



WEB INTERACTION DESIGNER

532

Jamestown
1607

DEPARTMENT: Financial and Management Services/Information Resources Management

NATURE OF WORK:

Performs advanced technical work developing, designing, and programming interactive features on the James City County Internet and internal employee web portal. Work is performed under the general supervision of the Information Resources Management Director.

ESSENTIAL FUNCTIONS OF JOB:

Designs, builds, and maintains interactive functionality of features on current James City County websites; creates feed-driven pages; continually improves existing sites to provide seamless web-service experience for clients.

Develops databases and database interfaces in conjunction with Information Technology to provide interactive customer transaction support via the web for a wide variety of County services.

Conducts research into viable, cost effective Content Management Systems for James City County web content managers; presents results from research into site-building programs; installs and maintains the technical infrastructure for these systems.

Develops information hierarchies for web content that create flexible structures to accommodate new information.

Manages James City County Intranet and Internet servers; updates, troubleshoots, and maintains associated software.

Conducts frequent research and presents results that lead to software choices integrating James City County Intranet and Internet servers with other servers/databases in James City County.

Works with Information Technology staff to monitor server health and traffic; manages user activities when appropriate; maintains necessary Internet server system backups and necessary file redirections.

Advises and consults with Information Technology staff and other James City County employees to design and implement web-based server applications and content.

Conducts and presents results from research into site-building programs.

Works with Intranet Webmaster to enhance employee portal and make it more interactive.

Shares knowledge and provides training to others as needed

Practices continuous learning through individual study, classroom training, seminars, and conferences.

Performs work safely in accordance with department safety procedures and the County Safety Program. Operates equipment safely and reports any unsafe work condition or practice to Supervisor.

May be required to report to work to serve customers during emergency conditions. May be assigned to report at a different time and location and to perform different duties as necessary.

Performs related work as required.

JOB LOCATION AND EQUIPMENT OPERATED:

Work is performed primarily in an office setting. Operates office equipment such as desk top personal computer and mouse, lap top computer, scanner, fax machine, copy machine, telephone, calculator and hand tools used to repair or install computers.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Data base management system software such as Microsoft Access; MySQL; SQL
- Development environment software such as C; Microsoft Visual Basic; Source code migration software; Tier generator software and practical extraction and reporting language Perl
- Graphical user interface development software such as Basis BBx VisualPRO/5; Graphical user interface GUI development software
- Object or component oriented development software such as C++; Greatis Object Inspector; PowerSoft PowerBuilder; Practical extraction and reporting language Perl
- Program testing software such as debugging software; Low-level debugger software; Source code editor software; Symbolic debugger software
- Web platform development software such as Hypertext markup language HTML; Java server pages JSP; JavaScript; Macromedia ColdFusion; AJAX; PHP
- The principles of good web design
- Electronic forms creation and related software
- Standard English grammar, punctuation, and spellings
- Worldwide web practices and procedures such as e-mail, FTP, etc.
- Graphic design/paint software, such as Photoshop, to include gif and jpg files
- Structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar
- Arithmetic, algebra, geometry, calculus, statistics, and its applications

Skill in:

- Writing computer programs for various purposes
- Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
- Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions
- Understanding the implications of new information for both current and future problem-solving and decision-making
- Understanding written sentences and paragraphs in work related documents
- Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things
- Analyzing needs and product requirements to create a design

- Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times. Technology
- Generating or adapting equipment and technology to serve user need
- Determining causes of operating errors and deciding what to do about it

Ability to:

- Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations)
- Apply general rules to specific problems to produce answers that make sense
- Listen to and understand information and ideas presented through spoken words and sentences
- Read and understand information and ideas presented in writing
- Communicate information and ideas in writing so others will understand
- Combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)
- Communicate information and ideas in speaking so others will understand
- Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem
- Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem

MINIMUM QUALIFICATIONS:

Bachelors Degree in Computer Science or equivalent, extensive experience and skills in creating and managing a web site to include the use of HTML and CSS and/or programming software (PHP, JavaScript, etc.), extensive experience and skills using web graphic programs, and considerable experience with search engine optimization, web metrics and usability testing, and some experience working with servers and networking or any equivalent combination of the acceptable education and experience providing sufficient knowledge, abilities, and skills.

NECESSARY SPECIAL QUALIFICATIONS

Requires the ability to work in a technology environment based on but not limited to Microsoft products; may include other products such as HTML, PHP, Java, CSS, XML, DHTML, JavaScript, Perl, VB.Net, MySQL, SQL, and Microsoft SQL.

Date: June 2007

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IDENTIFICATION OF GENERAL APTITUDES AND PHYSICAL REQUIREMENTS

Position Title: Web Interaction Designer

Position Number: 532

Department: FMS

Division: IRM

The Americans with Disabilities Act requires that we identify the general aptitudes and physical requirements needed to perform the job listed above. Individuals who have the position must be able to perform all essential job functions unaided or with reasonable accommodation.

I. *Mental Abilities:* General learning ability. The ability to “catch on” or understand instructions and underlying principles.

- Ability to reason and make judgments
- Ability to understand and follow oral instruction
- Ability to understand and follow written instruction
- Ability to guide and/or give instructions
- Ability to make decisions in accordance with established procedures and policies
- Not essential to job function

II. *Verbal Abilities:* Ability to understand meanings of words and ideas associated with them and to use them effectively. To comprehend language, to understand relationships between words, and to understand meanings of whole sentences and paragraphs. To present information or ideas clearly.

