

Design 2019 v1.2

IA2: Sample assessment instrument

Project (35%)

This sample has been compiled by the QCAA to assist and support teachers in planning and developing assessment instruments for individual school settings.

This assessment instrument has been designed to be completed over a duration of eight weeks.

Student name

Student number

Teacher

Issued

Due date

Marking summary

Criterion	Marks allocated	Provisional marks
Exploring	10	
Devising	7	
Synthesising and evaluating	10	
Representing and communicating	8	
Overall	35	

Conditions

Technique	Project
Unit	Unit 3: Human-centred design
Topic/s	Topic 1: Designing with empathy
Duration	—
Mode/length	Part A — visual documentation of the design process: <ul style="list-style-type: none">• Multimodal: 10–12 pages Part B — written design brief and criteria: <ul style="list-style-type: none">• Written: One A3 page (maximum 400 words) Part C — design proposal: <ul style="list-style-type: none">• Multimodal — virtual presentation: 2–3 minute spoken supported by two A3 pages
Individual/group	Individual

Context

The United Nations report, *World Population Ageing 2015* stated that 11 per cent of the world's 6.9 billion people are aged over 60 and that the figure will double by the year 2050. If we are to support a growing number of older people, we need to design ways to assist them to stay healthy and well.

The context of this project is human-centred design (HCD). Fundamental to HCD is the principle that a designer considers human needs and wants to be a higher priority than other influences throughout the design process. The success of designs will depend on effectively considering the attitudes, expectations, motivations and experiences of older people.

Task

Respond to the following question: How can the design of products, services and environments make the experience of ageing more attractive?

Use designing with empathy as an approach to understand and experience the needs and wants of older people. This will require you to:

- identify stakeholder/s who must be an older person or group of older people (aged over 60)
- apply the HCD process to respond to their needs and wants using design with empathy techniques.

Interacting with your identified stakeholder/s throughout the process will be important.

To complete this task, you must:

Part A — Visual documentation of the design process

- representation of ideas, a design concept and HCD information using drawing and low-fidelity prototyping in the explore and develop phases
- analysis of the needs and wants of an identified stakeholder using
 - primary data, e.g. interviews with stakeholders
 - secondary data, e.g. analysis of existing designs and HCD information
- ideas devised in response to the HCD problem using divergent thinking strategies in the develop phase of the design process
- synthesis of ideas and HCD information to propose a design concept
- evaluation of the strengths, limitations and implications of ideas and a design concept against the design criteria to make refinements that improve ideas, including
 - written or spoken notes referenced to relevant drawings and low-fidelity prototypes
 - changes or amendments to drawings and/or low-fidelity prototypes
- evidence of primary sources, acknowledgment of secondary sources (references for images and text) and documentation of progressive development.

Part B — Written design brief and criteria

- description of:
 - the features that define the HCD problem
 - design criteria based on stakeholders' requirements and the principles of good design

- communication using written features, design language and conventions.

Part C — design proposal presented with a spoken pitch (live or virtual) for stakeholders

- evaluation of how well the design concept satisfies the design criteria
- visual presentation of the design concept using illustrations that may be supported by photographs or video of low-fidelity prototypes.

Checkpoints

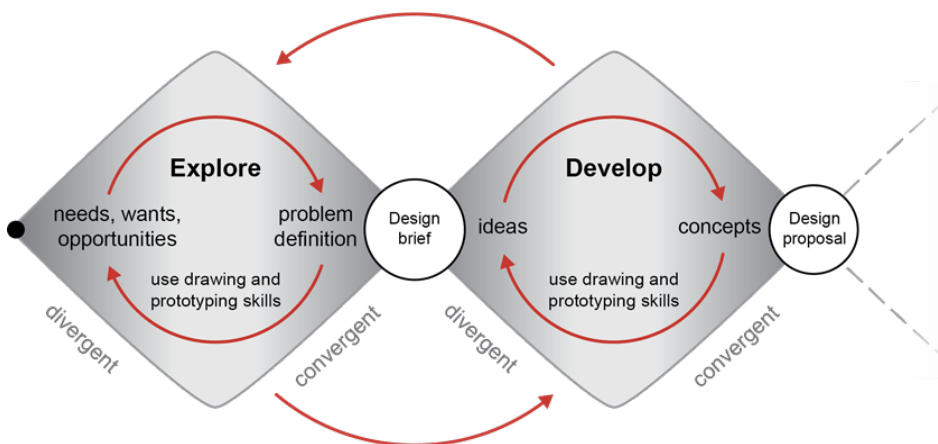
- Submit draft of Part B — Written design brief and criteria. Date:
- Submit draft of Part A — Visual documentation of the design process, including evidence of the explore and develop phase of the design process. Date:
- Submit draft of Part C — Design proposal with spoken pitch. Date:

Authentication strategies

- Students must acknowledge all sources.
- The teacher will collect copies of the student response and monitor at key junctures.
- The teacher will conduct interviews after submission to clarify or explore aspects of the response.

Scaffolding

In Design, a project involves students applying the explore and develop phases of the design process.



