



**Australian Government**

# **ICTPRG535 Build advanced user interfaces**

**Release: 1**

# ICTPRG535 Build advanced user interfaces

## Modification History

| Release   | Comments                                                                                                     |
|-----------|--------------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICT Information and Communications Technology Training Package Version 6.0. |

## Application

This unit describes the skills and knowledge required to design, build and test an advanced user interface (UI), including interaction techniques, rich controls, improved client-side validation, customisation and personalisation, graphics and multimedia.

It applies to individuals who work as user-interface designers and software developers and are responsible for managing and implementing complex UI design.

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. Plan UI design                                | 1.1 Determine client technology, development tools, and platforms according to UI solution<br>1.2 Review conceptual design with required personnel and seek and respond to feedback<br>1.3 Design and document UI layout and structure according to UI requirements |
| 2. Implement interaction techniques              | 2.1 Apply interaction design patterns according to UI design plan<br>2.2 Implement client-side validation according to UI requirements<br>2.3 Demonstrate alignment of implement interactions against UI design plan                                                |
| 3. Build customisable and                        | 3.1 Build customisable UI and allow users to select their own                                                                                                                                                                                                       |

| ELEMENT                              | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                       |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| personalised UI                      | customised version of the underlying application<br>3.2 Build personalised UI according to UI design plan task requirements<br>3.3 Demonstrate alignment of personalised UI to UI design plan<br>3.4 Implement required updates and confirm improvement to user experience |
| 4. Implement graphics and multimedia | 4.1 Create and display the graphics according to UI requirements<br>4.2 Add required multimedia content to the application<br>4.3 Demonstrate alignment of implementing graphics against UI design plan                                                                    |

## Foundation Skills

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

| SKILL                   | DESCRIPTION                                                                                                                                                                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy                | <ul style="list-style-type: none"><li>Selects from, and applies, an expanding range of mathematical and problem-solving strategies in a range of contexts, when designing layout and structure</li></ul>                                                                           |
| Reading                 | <ul style="list-style-type: none"><li>Interprets, and critically analyses, complex texts and applies the required strategies to construct meaning from complex texts, when reading and interpreting technical information, and determining suitable technology and tools</li></ul> |
| Writing                 | <ul style="list-style-type: none"><li>Prepares documentation, expressing ideas and exploring complex issues using relevant industry language</li><li>Writes and edits computer code, and technical data using correct syntax and logical flow</li></ul>                            |
| Planning and organising | <ul style="list-style-type: none"><li>Uses nuanced knowledge of context to demonstrate knowledge of anomalies and subtle deviations to normal expectations, focusing attention and remedying problems as they arise</li></ul>                                                      |
| Problem solving         | <ul style="list-style-type: none"><li>Understands the key principles and concepts underpinning the design, and operation, of digital systems and tools, and applies these when troubleshooting existing technology</li></ul>                                                       |
| Technology              | <ul style="list-style-type: none"><li>Seeks to understand the potential of new technology, in the context of implementing interaction, and customisable features, and graphics and multimedia, into the UI</li></ul>                                                               |

## Unit Mapping Information

Supersedes and is equivalent to ICTPRG505 Build advanced user interface.

## Links

Companion Volume Implementation Guide is found on VETNet -

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