

DACUM Research Chart for IT Application Developer

DACUM Panel

Michael Ayers
Senior Developer

Philip Brown
Senior Developer

Deanne L. Gretz-Stewart
Information Technical Specialist

Bryan Kuhn
Information Tech. Application Lead

Wilmer Lawig
IT Application Developer

Nathan Mackey
Consultant, IT Applications
Developer

Dennis Maeder
IT Technical Lead

Robert Matesick
IT Application Developer

Michael Ongalibang
IT Application Developer

Brian L. Webb
Sr. Developer, IT Applications

Observers

Jamie Diamond
Consultant, System Eng./Admin.

Catherine Oehl
IT Consultant, System Analysis

DACUM Facilitators

Tom Burek
Carmen Ramos-Rainge
Dawn Shepard
John Moser, Team Leader

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COLLEGE OF EDUCATION
THE OHIO STATE UNIVERSITY
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Duties		← Tasks				
A	Plan for System Changes	A-1 Participate in project kick-off	A-2 Determine project scope/objectives	A-3 Gather business requirements	A-4 Analyze business requirements	A-5 Create project estimates (e.g., time, cost, hardware)
		A-11 Participate in architectural assessment	A-12 Revise project estimates	A-13 Document requirement-based test cases		
B	Develop Application Code	B-1 Review design specs	B-2 Maintain individual development environment	B-3 Acquire code	B-4 Analyze existing code	B-5 Write application code (e.g., syntax, comments)
		B-11 Optimize code	B-12 Document code changes (e.g., flow charts, test cases)	B-13 Review code	B-14 Integrate coding changes, if	B-15 Release code (e.g., check-in, promote)
C	Test Single Systems (SS)	C-1 Prepare SS test environment	C-2 Write SS test plan	C-3 Support SS test	C-4 Execute SS test plan	C-5 Review SS test results
D	Test Multiple Systems (MS)	D-1 Prepare MS test plan	D-2 Write MS test plan	D-3 Consult on MS test plan	D-4 Coordinate with other systems	D-5 Support MS testing
		D-13 Promote approved MS code				
E	Test Parallel Systems (PS)	E-1 Prepare PS test environment	E-2 Mine test data	E-3 Execute PS test plan	E-4 Compare results to production	E-5 Analyze PS defects/differences
F	Support Applications Systems	F-1 Monitor systems processes	F-2 Process incidents	F-3 Schedule maintenance (e.g., powerdown, upgrade, disaster recovery)		F-4 Process external requests (e.g., ad hoc reports, walk-up
		F-12 Participate in post mortem reviews				
G	Develop Professional Skills	G-1 Review existing documentation	G-2 Participate in training (e.g., technical, soft skills)		G-3 Maintain professional certifications	G-4 Provide cross-training
H	Perform Administrative Tasks	H-1 Manage Lotus notes	H-2 Participate in non-project meetings	H-3 Track NIKU time	H-4 Manage ePMP	H-5 Manage system authentications & authorizations

A-6 Analyze system impact	A-7 Identify alternative solutions	A-8 Determine system requirements	A-9 Write design specs	A-10 Participate in design review	Acronyms ePMP Employee Performance Management Plan TOPS Time Off Planning System SS Single System MS Multiple System PS Parallel System VPN Virtual Private Network	
B-6 Compile code	B-7 Write test code/stub	B-8 Debug code	B-9 Create unit test plan	B-10 Execute unit test plan		
C-6 Analyze SS defects	C-7 Report SS test results	C-8 Maintain SS test environment	C-9 Manage SS defects	C-10 Participate in SS load test	C-11 Promote approved SS code	
D-6 Execute MS test plan	D-7 Review MS test results	D-8 Analyze MS defects	D-9 Report MS test results	D-10 Maintain MS test environment	D-11 Manage MS defects	D-12 Participate in MS load test
E-6 Report PS test results	E-7 Maintain PS test environment	E-8 Manage PS defects	E-9 Participate in PS load test	E-10 Promote approved PS code		
F-5 Provide business consulting	F-6 Provide technical consulting	F-7 Analyze system performance	F-8 Track system performance	F-9 Participate in disaster recovery efforts	F-10 Support release implementation/issues	F-11 Maintain on-call status
G-5 Obtain cross training	G-6 Perform technical research (e.g., online, books, tools)		G-7 Network with peers (e.g., conferences, user groups, colleagues)			
H-6 Complete surveys (e.g., 360 feedback, employee engagement)		H-7 Manage absences (e.g., TOPS, department calendar)	H-8 Provide status reports	H-9 Maintain on-call schedule	H-10 Prepare expense reimbursement request (e.g., travel, tuition, department)	

