STATE OF MONTANA
JOB DESCRIPTION

Montana state government is an equal opportunity employer. The State shall, upon request, provide reasonable accommodations to otherwise qualified individuals with disabilities.

Job Title: Software Developer

Position Number: 20003, 20005, 20011, 20023, 20040, 23002, 23005, 81009, 81011, 81014, 81016, 81017, 81018, 81023, 81025, 81101, 81117, 81118, 81119, 81120

Location: Helena

Department: MDT   Division and Bureau: ISD   Section and Unit: Infrastructure and Applications

Job Overview:

This position will perform programming tasks as a member of a project team in support of the Department of Transportation's day-to-day operations. The incumbent will use or adapt as necessary the most current programming methodologies from computer science effectively program, test and debug application changes or enhancements. Programming documentation is required to be completed by the incumbent.

Essential Functions (Major Duties or Responsibilities):

100%

Assess the available programming environments within the department and determine what specific environment or mix of environments best suits the programming task to be accomplished and the needs of the program's users. Suggest the adoption of new environments if applicable. Design, write, and test computer programs based on the results of the analysis phase of the systems design process. Thoroughly test the programs and assess user satisfaction with the end product.

- Write, update, and maintain computer programs or software packages to handle a variety of tasks such as tracking inventory, storing or retrieving data, or controlling other equipment.
- Identify critical test points for particular computer programs. Design testing processes to thoroughly evaluate all of the reasonably identifiable variations in data, input, and output.
- Carefully identify the source or sources for all errors discovered during the testing process. Note the implications of complex interactions between multiple procedures, routines, or other sections of code on the error identification and corrections process.

- Conduct trial runs of programs and software applications to be sure they will produce the desired information and that the instructions are correct.
- Based on accepted practices in Computer Science, compiles and writes documentation of program development and subsequent revisions, inserting comments in the coded instructions so others can understand the program as well as completing identified documents per MDT standards.
- Consult with managerial and technical personnel to clarify program intent, discuss programming complexities or new methods required, and propose solutions including platforms, languages, interfaces, tools, and methods.
- Perform or direct revision, repair, or expansion of existing computer programs to increase operating efficiency or adapt to new requirements. Carefully evaluate the interdependencies between the program to be modified and any other existing programs, database interfaces, re-usable code modules, department business practices, and user interactions.
- Apply the principles of Computer Science to create workflow charts and other relevant diagrams to detail program flow, logic, input and output requirements, and interfaces.
- Write or contribute to instructions or manuals to guide end users.
- Evaluates user processes, objectives and environments to determine computer system requirements necessary to support efficient and compliant business processes.
- Researches and evaluates new technologies, new system development procedures and policies, user business processes and other issues related to system development, administration, and troubleshooting to maintain a high level of professional and technical expertise.

Supervision

The number of employees supervised is: 0

The position number for each supervised employee is: NA

Physical and Environmental Demands:

Physical

- Ability to sit or stand in one place for a length of time

Mental

- Knowledge of computer programming methodologies, working knowledge of PC's and operating systems, computer program application development standards and processes

Knowledge, Skills and Abilities (Behaviors):

KNOWLEDGE: Knowledge of computer programming methodologies, working knowledge of PC's and operating systems, computer program application development standards and processes.

SKILLS: Reading Comprehension, Active Listening, Writing, Speaking, Critical Thinking. Active Learning, Learning Strategies, Service Orientation, Programming, Troubleshooting, and Judgment.

Minimum Qualifications (Education and Experience):

The required knowledge and skills are typically acquired through a combination of education and experience equivalent to Bachelor's Degree in Computer Science, Web Design and Development or a closely related field such as Information Systems Design or Computer Programming.

This position requires no years of experience.

Alternative qualifications include: Any combination of additional related work experience and education equivalent to the minimum qualifications.

Special Requirements:

☒	Fingerprint check	☐	Valid driver's license
☐	Background check	☐	Other; Describe
035	Union Code		Safety Responsibilities

The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

<u>Signatures</u>

My signature below indicates the statements in the job description are accurate and complete.

_____

Immediate Supervisor   Title   Date

_____

Administrative Review   Title   Date

My signature below indicates that I have read this job description.

_____

Employee   Title   Date

Human Resources Review

 Job Code Title: Software Developer 1.0   Job Code Number: C1D021

My signature below indicates that Human Resources has reviewed this job description for completeness and has made the following determinations:

☐ FLSA Exempt   ☒ FLSA Non-Exempt

☒ Telework Available   ☐ Telework Not Available

☒ Classification Complete   ☐ Organizational Chart attached

Human Resources:

Signature   **Title**   **Date**