

**State of Michigan
Civil Service Commission**

Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909

Position Code

1. ITPRANA

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.) 	8. Department/Agency TECH, MGMT AND BUDGET - IT
3. Employee Identification Number 	9. Bureau (Institution, Board, or Commission) Agency Services supporting DHHS
4. Civil Service Position Code Description Info Tech Prgmr Analyst-A	10. Division Data, Analytics, & Visualizations
5. Working Title (What the agency calls the position) ITPA12 – Senior Application Developer	11. Section Data Warehouse Health Services
6. Name and Position Code Description of Direct Supervisor JOSEPH, FATIMA J; INFO TECH MANAGER-3	12. Unit Health Systems 2
7. Name and Position Code Description of Second Level Supervisor AHMAD, AWAIS; STATE ADMINISTRATIVE MANAGER-1	13. Work Location (City and Address)/Hours of Work Elliott-Larsen, 320 S Walnut St, Lansing MI 48933 / 8:00am-5:00pm, Monday-Friday / Hybrid schedule

14. General Summary of Function/Purpose of Position

As a Senior Application Developer, the employee performs a complete range of information system analyst assignments including, but not limited to, designing, developing, testing, and implementing computer systems and applications for DTMB Agency Services supporting Department of Health and Human Services. This individual will be looked upon to provide technical support to Web Applications including but not limited to CareConnect 360(CC360), CC360-API, Waiver Support Application(WSA), WSA-API, MMIS Beneficiary Monitoring Program (PROM-BMP), Pharmacy Crosswalk Drug Reference (XDR), Medicaid Statistical Information System (MSIS), and multiple projects for DHHS. These systems are essential to the delivery of services to families across Michigan and require availability, scalability, and compliance with state and federal standards.

The developer participates in all phases of the software development lifecycle and provides direction and mentoring to both staff and contractors. The position is responsible for designing, developing, testing, and implementing applications and system enhancements, maintenance and operations, evaluating new tools and technologies to support agency modernization efforts. As part of a dynamic technical team, the developer works closely with MDHHS business partners, contractors, vendors, and DTMB leadership to deliver high-quality solutions that support critical business objectives. Strong collaboration skills, the ability to guide technical decisions, and considerable experience with .NET Framework 4.8, .NET C#, .NET Web Forms, and.NET 6 CORE, REST/SOAP API, creating/updating/reviewing and maintain stored procedures/functions/triggers/queries, and all database operations in SQL Server Database, Teradata, creating CI/CD Pipelines in Azure DevOps, are essential for success in this role.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary:

Percentage: 60

Serve as team lead and resource directing the programming, testing, and implementation of new and existing complex web-enabled data system applications following industry and DTMB development standards. Develop or approve plans for testing and implementation of web-enabled data system applications, evaluate impacts of changes and new technology, recommend solutions to persistent problems, and server as Agency Services liaison to external consultants.

Individual tasks related to the duty:

- With the Business Analyst, takes a lead role in presenting the information gathered to the Project Review Board and/or Sponsors during project review meetings, work groups and to TRB providing clarification and answers to questions.
- Design/Document IT solutions when new technology is involved with guidance and review from the solutions architect (SA) to ensure the software architecture aligns with the hardware architecture and other DTMB enterprise guidelines.
- Assist Architect or DBA to draft technical database model that: Complies with audit separation of duty requirement, Captures requirements of data elements, Designs data elements to best meet application needs.
- Serves as a team lead and resource, directing code development, providing advice/guidance to other development staff.
- Develop/Design coding standards and integration processes/objects/ framework that can be leveraged for an IT solution.
- Evaluate and identify opportunities for programming standardization.
- Lead code review to ensure strategies and applications adhere to State and agency policies, standards or guidelines. Participate in department wide coding standards review. Work with the SA to setup guidelines/processes on code review.
- Maintain source code within the standard version control tool.
- Evaluate and identify development exception needs. Work with a Solutions Architect to gain required approval.
- Review and approve application test plans with Business Analyst. Incorporate all levels of security, which were identified as system requirements, into test plans.
- Develop and monitor defect tracking logs and facilitate problem resolution.
- Design scripts and coordinate application peer testing, load testing and system integration testing.
- Develop plans and coordinate implementation of tool/environment upgrades with guidance and review from the SA.
- Monitors long term IT solution trends and recommends IT solutions to alleviate persistent problems.
- Validate and finalize Local Change Board and Enterprise Change Board documents
- Provide input to procedures and ensure proper change management for all requested fixes to production systems.
- Communicate changes to DBA, Configuration Management (CM), and development to complete release to production.
- Create build using proper code source from the standard version control tool.
- Work with CM team to release the build to appropriate environments.
- Serve as Agency Services liaison to internal/external vendors/consultants/partners.
- Work with vendors to integrate COTS applications with State standard solutions.
- Consult with agency clients to explain complex IT processes, DTMB standards, and solutions, developing and maintaining an effective communication plan within DTMB and agency clients relating to project level metrics, bureau level project reporting, etc.
- Represent DTMB AS on internal/external security policy and standards review teams with guidance/review from the SA.
- Prepare documentation for disaster recovery planning and implementation.
- Gather, review and analyze potential impacts of changes and inform DTMB management and supported client agency of impact and risks to existing IT solutions due to proposed legislation requests, changes in processes or procedures.
- Evaluate impact of new development tools, languages, upgrades and equipment on agency systems and make recommendations to DTMB and/or agency clients in collaboration with the solutions architect (SA).

