



**Orange County Department of Education
Human Resources Department
Classified Management Class Specification**

Applications Architect

**Class Code: 1372
Work Days: 225**

GENERAL PURPOSE

Design and create major aspects of the architecture of an application, including user interface, middleware, and infrastructure; to provide technical leadership to the applications development team; to provide design and code reviews; to ensure that enterprise wide application design standards are maintained; and to collaborate with other stakeholders to ensure architecture is aligned with business requirements.

SUPERVISION RECEIVED AND EXERCISED

1. Receives general supervision from higher level supervisory and management staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES

This position description is intended to describe the general nature and level of work performed by an employee assigned to this position. This description is not an exhaustive list of all duties, responsibilities, knowledge, skills, abilities, and working conditions associated with this position. All requirements are subject to possible modification to reasonably accommodate individuals with a disability.

1. Evaluate OCDE applications development needs and apply technical principles and concepts to develop solutions.
2. Analyze procedures, data and processes to develop logical solutions to complex application programming problems.
3. Recommend, design, and develop complex applications while supporting hardware and software.
4. Perform complex application analysis, design and development independently and with a team.
5. Evaluate, test, debug and implement application updates while supporting new operating systems, hardware and software.
6. Evaluate application development practices and create development standards, policies, and procedures.
7. Create and maintain OCDE application design, development and database standards.
8. Conduct meetings with customers and transform requirements into effective applications.
9. Monitor quality assurance and security procedures for applications.

ESSENTIAL FUNCTION STATEMENTS (cont.):

10. Coordinate application upgrades with related technical staff.
11. Enhance and maintain development operations in support of the team and organizational goals.
12. Perform code reviews, provide guidance and technical leadership to Software Developers, Software Engineers and related technical staff.
13. Provide detailed design and specification documentation for all applications and databases.
14. Provide project management, oversight, leadership, and support. Including project analysis and estimation of time.
15. Represent Information Technology at advisory and user group meetings.
16. Verify stability, interoperability, portability, security, and scalability of application architecture.
17. Install, research, test, and verify proper functioning of software updates.
18. Research new features, software, and tools. Make recommendations and plan integrations or replacements with existing processes or tooling.
19. Keep up-to-date on emerging application design and database architectures, technologies, methodologies, and attend training classes as necessary.
20. Stay current, enhance and maintain application security standards.
21. Demonstrate attendance sufficient to complete the duties of the position as required. This includes nights and weekends for implementations, updates and processes.
22. Perform related duties similar to the above in scope and function as required.

QUALIFICATIONS (KNOWLEDGE, SKILL, ABILITY REQUIREMENTS)

Knowledge of:

1. Principles and practices of application architecture, security and analysis.
2. Methods and techniques used to design, develop, test, and deploy applications.
3. Methods and techniques of evaluating business requirements and developing information systems solutions.
4. Principles and practices of programming languages, development operations, tooling and related technology.
5. Project management and reporting.
6. Methods and techniques of developing complex application technical manuals and documentation
7. Application development best practices
8. C#

Knowledge of (cont.):

9. ASP.NET (WebForms and MVC)
10. Microsoft .NET Framework
11. Visual Studio .NET Development Environments
12. Structured Query Language (SQL)
13. Microsoft SQL Server 2008 and above
14. SQL Server Integration Services (SSIS)
15. Database design and development
16. Team Foundation Server
17. Development operations with continuous integration
18. Development methodologies such as Agile and Scrum
19. JavaScript (and JavaScript frameworks)
20. Hyper Text Markup Language (HTML)
21. Cascading Style Sheets (CSS)
22. Reporting tools such as Crystal Reports or SQL Server Reporting Services (SSRS)
23. OCDE business applications and processes

Ability and Skill to:

1. Lead, assign, and review the work of assigned project staff.
2. Manage multiple projects and requests.
3. Communicate clearly and concisely, both orally and in writing.
4. Interpret and apply federal, state, and local laws, codes, and regulations.
5. Learn core business concepts and understand how changes impact individual and related applications and/or business units.
6. Establish and maintain cooperative working relationships with those contacted in the course of work.

Education, Training and Experience:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

A typical way of obtaining the knowledge, skills, and abilities outlined above is Bachelor's degree from an accredited college or university with major course work in a computer related field and four (4) years of extensive recent experience in the areas of architecture, design, development, testing, debugging and deployment of enterprise-level applications using Microsoft.NET and SQL Server. This experience should be at a leadership capacity and within the last two years. (Recent experience is defined as within the last two (2) years)

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this job, employees are regularly required to bend, stoop, push, pull, grasp, squat, twist, kneel, walk, sit, and reach to access materials or equipment and complete other tasks as assigned; lift and carry up to 25 pounds; and lift from ground, waist, chest, shoulder, and above shoulder level. The position may include occasional need to traverse uneven surfaces.

Employees in this classification are to be able to travel countywide to a variety of sites within a reasonable time frame; read written and electronic materials; communicate clearly in person, on the phone, and via email; and operate all required equipment.

Mental Demands

While performing the duties of this class, employees are regularly required to use written and oral communication skills; read and interpret information; analyze and solve problems; use mathematical reasoning; make observations; learn and apply new information or skills; perform highly detailed work; work on multiple, concurrent tasks with frequent interruptions; work under intensive deadlines and meet productivity requirements; and interact successfully with various groups of people encountered in the course of work.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Employee typically works in an office environment that is fast paced with high pressure.

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