> *Takes Corrective Action |
| | <input type="checkbox"/> *Hires | <input type="checkbox"/> *Terminates | |
| (*Has the authority to effectively recommend these actions.) | | | |

| List Class Title and Working Title of Position(s) Supervised | If Part Time, What % |
|--|----------------------|
| | Part Time %. |
| | Part Time %. |
| | Part Time %. |
| | Part Time %. |
| | Part Time %. |
| | Part Time %. |

Add information that clarifies this position's lead or supervisory responsibilities.

Working Relationships

Level of Supervision received (*check one*). For more guidance see [Glossary of Classification Terms](#).

- Direct/Close Supervision: Most work is reviewed in progress and upon completion.
- General Supervision: Completed work is spot checked.
- General Direction: Completed work is reviewed for effectiveness and expected results.
- Administrative Direction: Completed work is reviewed for compliance with budget, policies, laws and program goals.

Add information that clarifies this position's interactions with others to accomplish work.

The incumbent will work with team members and other internal HTS groups on a daily basis in providing the services and outcomes from this position. This requires good team and relationship building that allows for the position to be successful. This position will occasionally work directly with business users and/or external partners.

Continuity of Operations Plans (COOP) Designation – For Disaster or Emergency Recovery

For more information see [COOP and Critical Positions](#). For higher education, refer to your list of essential personnel.

Is this position designated critical based on agency COOP? Yes No

If **yes**, describe how this position supports the agency COOP Critical Functions.

This position is critical to supporting the agency Laboratory Information Systems (LIMS) which handles the tracking, testing, and results reporting of samples and specimens submitted by clinical and environmental organizations from multiple western States. This system is comprised of multiple components including; web applications, services, client/server applications, databases and interfaces.

Qualification – Knowledge, Skills and Abilities

| Required Education, Experience or Certifications | Application (why each qualification exists) |
|---|--|
| <p>A Bachelor's degree or higher in Information Technology program or a closely related field; and four (4) years (full-time equivalent) of professional experience in one or more of the following IT disciplines: consulting, analyzing, designing, programming, installing and/or maintaining computer software applications. Additional years of experience can substitute for education on a one for one basis.</p> <p>OR</p> <p>An Associate's degree or higher in Information Technology program or a closely related field; and six (6) years (full-time equivalent) of professional experience in one or more of the following IT disciplines: consulting, analyzing, designing, programming, installing</p> | <p>As a technical Specialist, trusted to plan and direct small to large IT projects. Independently performs simple to highly complex assignments and is trusted to lead and mentor other IT staff.</p> |

| | |
|--|--|
| <p>and/or maintaining computer software applications. Additional years of experience can substitute for education on a one for one basis.</p> <p>OR</p> <p>Eight (8) years (full-time equivalent) of professional experience in one or more of the following IT disciplines: consulting, analyzing, designing, programming, installing and/or maintaining computer software applications.</p> | |
| <p>At least three (3) years, of the listed above (full-time equivalent) of professional experience in the software development field. Experience must include:</p> <p>Experience must include;</p> <ul style="list-style-type: none"> Using MS-Visual Studio Development tools and Open Source tools to maintain and develop agency or corporate level systems. Designing, developing, testing, implementing and maintaining .NET and Open Source applications and web services using C#/VB Web/Win Forms, JavaScript, and SQL. Using Microsoft SQL Management tools or Open Source alternative to develop and maintain back-end codes and database objects Experience working with relational databases. Interpreting user requirements and software design documentation to be used for software development. | <p>This experience is necessary to complete the duties for this position. This position is part of the PHL IT Development section. This group supports multiple .NET and Open Source centric business unit applications including web, client/server, console, and web services which are critical to health partners across the state. As an technical level specialist, superior skills in these tools and technologies are vital to the incumbent providing a lead role within the development team and mentoring junior peers.</p> |
| <p>Desirable/Preferred Education, Experience or Certifications</p> | <p>Application (why each qualification exists)</p> |
| <p>A Bachelors' degree or higher in Computer Science, Management Information System, or closely allied field (Engineering/Mathematics).</p> | <p>As a technical Level Specialist a bachelor's degree would provide even stronger IT skills foundation and reduce acclimation time to the agency's information system landscape.</p> |
| <p>One (1) or more years (full-time equivalent) of professional experience developing Microsoft application security, authentication, auditing and exception handling protocols using the Microsoft Enterprise Libraries</p> | <p>HTS adheres to strict IT Security Standards outlined by our Information Security Office as well as the State Office of CIO. Advanced knowledge of these tools and how to apply them to application authorization, authentication, and auditing development improves the incumbent's ability to successfully adhere to these standards.</p> |
| <p>One (1) or more years (full-time equivalent) of professional experience developing JavaScript programs or using JQuery libraries.</p> | <p>Several applications supported by the PHL IT Development section leverage JavaScript and JQuery. Knowledge in these technologies broadens and improves the incumbent's ability to support key services maintained by this unit</p> |
| <p><i>List the competencies (knowledge, skills, abilities and behaviors) and a description of each that are necessary to successfully perform the work of the position.</i></p> <p>Demonstrate the following Department of Health core competencies at a proficient level;</p> <ul style="list-style-type: none"> Achievement Orientation | |