Duty 2

General Summary:

Percentage: 20

Apply automated data processing principles and procedures to assist users in resolving system related problems with highly complex computer applications. Recommend solutions to persistent problems.

Individual tasks related to the duty:

- Develop solutions for existing IT systems to best meet the user's needs enabling more efficient and cost-effective processing. This includes reviewing existing systems, evaluating possible solutions, and recommending technical modifications.
- Work with users for clarification and elaboration to clearly define the problem and conceptualize a development plan.
- Ability to recognize, gather, assemble, correlate, and analyze facts, draw conclusions, define problems, and devise solutions and alternatives. Make appropriate recommendations to users and the first-line supervisor.
- Develop and monitor defect tracking logs and facilitate problem resolution.
- Participate in statewide IT initiatives as necessary, appropriate, and required by supervisor.

Duty 3

General Summary:

Percentage: 10

Consult with clients to explain complex IT processes, DTMB standards, and solutions, developing and maintaining an effective communication plan within DTMB and agency clients relating to project level metrics, bureau level project reporting, etc.

Individual tasks related to the duty:

- Serve as Agency Services liaison to external consultants.
- Recommend action to increase application performance i.e., update, response time, throughput, reliability, scalability, etc.
- Gather, review, and analyze potential impacts of changes and inform DTMB management and support client agency of impact and risks to existing IT solutions due to proposed legislation requests, changes in processes or procedures.
- Apply and manage security restrictions (application level, folder level and object level) based on user profile and groups.

Duty 4**General Summary:****Percentage: 10**

Performs special assignments as assigned.

Individual tasks related to the duty:

- Make presentations about complex data processing applications to systems users, Agency management, representatives from other State agencies/departments.
- Participate in task forces, special committees, and research groups, to support development of data processing systems.
- Evaluate impact of new development tools, languages, upgrades and equipment on agency systems and make recommendations to DTMB and/or agency clients in collaboration with the solutions architect (SA).
- Keep abreast of new technologies through professional reading, seminars, etc.
- Serve on IT related advisory groups and interview panels upon request.
- Perform related work as is deemed necessary and appropriate by the supervisor.
- Identify, recommend and implement improvements in the IT operations of assigned systems.
- Participate in statewide IT initiatives as necessary, appropriate and required by supervisor.
- Develop and monitor defect tracking logs and facilitate problem resolution.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

For overall approval of system design and approval of major system enhancement. Decisions that impact Department policy, budget, procedures, prioritization of work assignments, or issues that influence resource allocation.

17. Describe the types of decisions that require the supervisor's review.

- Major security actions affecting MDHHS.
- Implementation of new security policies and standards.
- Decisions that have or may have legislative, legal, or budgetary impact.
- Impacting approved scope, schedule, or cost.
- Regarding implementation of modifications or new development for automated systems
- Action to be taken in the event of a major security problem.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Standard office environment. Use of personal computer using keyboard and mouse to perform trouble shooting, create and edit technical materials, communications with staff and clients, and reports. A minimum effort may be required to walk or drive to other locations. Majority of work is performed sitting at an ergonomic prepared workstation suitable for a personal computer or attending meetings in standard conference room settings. This position is subject to stress and pressure to resolve problems quickly and effectively.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

- | | | | |
|----------------------------|------------------------------------|----------------------------|-----------------------------------|
| ☐ N | Complete and sign service ratings. | ☐ N | Assign work. |
| ☐ N | Provide formal written counseling. | ☐ N | Approve work. |
| ☐ N | Approve leave requests. | ☐ N | Review work. |
| ☐ N | Approve time and attendance. | ☐ N | Provide guidance on work methods. |
| ☐ N | Orally reprimand. | ☐ N | Train employees in the work. |

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes

23. What are the essential functions of this position?

This position serves as a senior information technology programmer analyst responsible for maintaining and enhancing web applications using .NET technologies, SQL Server Database, and databases located on the State of Michigan's Teradata data warehouse platform. The position develops applications and processes for the enhancement and maintenance of the data warehouse databases. The position develops and maintains Compliance Division computer applications for Federal data collection and reporting. This position also serves as a senior analyst responsible for:

- Make customers and their needs a primary focus of one's actions; develop and sustain productive customer relationships.
- Identify and understand issues, problems, and opportunities; compare data from different sources to draw conclusions; use effective approaches for choosing a course of action or developing appropriate solutions; take action that is consistent with available facts, constraints, and probable consequences.
- Establish courses of action for self and others to ensure that work is completed efficiently.
- Keep up with current developments and trends in areas of expertise (having achieved a satisfactory level of technical and professional skill or knowledge in position-related areas).

