



Australian Government

ICTPRG419 Analyse software requirements

Release: 1

ICTPRG419 Analyse software requirements

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to research and analyse client requirements, produce a range of options, and create a software-requirements document.

It applies to individuals in a range of work environments who are required to perform an analysis role in formulating software requirements. They may work as database or computer developers, business analysts, or project managers.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Programming and software development

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Gather and confirm client requirements	1.1 Confirm the requirements, and the scope, of the project with the client 1.2 Gather information regarding requirements via sources of information and business processes 1.3 Analyse client requirements, to determine the project scope and the problem context or opportunity faced by the business 1.4 Document the client requirements, project's scope, related problems, and sources of information
2. Analyse the functional and related	2.1 Map business processes using modelling tools such as unified

ELEMENT	PERFORMANCE CRITERIA
non-functional requirements	modelling language (UML) 2.2 Determine the opportunities for business process efficiencies 2.3 Document functional, and related non-functional, processes
3. Analyse the feasibility of a project	3.1 Analyse the technical feasibility of the project 3.2 Analyse the operational feasibility of the project 3.3 Determine the budget and schedule feasibility of the project 3.4 Examine how the project will fit within the organisation
4. Develop high-level system solutions	4.1 Develop and document feasible solutions for client requirements 4.2 Explore and document the feasibility of each solution 4.3 Examine alternatives against project constraints 4.4 Document assumptions, dependencies and required resources 4.5 Produce a project risk analysis 4.6 Document future requirements
5. Prepare and publish the software-requirements documentation	5.1 Develop the software-requirements document 5.2 Submit the software-requirements report to the appropriate person for project approval

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3	Interprets, and critically analyses, and applies the appropriate strategies to construct meaning from complex texts, when gathering and analysing information to determine client requirements, and the project's scope
Writing	1.4, 2.3, 4.1, 4.4, 4.6, 5.1	Communicates complex relationships between ideas and information, matching the style of writing to the purpose and audience, and displays a knowledge of structure and layout, employing a broad vocabulary, grammatical structure, and the conventions appropriate

		to text
Oral communication	1.1	Demonstrates flexibility in spoken texts by choosing the appropriate structures and strategies to extract main ideas from oral texts
Numeracy	3.3	Selects from, and applies, an expanding range of mathematical and problem-solving strategies, when determining the project budget and schedule feasibility
Navigate the world of work	5.2	Recognises and responds to both explicit, and implicit, protocols when submitting the report to the appropriate person for approval
Get the work done	1.3, 1.4, 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 4.2, 4.3, 4.5	- Sequences and schedules complex activities, monitors implementation, and manages relevant communication - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information, and identifying, and evaluating options against the agreed criteria - Uses analytical processes to decide on a course of action, establishing the criteria for deciding between options - Uses a systematic process to identify possible solutions to a difficult problem - Uses familiar digital systems and tools to access, organise, analyse, and display information relevant to the software requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTPRG419 Analyse software requirements	ICAPRG419A Analyse software requirements	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTPRG419 Analyse software requirements

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- Analyse client requirements to create a software requirements document, including:
 - gathering, confirming and documenting client requirements
 - analysing functional and related non-functional requirements, and project feasibility
 - developing high-level system solutions
 - submitting documents for approval.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the client business domain
- describe content features, such as clarity and readability
- summarise the system's current functions
- explain document design and usability
- explain the functions and features, of templates and style guides
- summarise instructional design principles
- describe the role of stakeholders and the degree of stakeholder involvement
- explain two or more current industry systems development methodologies.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the programming and software development industry, and include access to:

- documentation regarding client and functionality requirements
- word processing software
- modelling software currently used in industry.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>