

Design 2019 v1.1

IA3 mid-level annotated sample response

June 2018

Project (25%)

This sample has been compiled by the QCAA to assist and support teachers to match evidence in student responses to the characteristics described in the instrument-specific marking guide (ISMG).

Assessment objectives

This assessment instrument is used to determine student achievement in the following objectives:

1. describe the features and sustainable requirements that define a redesign problem and design criteria based on the requirements of the opportunity and the principles of good design
2. represent ideas, a sustainable design concept and sustainability information using schematic sketching and ideation sketching and/or low-fidelity prototyping in the explore and develop phases
3. analyse redesign opportunities using data about existing designed solutions and sustainability information
4. devise ideas using divergent thinking strategies and circular design methods in response to a redesign problem in the develop phase
5. synthesise ideas and sustainability information to propose a sustainable design concept in the develop phase
6. evaluate the strengths, limitations and implications of ideas and a sustainable design concept against design criteria to make refinements
7. make decisions about and use visual, written and/or spoken communication to present a design brief and visual display of a design proposal for stakeholders.

Instrument-specific marking guide (ISMG)

Criterion: Exploring

Assessment objectives

1. describe the features and sustainable requirements that define a redesign problem and design criteria based on the requirements of the opportunity and the principles of good design
3. analyse redesign opportunities using data about existing designed solutions and sustainability information

The student work has the following characteristics:	Marks
<ul style="list-style-type: none">discerning description of features and sustainable requirements that define a redesign problem and essential design criteria based on the requirements of the opportunity and the principles of good designinsightful analysis of redesign opportunities using relevant data about existing designed solutions and sustainability to identify the significant features, constraints and the relationships between them.	6–7
<ul style="list-style-type: none">adequate description of features and sustainable requirements that define a redesign problem and some design criteria based on the requirements of the opportunity and the principles of good designappropriate analysis of redesign opportunities using data about existing designed solutions and sustainability to identify features and constraints.	4–5
<ul style="list-style-type: none">superficial description of a redesign problem with sustainable requirements and some design criteriasuperficial analysis of redesign opportunities to identify some partial features.	2–3
<ul style="list-style-type: none">description of aspects of a redesign problemstatements about opportunities.	1
<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 and circular design methods in response to a redesign 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 and circular design methods in response to a redesign problem in the develop phase.	4–5
<ul style="list-style-type: none">ideas appropriately devised — with each idea incorporating credible and detailed attributes — using a divergent thinking strategy and aspects of circular design methods in response to a redesign problem in the develop phase.	2–3
<ul style="list-style-type: none">ideas disjointedly devised in response to aspects of a redesign 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 sustainability information to propose a sustainable design concept in the develop phase
6. evaluate the strengths, limitations and implications of ideas and a sustainable design concept against design criteria to 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 sustainability information to propose an innovative sustainable design concept in the develop phasecritical evaluation of the strengths, limitations and implications of ideas and a sustainable design concept against design criteria to make discerning refinements that improve ideas and the sustainable design concept.	4–5
<ul style="list-style-type: none"><u>simple synthesis by combining ideas and sustainability information to propose a sustainable design concept</u><u>feasible evaluation of the strengths and limitations of ideas and sustainable design concept against some design criteria to make adequate refinements.</u>	2–3
<ul style="list-style-type: none">unclear combination of ideasmake statements about ideas or the sustainable concept.	1
<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 sustainable design concept and sustainability information using schematic sketching and ideation sketching and low-fidelity prototyping in the explore and develop phases
7. make decisions about and use visual, written and/or spoken communication to present a design brief and visual display of a design proposal for stakeholders.

The student work has the following characteristics:	Marks
<ul style="list-style-type: none"> sophisticated representation of ideas, a design concept and sustainability information using fluent sequences of schematic sketching and ideation sketching and/or 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"> illustrations and/or low-fidelity prototypes to promote a design opportunity with sustainable attributes for relevant stakeholders written and/or spoken conventions, features and design-specific language to present a design brief for a specified audience. 	7–8
<ul style="list-style-type: none"> considered representation of ideas, a design concept and sustainability information using proficient schematic sketching and ideation sketching and/or 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"> illustrations and/or low-fidelity prototypes to promote a design opportunity with sustainable attributes for relevant stakeholders written and/or spoken conventions, features and design-specific language to present a design brief for a specified audience. 	5–6
<ul style="list-style-type: none"> appropriate representation of ideas, a design concept and sustainability information using schematic sketching and ideation sketching and/or low-fidelity prototyping in the explore and develop phases appropriate decision-making about and use of <ul style="list-style-type: none"> illustrations and/or low-fidelity prototypes to promote a design opportunity written and/or spoken conventions and 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 about, and inconsistent use of, <ul style="list-style-type: none"> illustrations and/or low-fidelity prototypes written and/or spoken conventions. 	1–2
<ul style="list-style-type: none"> does not satisfy any of the descriptors above. 	0

