Instrument-specific marking guide (IA2): Project — digital solution (30%)

Criterion: Retrieving and comprehending

Assessment objectives

1. recognise and describe programming elements, user interface components and useability principles
2. symbolise and explain programming information and ideas, data structures and interrelationships between user experiences and data of the digital prototype

The student work has the following characteristics:	Marks
• accurate and discriminating recognition and discerning description of relevant programming elements, user-interface components and useability principles • adept symbolisation and discerning explanation of algorithms and relevant programming information and ideas, data structures and interrelationships between user experiences and data of the digital prototype.	7–8
• accurate recognition and effective description of relevant programming elements, user-interface components and useability principles • methodical symbolisation and effective explanation of algorithms and relevant programming information and ideas, data structures and interrelationships between user experiences and data of the digital prototype.	5–6
• appropriate recognition and description of some programming elements, user-interface components and useability principles • competent symbolisation and appropriate explanation of algorithms and some information and ideas, and interrelationships between user experiences and data of the digital prototype.	3–4
• variable recognition and superficial description of programming elements, user-interface components or useability principles • variable symbolisation and superficial explanation of information, ideas or interrelationships.	1–2
• does not satisfy any of the descriptors above.	0

Criterion: Analysing

Assessment objectives

3. analyse the problem and information related to the technical proposal for a low-fidelity prototype digital solution
4. determine user interface, data, programmed and solution requirements of the digital solution and prescribed and self-determined criteria

The student work has the following characteristics:	Marks
• insightful analysis of the problem and relevant contextual information to identify the essential elements and features of user interface, data and programmed components and their relationships to the structure of the low-fidelity prototype digital solution • astute determination of the user interface, data, programmed and solution requirements of the digital solution and essential prescribed and self-determined criteria.	7–8
• considered analysis of the problem and relevant contextual information to identify the relevant elements and features of user interface, data and programmed components and their relationships to the structure of the low-fidelity prototype digital solution • logical determination of the user interface, data, programmed and solution requirements of the digital solution and effective prescribed and self-determined criteria.	5–6
• appropriate analysis of the problem and contextual information to identify some elements and features of user interface, data and programmed components and their relationships to the structure of the low-fidelity prototype digital solution • reasonable determination of the user interface, data, programmed and solution requirements of the digital solution and some prescribed and self-determined criteria.	3–4
• superficial analysis of the problem or partial information to identify aspects of elements or features of the low-fidelity prototype digital solution • vague determination of some solution requirements of the digital solution and some criteria.	1–2
• does not satisfy any of the descriptors above.	0

Criterion: Synthesising and evaluating

Assessment objectives

5. synthesise information and ideas to determine data elements, user interface and programmed components for a digital solution
6. generate user interfaces and programmed components of the digital solution
7. evaluate impacts, components and the digital solution against prescribed and self-determined criteria to make refinements and justified recommendations

The student work has the following characteristics:	Marks
• coherent and logical synthesis of relevant information and ideas to determine data elements, user interface and programmed components for a digital solution • purposeful generation of efficient user interface and programmed components of the digital solution • critical evaluation of impacts, user experience and coded components and the digital solution against essential prescribed and self-determined criteria to make discerning refinements and astute recommendations justified by data.	9–10
• logical synthesis of relevant information and ideas to determine data elements, user interface and programmed components for a digital solution • effective generation of user interface and programmed components of the digital solution • reasoned evaluation of impacts, user experience and coded components and the digital solution against effective prescribed and self-determined criteria to make effective refinements and considered recommendations justified by data.	7–8
• simple synthesis of information and ideas to determine data elements, user interface and programmed components for a digital solution • adequate g eneration of user interface and programmed components of the digital solution • feasible evaluation of impacts, user experience and coded components and the digital solution against some prescribed and self-determined criteria to make adequate refinements and fundamental recommendations justified by data.	5–6
• rudimentary synthesis of partial information or ideas to determine data elements, user interface or programmed components • partial generation of user interface and programmed components of the digital solution • superficial evaluation of impacts, user experience components or the solution against some criteria.	3–4
• unclear combination of information, ideas or solution components • identification of a change to an idea or a solution.	1–2
• does not satisfy any of the descriptors above.	0

Criterion: Communicating

Assessment objectives

8. make decisions about and use mode-appropriate features, written language and conventions for a technical audience.

The student work has the following characteristics:	Marks
• discerning decision-making about, and fluent use of – written and visual features to communicate about a solution – language for a technical audience – grammatically accurate language structures – referencing and project conventions.	3–4
• variable decision-making about, and inconsistent use of – written and visual features – suitable language – grammar and language structures – referencing or project conventions.	1–2
• does not satisfy any of the descriptors above.	0