

WEB DEVELOPER

DEFINITION

Participates in systems analysis, design, programming, documentation, and implementation of complex web applications based on user requirements. Modifies and maintains existing web applications.

TYPICAL DUTIES

Prepares or assists in preparation of reports detailing technical feasibility and cost of implementing data processing systems or alternatives.
Serves as primary technical resource for web application design and development.
Designs formats for data input and output, storage and retention of data, and control procedures for computer program specifications.
Assesses client needs, develops working prototypes, and develops maintainable sites.
Analyzes and prepares detailed program specifications and processing requirements.
Prepares flow charts and develops, tests, and corrects programs.
Prepares and updates documentation, including production job control procedures and job narratives.
Writes, edits, and reviews project documentation using various office automation tools.
Complies with project standards and processes related to producing quality software products.
Develops software in Windows, UNIX, or Macintosh platforms.
Develops software using various GUI, client/server, and Internet related programming languages to access DB2 and ORACLE relational databases.
Reviews and makes recommendations on current off-the-shelf web development products.
Mentors other team members on object technology and advanced programming topics.
Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A Web Developer designs or assists in the design of web applications; analyzes software specifications and prepares detailed web program logic flow charts; codes program logic instructions; tests and debugs software applications; detects and corrects software logic deficiencies; produces and maintains documentation pertaining to computer software design, objectives, and operation requirements; and works with other data processing personnel in solving computer programming problems.

A Web Architect directs and manages global architecture activities analyzes existing business practices and develops workflow improvements and conducts feasibility studies for the development and maintenance of web applications. A Web Architect supervises Web Developers assigned to small units or working on portions of a large project.

A Programmer Analyst performs responsible systems analysis and programming on complex projects, assists higher-level programmer analysts on the most complex projects, and may provide work direction and technical assistance to assigned personnel.

SUPERVISION

General direction is received from the Strategic Planning Systems Engineer. Supervision is received from the Web Architect. No supervision is exercised.

CLASS QUALIFICATIONS

Knowledge of:

System Development Life Cycle
Structured programming and design techniques
Modeling, prototyping, simulation, and performance analysis
Internet-enabled and client/server technology
Uses and limitations of information technology hardware, software and services
Block and flow chart diagrams, theory and application, using Change Management and version control
Relational Database Management Systems concepts
Database design
DB2, Oracle
Project Management and Project Tracking
Distributed Systems
PC and/or Macintosh platforms
Windows, Windows NT, Macintosh OS, AIX, Unix
LAN and WAN environments which include: ATM, Frame Relay, Ethernet, FDDI, TCP/IP, DECnet, IPX, and Token Ring
Visual Basic, Visual Studio, Visual Basic.NET, HTML, Java, JavaScript, XML, CGI, Servlets, JSP, JavaBeans, Oracle J2EE, ASP, PHP, SQL server, COM, MTS, CSS, SQL, PL/SQL, InfoMaker
Adobe Suite: Acrobat, PhotoShop, Illustrator, After Effects, GoLive, Director/Shock Wave, Image Ready
Micromedia Suite: Dreamweaver, Fireworks, Flash, Coursebuilder, Frontpage
Blackboard, RealProducer, MySQL, Perl
Image optimization and web animation

Ability to:

Analyze problem situations, define problems, identify relevant factors and relationships, formulate solutions, and recognize the implications of those solutions
Express difficult concepts orally and in writing in a clear and concise manner that is understandable to both data-processing and non-data-processing personnel
Work independently with a minimum of supervision
Think creatively in developing new procedures, methods, or approaches
Interact responsibly with other employees and those in user departments
Analyze problems in machine operations and program logic
Re-engineer work flow for users
Prepare block diagrams and flow charts
Train others
Manage multiple concurrent projects

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized college or university, preferably with a major in Computer Science, Information Systems, or a related field. An advanced degree in Computer Science is preferable. Additional qualifying experience may be substituted on a year-for-year basis for up to two years of the required education.

Experience:

Three years of experience in architecting and developing large, scalable, distributed systems using Microsoft Development Tools and Languages such as Visual Studio, Visual Basic, ASP, HTML, SQL Server, COM and MTS or Java Development Tools and languages such as JSP, Oracle Database, JavaScript, and JavaBeans. Experience must include object-oriented analysis, design, programming, design patterns, and framework. Hands-on experience with .NET or J2EE is preferable.

Special:

A valid California Driver License is required.
Use of an automobile.

SPECIAL NOTES

Employees in this class are subject to call at any hour.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Requirements are representative of the minimum level of knowledge, skill and/or abilities. Management retains the discretion to add or change typical duties of a position at any time.

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SJ