Duties	← Tasks →				
H Perform Administrative Tasks – cont.	H-11 Schedule meetings	H-12 Attend corporate presentations	H-13 Manage personal consumption reductions	H-14 Interview job candidates	H-15 Maintain corporate assigned hardware
	H-16 Complete corporate compliance requirements (e.g., security, privacy, ethics)				

General Knowledge and Skills

Time management skills
 Prioritizing skills
 Basic computer knowledge/keyboarding skills
 Reading skills
 Communication skills (verbal, writing, listening)
 Problem solving skills
 Interpersonal skills
 Stress management skills
 Debugging knowledge
 Multi-tasking skills
 General programming knowledge
 Knowledge of programming languages
 Knowledge of corporate culture
 Negotiating skills
 Interviewing skills
 Leadership skills
 Knowledge of development life cycle
 General business knowledge
 Organization skills
 Investigation skills
 Customer relations skills
 Analytical skills
 General math skills

Worker Behaviors

Self motivated
 Quick learner
 Sense of humor
 Diligent
 Flexible
 Accountable
 Integrity
 Team player
 Perseverance
 Detail oriented
 Patient
 Proud
 Relentless
 Confident
 Professional
 Political
 Tactful
 Dependable

Proactive
 Resourceful
 Cooperative
 Responsive
 Assertive
 Creative
 Honest
 Customer oriented
 Adaptable
 Results oriented
 Visionary
 Sociable
 Trusting
 Respectful
 Skeptical

Tools, Equipment, Supplies & Materials

Computer	Compilers	Electronic storage devices
Phone (land, cell)	Editors	Operating systems
PDA – Personal Digital Assistant	Internet (including access through VPN)	Reference manuals
Printer	Pager	Automated testing software
Monitor	Software schedulers (Cron, Maestro, CA7, Zeke)	Monitoring software (Mercury, Topaz)
Fax	Administrative software (Microsoft Office, Lotus)	Database managers
Copier	Data manipulations tools/utilities	CRM (vendor specific) tools
Desk/chair	Debug tools	Defect tracking software
E-mail	Profiling tool	Terminal emulators
Whiteboard	IDE software – Integrated Development Environment	Communication software
CD's – Compact Disc	Version control software (Harvest, Changeman)	
Shredder	Plotters	
General office supplies		
ID badges		
Server		

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Future Trends and Concerns

Outsourcing of work
Transformation of work
Ability to keep pace with changing technology
No gain processes/too many processes
Increased telecommuting
Increased workloads
Budget constraints
Decline in stock market performance
Company performance within the industry
Changing workforce demographics (retirements, etc.)
Rushing projects through/quality loss
Variable labor vs. full-time employees
Funding by project rather than team
Increasing cost of employee benefits/decline in coverages
Better integration of web services
Increasing employee turnover/loss of expertise
Where decision making occurs
Unsupported applications within businesses (hiring their own developers)
Sarbanes-Oxley requirements
Managerial inconsistencies
Changing business needs
Lack of managerial involvement/tasks falling to associates
Lack of effective system ownership
Switching to new/unproven technologies
Lack of accountability/teamwork among departments
Good 'ol boy network