Task

Context
<p>The context of this project is sustainable design. Fundamental to sustainable design is the principle that designers should create new designs that can be supported indefinitely in terms of their economic, social and ecological impact on human wellbeing.</p> <p>Products, services and environments are often designed for specific cultural celebrations and events. Unfortunately, their use is often limited to the duration of the event. Examples include a mobile phone app for spectators navigating events at a music festival or a Christmas-themed carry bag.</p>
Task
<p>Respond to the following question: How can products, services and environments be redesigned to extend their useful life beyond their original intended purpose?</p> <p>You are required to:</p> <ul style="list-style-type: none">• identify a design opportunity based on the redesign of a product, service or environment that was originally designed for a specific cultural celebration or event• apply the design process to explore and develop the opportunity• use circular design methods to improve the economic, social or ecological sustainability of your design concept.

Sample response

Criterion	Marks allocated	Result
Exploring Assessment objective/s 1, 3	7	5
Devising Assessment objective 4	5	3
Synthesising and evaluating Assessment objective/s 5, 6	5	3
Representing and communicating Assessment objective/s 2, 7	8	7
Total	25	18

Part A

Unit 4 Sustainable Design

WHAT IS
THIS FOR?
WHAT COULD I
REDESIGN?

WHERE IS
THERE A
GAP?

IS IT A
PROBLEM?
CAN I REFRAME
INTO AN
OPPORTUNITY?

CONTEXT:

① A new design that can be supported indefinitely in terms of economic - money / business structure / financial impact / cost \$
social - human centered / meeting needs? / scope of participation
ecological impact - how does it affect the world, environment
on the wellbeing of humans - individual / family / community / society / local / global

② Products, services and environments are often designed for specific cultural celebrations and events * therefore useful life is often limited

How can I extend the life of something with design ???
- innovative - aesthetic
- enduring - accessible
- useful - SUSTAINABLE

principles of Design



WHO CAN
BENEFIT?

HOW WILL
IT
LOOK?

IS IT
ALREADY
OUT
THERE??

WHAT DO I NEED TO DO ??

① Identify a design opportunity
something positive
something relative
something I care about
something that will make a difference and benefit many?
based on a REDESIGN of a product / service / environment
to extend the life beyond original intended purpose

② Apply the design process to explore + develop the opportunity
to extend the life beyond original intended purpose

③ Use circular design methods to improve
economic
social
or
ecological sustainability of my concept

Exploring [4-5]

appropriate analysis of redesign opportunities using data about existing designed solutions and sustainability to identify features and constraints

Specific cultural celebrations and events

?