- Analysis & Problem Solving
- Communication
- Cultural Competency
- Customer Service Orientation
- Interpersonal Skills
- Professional & Technical Competence

A copy of the Department of Health Core Competencies can be found here

<https://doh.sp.wa.gov/sites/OS/pr/hr/Shared%20Documents/Core-Competencies-DOH.doc>

A copy of the Department of Health Core Competencies Matrix can be found here

<https://doh.sp.wa.gov/sites/OS/pr/hr/Shared%20Documents/Core-Competencies-Matrix.doc>

In addition, demonstrate the following technical competencies;

Software Design

- Able to determine what code is necessary to achieve some specified functionality, particularly the higher-level structure or organization of the code.
- Familiar with UI and database design standards and concepts.
- Follows complex code design pattern and conform to industry and agency best practices and standards.
- Awareness of the Software Development Life Cycle. This is an awareness of the 'big picture' of software development beyond just writing code - how the other life cycle stages (requirements, design, testing, and maintenance) impact coding and vice-versa. This includes an understanding of the types of methodologies (e.g. Agile or Waterfall) that can be used to progress through this cycle.
- Conceptualizes and communicates a system design effectively from business requirements.
- Assesses potential risks in business requirements prior to finalizing design deliverables.
- Identifies critical architecturally significant concerns and aspects of systems and the impact on quality design.
- Responsible for all technical design deliverables that contribute to core system architecture.
- Designs software that is flexible, configurable and manageable to scale and adapts to future business growth.
- Manages technical risk aspects of a solution redesign through advocating best possible solution or approaches.
- Implements industry design patterns and architecture principles that suit the solution, without over engineering a solution.
- Ensures the functional, operational and system quality attributes are met.

Software Coding

- Learns quickly and works to extend their coding skill set as workload requires.
- Reads code quickly and can understand an existing code base in order to analyze its behavior and make fixes or enhancements to it.
- Able to revise existing code without impacting its functional behavior.
- Delivers code within stipulated timeframes and according to design and specification.
- Communicates effectively current status of code deliverables and raise risks early concerning timeframes that could be missed.
- Takes accountability for the quality of the code they deliver, and ensure that there are no issues on the critical system path.
- Adheres to industry, agency and group IT standards and policies.
- Flexible in their approach to coding.
- Able to effectively use modern IDEs and an understanding of their strengths and weaknesses.
- Successfully implements design patterns based on business and technical requirements.
- Has coding experience across a number of varying frameworks, technologies within different environments.
- Ability to deliver completed code modules.
- Fine tunes performance, decipher complex logic and efficiently implement solutions that work.
- Shares coding approach and principles in a collaborative manner with greater development team.
- Owns the technical decision making at a system level.
- Reviews peers code from a standard and design adherence perspective.
- Up to date with newer technologies and frameworks that could possibly favor a particular business solution.
- Has the following qualities:

- Has a firm grasp of code quality
 - Excellent code reading skills
 - Excellent debugging skills
 - Excellent understanding of concurrency principles and techniques
 - Excellent understanding of secure coding
- Assists in defining coding standards and patterns.
- Takes responsibility for the code quality of an entire team.
- Advocates new techniques, technologies or frameworks and demonstrates their value through proof of concepts.

Software Testing/Debugging

- Able to analyze the behavior of code to diagnose a problem and find the underlying cause. This includes but is not limited to using a debugger and reading application event logs.
- Able to develop, execute and maintain basic to complex unit testing, load testing, and profiling strategies for supported applications through use of industry standard tools.
- Able to work within an automated build test development environment using industry standard tools.