Instrument-specific marking guide (IA2): Project (35%)

Criterion: Exploring

Assessment objectives

1. describe the features that define a HCD problem and design criteria based on stakeholders' requirements and principles of good design
3. analyse needs and wants using primary data about stakeholders and secondary data about existing designs and HCD information

The student work has the following characteristics:	Marks
<ul style="list-style-type: none"> discerning description of the features that define a HCD problem and essential design criteria based on stakeholders' requirements and principles of good design insightful analysis of needs and wants using relevant primary data about stakeholders and secondary data about existing designs and HCD information to identify the significant features, constraints and the relationships between them. 	9–10
<ul style="list-style-type: none"> effective description of the features that define a HCD problem and design criteria based on stakeholders' requirements and principles of good design considered analysis of needs and wants using relevant primary data about stakeholders and secondary data about existing designs and HCD information to identify valid features, constraints and the relationships between them. 	7–8
<ul style="list-style-type: none"> adequate description of the features that define a HCD problem and some design criteria based on stakeholders' requirements and principles of good design appropriate analysis of needs and wants using primary data about stakeholders and secondary data about existing designs and HCD information to identify some features, constraints and the relationships between them. 	5–6
<ul style="list-style-type: none"> superficial description of a HCD problem and some design criteria superficial analysis of needs and wants using HCD information to identify partial features. 	3–4
<ul style="list-style-type: none"> description of aspects of a HCD problem statements about needs and/or wants. 	1–2
<ul style="list-style-type: none"> does not satisfy any of the descriptors above. 	0

Criterion: Devising

Assessment objectives

4. devise ideas using divergent thinking strategies in response to the HCD problem in the develop phase

The student work has the following characteristics:	Marks
<ul style="list-style-type: none">multiple ideas perceptively devised from different points of view — with each idea incorporating unique, credible and detailed attributes — using divergent thinking strategies in response to the HCD problem in the develop phase.	6–7
<ul style="list-style-type: none">ideas purposefully devised — with each idea incorporating unique, credible and detailed attributes — using a divergent thinking strategy in response to the HCD problem in the develop phase.	4–5
<ul style="list-style-type: none">ideas appropriately devised — with each idea incorporating credible attributes in response to the HCD problem in the develop phase.	2–3
<ul style="list-style-type: none">ideas disjointedly devised in response to aspects of the HCD problem.	1
<ul style="list-style-type: none">does not satisfy any of the descriptors above.	0

Criterion: Synthesising and evaluating

Assessment objectives

5. synthesise ideas and HCD information to propose a HCD concept in the develop phase
6. evaluate the strengths, limitations and implications of ideas and HCD design concept against design criteria and make refinements

The student work has the following characteristics:	Marks
<ul style="list-style-type: none">coherent and logical synthesis by combining attributes of multiple ideas and HCD information to propose an innovative HCD concept in the develop phasecritical evaluation of the strengths, limitations and implications of ideas and a HCD concept against design criteria to make discerning refinements.	9–10
<ul style="list-style-type: none">logical synthesis by combining ideas and HCD information to propose a credible HCD concept in the develop phasereasoned evaluation of the strengths, limitations and implications of ideas and the HCD concept against design criteria to make effective refinements.	7–8
<ul style="list-style-type: none">simple synthesis by combining ideas and HCD information to propose a HCD conceptfeasible evaluation of the strengths and limitations of ideas and the HCD concept against some design criteria to make adequate refinements.	5–6
<ul style="list-style-type: none">rudimentary synthesis of ideas to propose a partial HCD conceptsuperficial evaluation of ideas and the HCD concept against some design criteria.	3–4
<ul style="list-style-type: none">unclear combination of ideasmake statements about ideas or the HCD concept.	1–2
<ul style="list-style-type: none">does not satisfy any of the descriptors above.	0

Criterion: Representing and communicating

Assessment objectives

2. represent ideas, a design concept and HCD information using ideation sketching, schematic sketching and low-fidelity prototyping in the explore and develop phases
7. make decisions about and use visual, written and spoken communication to present a design brief and design proposal to stakeholders

The student work has the following characteristics:	Marks
<ul style="list-style-type: none"> • sophisticated representation of ideas, a design concept and HCD information using fluent sequences of ideation sketching, schematic sketching and low-fidelity prototyping to progress understanding in the explore and develop phases • discerning decision-making about, and fluent use of, <ul style="list-style-type: none"> – spoken features, design-specific vocabulary and visual elements and principles to present a design proposal for a live or virtual stakeholder audience – written conventions, features and design-specific language to present a design brief for stakeholders. 	7–8
<ul style="list-style-type: none"> • considered representation of ideas, a design concept and HCD information using proficient ideation sketching, schematic sketching and low-fidelity prototyping to progress understanding in the explore and develop phases • effective decision-making about, and proficient use of, <ul style="list-style-type: none"> – spoken features, design-specific vocabulary and visual elements and principles to present a design proposal for a live or virtual stakeholder audience – written conventions, features and design-specific language to present a design brief for stakeholders. 	5–6
<ul style="list-style-type: none"> • appropriate representation of ideas, a design concept and HCD information using ideation sketching, schematic sketching and low-fidelity prototyping in the explore and develop phases • appropriate decision-making about, and use of, <ul style="list-style-type: none"> – spoken features and visual elements and principles to present a design proposal – written features to present a design brief. 	3–4
<ul style="list-style-type: none"> • cursory representation of ideas and information using unclear sketching or low-fidelity prototyping in the design process • variable decision-making, and inconsistent use of, <ul style="list-style-type: none"> – spoken features or visual elements – written conventions. 	1–2
<ul style="list-style-type: none"> • does not satisfy any of the descriptors above. 	0



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