

COMPETENCY-BASED OCCUPATIONAL FRAMEWORK FOR REGISTERED APPRENTICESHIP

Developer (Software and Applications)

ONET Code: [15-1132.00](#)

RAPIDS Code: [1129CB](#)

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Work Process Schedule

WORK PROCESS SCHEDULE¹	ONET Code: 15-1132.00
Developer (Software and Applications)	RAPIDS Code: 1129CB

JOB TITLE:		
LEVEL:	SPECIALIZATION:	
STACKABLE PROGRAM ___yes ___no		
Company Contact: Name		
Address:	Phone	Email
Apprenticeship Type: ___Competency-Based ___Time-Based ___Hybrid	Prerequisites	

JOB FUNCTION 1: Participates in and supports the creation of product, platform, and/or software development life cycles by assisting Principal Developer and team with initial determination of applicable specifications, requirements, systems and concepts to produce the desired output

Competencies	Core or Optional	RTI	OJT
A. Participates in the implementation of development life cycles and specifications, including supporting of mapping out work plans, under supervision	Core		
B. Supports the creation of tools and languages needed per output in the work plan, under supervision	Core		
C. Participates in supporting Principal Developer to establish overall project goals with senior and other key team members primarily, as well as any external project members, as applicable	Optional		
D. Supports project team members with team consultations that determine end product's feasibility in economic, operational, and technical areas	Core		
E. Assists with offering and applying technical and cost-effective approaches for mitigating risks at the end result, under direction from Principal Developer; and communicates any potential questions or concerns based on preliminary assessments	Optional		

¹ See full framework for certifications and occupational pathways, cross-cutting competencies, and detailed job functions.

JOB FUNCTION 2: Supports the Principal Developer and team with mapping out requirement specifications, communicates with other key team members			
Competencies	Core or Optional	OJT	RTI
A. Coordinates with the Project Manager to communicate desired requirements and objectives clearly to other team members such as the UX team, QA testers, etc.	Core		
B. Ensures proper use of desired Software Requirement Specification (SRS), and clearly defines and documents the product requirements, under supervision	Core		
C. Supports the team/ QA testers in preliminary quality assurance requirements assessments & potential risk assessments, under supervision	Core		
JOB FUNCTION 3: Participates in and supports designing software or platform with the appropriate team			
Competencies	Core or Optional	OJT	RTI
A. Supports the UX team, or appropriate team members, with software design and structure of the software as it relates to implementation, its data models, interfaces between system components, and if applicable, the algorithms used, under supervision	Core		
B. Participates in the identification and development of the best prototype suited for the project, if any; supports identification of appropriate languages, operating systems, and monitoring methods applicable for the final program	Optional		
JOB FUNCTION 4: Supports the development and assembly of the software, platform, or product			
Competencies	Core or Optional	OJT	RTI
A. Applies best practices to the company-specific source code management processes	Core		
B. Continues to support identifying program and project changes or newfound needs as the software or system is formed, apply such project changes or needs effectively under direction from Principal Developer or applicable team members	Core		
C. Participates in building the program using the appropriate languages and/or applicable development methods	Core		

JOB FUNCTION 5: Supports testing and debugging; participates in integration and deployment

Competencies	Core or Optional	OJT	RTI
A. Participates in recognizing concepts to determine CI/CD configuration, supports building and applying CI/ CD integrations for manual and/or automated functionalities	Core		
B. Supports application of prototyping methods, if applicable	Core		
C. Supports close monitoring to identify issues and reports them in a clear and concise way to senior team members	Core		
D. After issue is reported, clearly tracks and works with team to fix, and re-test until quality standards are met	Core		
E. Makes extensive, detailed notes when any changes are made and/or to clarify why a function must remain the same in a clear way for other team members	Core		
F. Participates in curating implementation preparation documents and plans	Optional		
G. Supports integration and test phase, properly notes progress relevant to project success	Core		
H. Participates in ongoing monitoring of platform, software, or application under project requirements, and supports with providing maintenance, troubleshooting assistance, and applies problem solving capabilities as applicable, under supervision	Core		