

Specification of Competency Standards
for the Information & Communications Technology Industry
Unit of Competency

Functional Area - Operations Management

Title	Perform human computer interaction (HCI) design
Code	107923L4
Description	This unit of competency applies to all Digital Media Technology (DMT) practitioners who are involved in game design. Human Computer Interaction (HCI) is the study, design, construction and implementation of human-centric interaction with computer systems. It includes elements such as designing screens and menus, studies reasoning behind building specific functionality, etc. This UoC is concerned with the knowledge and activities involved in HCI design in the capacity of a game designer.
Level	4
Credit	3
Competency	<p>Performance Requirements</p> <p>1. Knowledge for HCI design</p> <ul style="list-style-type: none"> • Understand the technical requirements for accommodating and operating the game application • Understand the details of the game mechanism • Understand HCI as processes for the following activities: <ul style="list-style-type: none"> ○ Goal-directed problem solving ○ Creativity ○ Decision making ○ Planning for development, etc. • Possess proficient knowledge in designing user-friendly interfaces for game applications • Possess the ability to present relationship of interfaces by flow charting • Possess the ability to implement HCI user design features and usability techniques for developing interactive games <p>2. Perform HCI design</p> <ul style="list-style-type: none"> • Design the interface between players and the game, which may include elements such as: <ul style="list-style-type: none"> ○ Psychology ○ Ergonomics ○ Engineering ○ Design ○ Semiotics ○ Ethnography ○ Language, etc. • Design the inter-relationship between interfaces • Design the components of an interface and ensure that they are kept simple, descriptive and fast, such as: <ul style="list-style-type: none"> ○ Opening menu ○ Configuration screens ○ In-game, onscreen buttons, etc. • Design what is visible for each interface to the player and also the relationship between interfaces, with the help and depiction of flowcharts • Carry out basic activities for the above HCI design elements, including: <ul style="list-style-type: none"> ○ Identify needs and establish requirements ○ Develop alternative designs and suggest ideas to fulfill the requirements ○ Build interactive versions of the designs ○ Evaluate designs and their acceptability, etc.

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	<ul style="list-style-type: none">• Conduct integration and testing for the final design products and ensure they meet the prescribed usability and other criteria <p>3. Exhibit professionalism</p> <ul style="list-style-type: none">• Always perform the HCI design and related activities with full dedication and effort, and in an efficient and effective manner• Always ensure the final design products can satisfy specific user and organisational requirements
Assessment Criteria	<p>The integrated outcome requirements of this UoC are the abilities to:</p> <ul style="list-style-type: none">• Complete the HCI design tasks for the game application in concern on time; and• Complete the HCI designing that can satisfy the requirements of users, within the prescribed budget and constraints of the organisation
Remark	