Application Builds and Deployments

- Adheres to and contributes towards ensuring Continuous Integration (CI) and Software Configuration Management (SCM).
- Has firm grasp of, and conforms to, necessary standards and procedures within the development environment regarding development, QA and production deployment intricacies and control mechanisms.
- Can be relied upon to negotiate and ensure infrastructure and server configurations are completed by business partners.
- Responsible for the development and communication of proposed development release plan and associated deployment roadmap.
- Assists in the definition and implementation of a stable and scalable build and deployment strategy.
- Guides development team adherence and provides assistance in conforming to the build and deployment tools, policies and procedures.

Data Modeling and Querying

- Proficient in chosen SQL editing tool and management/administration workbench (I.e. SQL Management Studio)
- Proficient in chosen report development tool and management/administration workbench (I.e. SQL Reporting Services, Crystal Reports)

Compiles well-structured stored procedures, user defined functions, and queries of simple to challenging complexity.

Special Requests and Conditions of Employment

Examples: Must possess valid drivers' license and good driving record. Must successfully pass a criminal background check.

Working Conditions

| | |
|---------------------------------|---|
| Work Setting, including hazards | Work is performed almost exclusively indoors in a laboratory environment. Exposure to hazards is slightly more elevated than those commonly found in government office environments. |
| Schedule (i.e., hours and days) | Standard business hours are Monday – Friday from 8 a.m. to 5 p.m., but the incumbent may be expected to adjust the work schedule to meet business needs and to meet deadlines for system implementations. Occasionally the incumbent will be contacted outside of business hours to address emergency or urgent business needs and is expected to assist, if possible. Maintenance windows vary from team to team but are scheduled in advance. This position may participate in stand-by coverage to support agency systems. |
| Travel Requirements | Some travel may be required, and is typically local or regional, to meet with clients, conduct business, or attend or provide training |
| Tools and Equipment | Duties require the use of standard office furniture and equipment (e.g., desk, filing cabinet, computer, printer, telephone, fax machine, copy machine, etc.) |

| | |
|---|---|
| Customer Relations | Frequent contact (likely daily) with clients, including some contact with those who may be angry, distraught, or frustrated |
| Other | Maybe required to work remotely to support inclement weather or emergency operations support functions |
| Acknowledgement of Position Description | |
| The signatures below indicate that the job duties as defined above are an accurate reflection of the work performed by this position. | |
| Date | Supervisor's/Manager's Signature (required) Enter text. |
| Date | Appointing Authority's Name and Title Signature (required) |
| As the incumbent in this position, I have received a copy of this position description. | |
| Date Enter a date. | Employee's Signature Enter text. |

Position details and related action have been taken by Human Resources as reflected below.

| For Human Resource/Payroll Office Use Only | | | |
|--|--|--|-------------------------------------|
| Approved Class Title: IT App Devel - Journey | Class Code: 483AD | Salary Range: 05IT | Effective Date: 8/1/2020 |
| Pay Scale Type: 01 Classified | Job Analysis On File? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Position Type (Employee Group): Project competitive | EEO Category: Enter text. |
| Employee Sub-Group: OT Exempt | Position Retirement Eligible: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Position is: Funded <input checked="" type="checkbox"/> Non-Funded <input type="checkbox"/> | Workers Comp. Code: 5300 |
| County Code: King | Business Area: Enter text. | Personnel Area (FEIN): Enter text. | |
| Position Eligible for Telework Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | | Position Eligible for Flextime Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | |
| Position Eligible for Compressed Workweek Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | | Unique Facility Identifier (UFI) For more information see: UFI Search Feature Enter text. | |

Bona Fide Occupational Qualification Yes No

If **yes**, list qualifications: **Enter text.**

Cost Center Codes

| COST CENTER | PCT. (%) | FUND | FUNCTIONAL AREA | COST OBJECT | AFRS PROJECT | AFRS ALLOCATION |
|-------------------------------|---|--------------------|--|--------------------|--|------------------------|
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Date: 08/20/2020 | HR Designee's Name: Annie Manning | | HR Designee's Title: HRC | | HR Designee's Signature: /s/ Annie Manning | |
| Date: Enter a date. | Budget Designee's Name: Enter text. | | Budget Designee's Title: Enter text. | | Budget Designee's Signature: Enter text. | |