Competencies: Communication, Customer Focus, Initiating Action, Innovation, Planning and Organizing, Technical/Professional Knowledge

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

Establishment

25. What is the function of the work area and how does this position fit into that function?

Each area within the Division develops implements and maintains the automated data processing systems required by the Bureau and Offices within the Department of Health and Human Services. It must perform these activities in compliance with ever changing State and Federal regulations and mandated legal priorities and deadlines while adhering to prevailing agency policy/procedures/standards and maintain operation effectiveness. This position is part of the staff needed to develop and support system applications.

Data Analytics and Visualization division is responsible for maintaining web applications, data warehousing and business intelligence activities for MDHHS. The Division seeks to ensure that our solutions help support the goals of making the State of Michigan one of the most efficient and responsive governments in the world by providing the data needed to support effective and timely decision making.

Our Senior Application Developer will be charged with ensuring that all requests for web applications are viewed holistically within the larger framework of the Division. Further, our Senior Application Developer will work to understand not only the immediate request being worked, but the broader strategic picture of MDHHS so that the solutions provided meet immediate needs and are positioned effectively to add additional value in the future.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Information Technology Programmer/Analyst 9

Possession of an Associate's degree with 16 semester (24 term) credits in one or a combination of the following: computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics.

Information Technology Programmer/Analyst P11/12

Possession of a Bachelor's degree with 21 semester (32 term) credits in one or a combination of the following: computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics.

EXPERIENCE:

Information Technology Programmer/Analyst 12

Two years of professional experience equivalent to an Information Technology Infrastructure or Programmer/Analyst P11.

Alternate Education and Experience

Information Technology Programmer/Analyst P11 - 12

Possession of an associate's degree with 16 semester (24 term) credits in computer science, information assurance, data processing, computer information, data communications, networking, systems analysis, computer programming, IT project management, or mathematics and two years of experience as an application programmer, computer operator, or information technology technician; or two years (4,160 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

OR

Completion of high school and four years of experience as an application programmer, computer operator, information technology technician, or four years (8,320 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Designing logical and physical database models using SSIS, SQL Server 2019
- Designing and developing reports using Crystal Reports
- Building and maintaining unit test framework with Nunit. Developing and maintaining APIs using .NET MVC, REST API, JSON,.NET Framework 4.8, JSON.NET, Dapper, Swagger, and XUnit
- Enhancing applications to comply with ADA standards
- Teradata uses tools such as Teradata Tools and Utilities (TTU), Teradata SQL Assistant 16.10.
- Troubleshoot issues using TSQL Scripts
- Selenium testing tool
- State of Michigan's Compliance Division systems and business practice
- Business Objects reporting for design and performance
- Creating System Security Plans(SSP), Business Continuity Plan(BCP), Disaster Recovery Plan(DRP), and obtaining ATO
- Application development lifecycle includes systems analysis, design, development and system testing techniques
- Developing business application components using Object Oriented with DotNet technologies and design principles .
- Design, Develop and maintain applications using .NET Framework 4.8, C# and .NET CORE 3.1 or higher (6.0 preferred)
- Writing well-designed, testable code using Microsoft .NET MVC, .NET C#, Entity core framework for entity object mapping, with front-end: JQuery, JavaScript and Telerik Package.
- Experience in NET MVC,REST API,JSON,.NET Framework 4.8, JSON.NET, Dapper, Swagger, XUNIT
- Developing database objects including stored procedures, functions, triggers, etc in SQL Server 2019
- Building Frameworks like CI/CD pipeline and maintain source code using source control, and baseline software versions and build war files for deployments
- Gathering requirements and writing functional/technical specifications for complex projects
- Developing prototypes, mockup for users review and approval, and creating flowcharts using MS-Visio, screen layouts and documentation to ensure logical flow of the system requirements
- Working on large agile projects
- SOAP Web-Services ,Restful web services and Web API
- ASP.Net identity server ,Logging frameworks
- Work productively and always project a positive outlook
- Self-motivate and be results oriented; able to motivate others
- Demonstrate excellent oral and written skills, lead groups of people through discussions, technical or otherwise
- Be a strong team player; able to work effectively within a team and more broadly with people from a variety of backgrounds and areas across the organization
- Prepare detailed written instructions and documentation
- Effectively make oral and written reports and presentations and prepare clear and concise documentation,
- Communicate technical terminology at a level appropriate to the audience
- Troubleshoot application issues under pressure

CERTIFICATES, LICENSES, REGISTRATIONS:

Duties may involve the use of a vehicle.

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

N/A

I certify that the entries on these pages are accurate and complete.

AMY MILLER

7/20/2026

Appointing Authority

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date