1. Speaking/Talking:

- Answer telephone, radio or switchboard
- Communicating with County officials
- Communicating with general public
- Communicating with vendors
- Communicating with supervisors and/or with other employees
- Communicating with other _____
- Not essential to job functions

2. Hearing/Listening:

- Ability to distinguish between different tones
- For communication with County officials, public, vendors, supervisors and/or other employees
- Not essential to job function.

3. Reading: (ability to read and understand text)

- Essential to job function
- Not essential to job function

III. Numerical: Ability to perform arithmetic operations quickly and accurately.

- Ability to mentally perform accurate two digit calculations
- Ability to perform accurate calculations aided by a calculator, adding machine or measurement device
- Not essential to job function

IV. Spatial Abilities: Ability to comprehend forms in space and understand relationships of plane and solid objects. May be used in such tasks as blue print reading and in solving geometry problems. Frequently described as the ability to “visualize” objects of two or three dimensions, or to think visually of geometric forms.

- Essential function
- Not essential function

V. Motor Coordination: Ability to coordinate eyes and hands or fingers rapidly and accurately in making precise movements with speed. Ability to make a movement response accurately and quickly.

1. Manual Dexterity: Ability to move the hands easily and skillfully. To work with the hands in placing and turning motions.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use telephone | <input checked="" type="checkbox"/> Manipulate computer keyboard and mouse |
| <input type="checkbox"/> Use switchboard | <input type="checkbox"/> Use postage machine |
| <input type="checkbox"/> Use radio/console | <input type="checkbox"/> Use hand tools |
| <input checked="" type="checkbox"/> Use a calculator | <input type="checkbox"/> Use power tools |
| <input checked="" type="checkbox"/> Use a copy machine | <input checked="" type="checkbox"/> Other: <u>small tools used w/computers</u> |
| <input checked="" type="checkbox"/> Use a fax machine | <input type="checkbox"/> Not essential to job function |

2. Finger Dexterity: Ability to move the fingers and manipulate small objects with the fingers rapidly or accurately. For example: electrical wiring.

- Essential to job function
- Not essential to job function

Explain: _____

VI. Physical Demands:

1. Strength: The quality, state or property of being strong. The power to withstand strain, force, or stress.

Please check (✓) in appropriate boxes below.

	Ability to manipulate materials and/or equipment (lbs)						Frequency of Manipulation		
	5-	5-10	10-15	15-25	25-50	50+	Occasionally	Frequently	Continuously
Lift									
Push/Pull									
Hold/Carry									

Manipulation done from: ground to waist waist level waist to shoulder above shoulder
(Check all that apply)

Not essential to job function: Lift Push/Pull Hold/Carry (Check all that apply)

2. Climbing: To move up or mount by using the hands or feet.

Ladders

Stairways

Steps

- | | | |
|---|---|---|
| <input type="checkbox"/> Step stool | <input type="checkbox"/> 1 flight | <input type="checkbox"/> 1-2 |
| <input type="checkbox"/> 8' to 10' step ladder | <input type="checkbox"/> 2 flights | <input type="checkbox"/> 2-3 |
| <input type="checkbox"/> Extension ladder | <input type="checkbox"/> 3 or more flights | <input type="checkbox"/> 3-4 |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> Other _____ | <input type="checkbox"/> Other _____ |
| <input checked="" type="checkbox"/> Not essential to job function | <input checked="" type="checkbox"/> Not essential to job function | <input checked="" type="checkbox"/> Not essential to job function |

3. Ability to Stand, Sit, Walk, and Run:

Please check (✓) in appropriate boxes below.

	Duration (hours/day)						Occasionally	Frequently	Continuously
	0-1	1-3	3-5	5-7	7-9	9+			
Stand									
Sit			✓				✓		
Walk									
Run									

If walking or running, over what type of terrain? flat rough both

Not essential to job function: Stand Sit Walk Run (Check all that apply)

4. Stooping, Kneeling, Crouching, and /or Crawling:

To bend forward or down from the middle of the waist or the middle of the back, to bend downwards, to lower oneself and/or to move freely on hands and knees.

Daily Amounts

- 0-5x
 5-20x
 20-50x
 50+x
 Other Filing, connecting computer parts _____ Not essential to job function

5. Reaching, Handling, Fingering, and/or Feeling:

To stretch out, extend, or put forth a bodily part. To touch or grasp something, by extending or stretching. To touch, lift, hold or operate with the hands.

Daily Amounts

- 0-5x
 5-20x
 20-50x
 50+x
 Other _____ Not essential to job function

6. Seeing: To perceive or comprehend by the sense of sight.

Essential to job function: These characteristics are necessary (Check all that apply)

- Peripheral vision
- Night vision
- Focus (distinctness or clarity)
- Color perception (discriminate between colors)
- Depth perception (determine distance relationship between objects)

VII. Driving: The ability to transfer or convey in a vehicle.

Transmission	Standard	Automatic	Multi-Gears
Car	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Van	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small Truck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medium Truck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Large Truck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Truck w/Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Bus Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not essential to job function	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other (list) _____			

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