

## 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
<ul style="list-style-type: none"> <li>• <u>accurate</u> and <u>discriminating</u> recognition and <u>discerning</u> description of <u>relevant</u> programming elements, user-interface components and useability principles</li> <li>• <u>adept</u> 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.</li> </ul>	7–8
<ul style="list-style-type: none"> <li>• accurate recognition and <u>effective</u> description of relevant programming elements, user-interface components and useability principles</li> <li>• <u>methodical</u> 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.</li> </ul>	5–6
<ul style="list-style-type: none"> <li>• <u>appropriate</u> recognition and description of some programming elements, user-interface components and useability principles</li> <li>• <u>competent</u> symbolisation and appropriate explanation of algorithms and some information and ideas, and interrelationships between user experiences and data of the digital prototype.</li> </ul>	3–4
<ul style="list-style-type: none"> <li>• <u>variable</u> recognition and <u>superficial</u> description of programming elements, user-interface components or useability principles</li> <li>• variable symbolisation and superficial explanation of information, ideas or interrelationships.</li> </ul>	1–2
<ul style="list-style-type: none"> <li>• does not satisfy any of the descriptors above.</li> </ul>	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
<ul style="list-style-type: none"> <li>• <u>insightful</u> analysis of the problem and <u>relevant</u> 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</li> <li>• <u>astute</u> determination of the user interface, data, programmed and solution requirements of the digital solution and <u>essential</u> prescribed and self-determined criteria.</li> </ul>	7–8
<ul style="list-style-type: none"> <li>• <u>considered</u> 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</li> <li>• <u>logical</u> determination of the user interface, data, programmed and solution requirements of the digital solution and <u>effective</u> prescribed and self-determined criteria.</li> </ul>	5–6
<ul style="list-style-type: none"> <li>• <u>appropriate</u> 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</li> <li>• <u>reasonable</u> determination of the user interface, data, programmed and solution requirements of the digital solution and some prescribed and self-determined criteria.</li> </ul>	3–4
<ul style="list-style-type: none"> <li>• <u>superficial</u> analysis of the problem or <u>partial</u> information to identify <u>aspects</u> of elements or features of the low-fidelity prototype digital solution</li> <li>• <u>vague</u> determination of some solution requirements of the digital solution and some criteria.</li> </ul>	1–2
<ul style="list-style-type: none"> <li>• does not satisfy any of the descriptors above.</li> </ul>	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
<ul style="list-style-type: none"> <li>• <u>coherent</u> and <u>logical</u> synthesis of <u>relevant</u> information and ideas to determine data elements, user interface and programmed components for a digital solution</li> <li>• <u>purposeful</u> generation of <u>efficient</u> user interface and programmed components of the digital solution</li> <li>• <u>critical</u> evaluation of impacts, user experience and coded components and the digital solution against essential prescribed and self-determined criteria to make <u>discerning</u> refinements and astute recommendations justified by data.</li> </ul>	9–10
<ul style="list-style-type: none"> <li>• logical synthesis of relevant information and ideas to determine data elements, user interface and programmed components for a digital solution</li> <li>• <u>effective</u> generation of user interface and programmed components of the digital solution</li> <li>• <u>reasoned</u> 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.</li> </ul>	7–8
<ul style="list-style-type: none"> <li>• <u>simple</u> synthesis of information and ideas to determine data elements, user interface and programmed components for a digital solution</li> <li>• adequate generation of user interface and programmed components of the digital solution</li> <li>• <u>feasible</u> evaluation of impacts, user experience and coded components and the digital solution against some prescribed and self-determined criteria to make <u>adequate</u> refinements and <u>fundamental</u> recommendations justified by data.</li> </ul>	5–6
<ul style="list-style-type: none"> <li>• <u>rudimentary</u> synthesis of <u>partial</u> information or ideas to determine data elements, user interface or programmed components</li> <li>• partial generation of user interface and programmed components of the digital solution</li> <li>• <u>superficial</u> evaluation of impacts, user experience components or the solution against some criteria.</li> </ul>	3–4
<ul style="list-style-type: none"> <li>• <u>unclear</u> combination of information, ideas or solution components</li> <li>• identification of a change to an idea or a solution.</li> </ul>	1–2
<ul style="list-style-type: none"> <li>• does not satisfy any of the descriptors above.</li> </ul>	0

## Criterion: Communicating

### Assessment objective

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
<ul style="list-style-type: none"> <li>• <u>discerning</u> decision-making about, and <u>fluent</u> use of               <ul style="list-style-type: none"> <li>– written and visual features to communicate about a solution</li> <li>– language for a technical audience</li> <li>– grammatically accurate language structures</li> <li>– referencing and project conventions.</li> </ul> </li> </ul>	3–4
<ul style="list-style-type: none"> <li>• <u>variable</u> decision-making about, and <u>inconsistent</u> use of               <ul style="list-style-type: none"> <li>– written and visual features</li> <li>– suitable language</li> <li>– grammar and language structures</li> <li>– referencing or project conventions.</li> </ul> </li> </ul>	1–2
<ul style="list-style-type: none"> <li>• does not satisfy any of the descriptors above.</li> </ul>	0