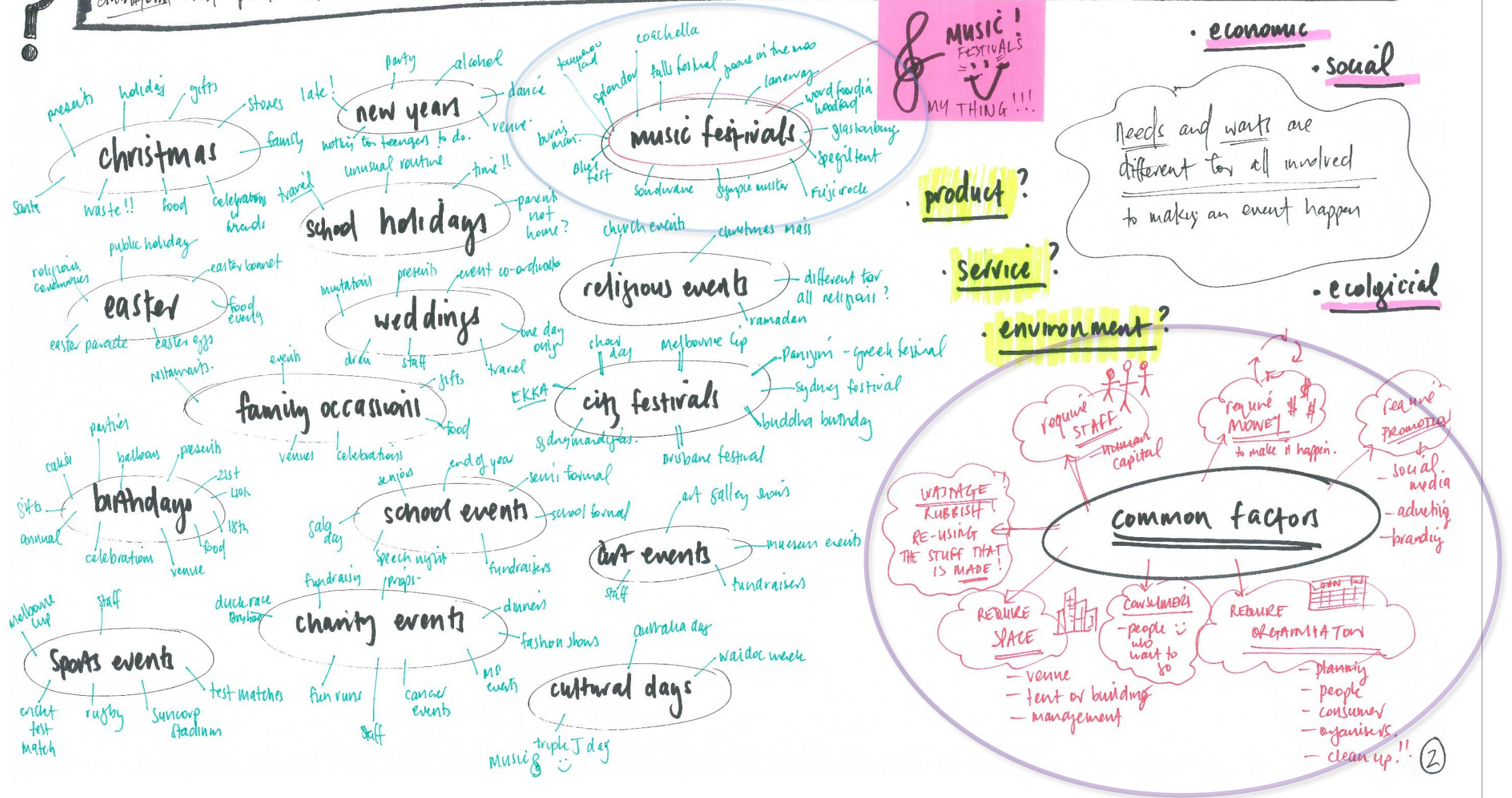
Brainstorm what specific cultural celebrations and events exist ?? Who do they appeal to ??? What factors are common to them ?? Can I identify an opportunity ??

Exploring [4-5]

appropriate analysis of redesign opportunities using data about existing designed solutions and sustainability to identify features and constraints

Representing and communicating [5-6]

considered representation of ideas, a design concept and sustainability information using proficient schematic sketching and ideation sketching and/or low-fidelity prototyping to progress understanding in the explore and develop phases



Exploring [4-5]

appropriate analysis of redesign opportunities using data about existing designed solutions and sustainability to identify features and constraints

* MERCHANDISE * (P)

- t-shirt!!!
- hat/caps
- cups
- bags - totes
- umbrellas
- hoodies
- clothing
- limited edition
- shibboleth
- artist merchandise
- kids clothing
- socks
- stickers
- posters
- commemorative tickets + programs
- lunchboxes
- bracelets
- sun glasses
- lanterns
- ponchos
- jewellery

WHAT OPPORTUNITIES EXIST FOR REDESIGN WITHIN A MUSIC FESTIVAL??

EITHER

- PRODUCT (P)
- SERVICE (S)
- ENVIRONMENT (E)

* FESTIVAL STRUCTURES * (E)

- stages
- lighting
- toilets / amenities
- VENUE
- stalls
- portable structures for stalls
- green room (where the band hangs out)
- props!!
- retail shops
- food venues
- seating
- tents / marquees
- bar venues
- camping - accommodation
- fencing etc.

farm?
land?
building?
tent?

* PEOPLE * (S)

- STAFF!!!!
- SECURITY STAFF - SAFETY
- CLEANING STAFF
- FESTIVAL GOERS!!
- FESTIVAL ORGANISERS
- ARTISTS AND CREW (MUSICIANS)
- event managers
- promotions
- money? budget? accounts?
- sponsors?? - like triple J?
- LICENSING



* PROMOTIONAL MATERIAL * (S)

- signage
- billboards
- road signs
- maps
- tent signage
- postcards
- BRANDING
- social media
- photographers
- brochures
- facebook site
- instagram site
- webpage?
- mapchat
- mobile app - calendar -> band times / planning tool
- bloggers
- ticketing - arm bands
- radio / tv promotional stuff

FESTIVAL

- Glastonbury - England
- Coachella - USA
- Tomorrowland - Belgium
- Burningman - Black Rock City
- EXIT - Serbia!
- Splendor in the Grass - Brazil! the best!
- Groove in the Moo - Australia WIDE!
- Falls Festival - AUS
- Laneway St Jerome's - AUS
- Unearthed - TBA
- Big Day Out - no longer!! why??
- Rabbits eat Lettuce - old
- Woodford Folk Festival - old
- Bron Bay Blues Fest - old
- Valley Fiesta - VALLEY BRISBANE
- Stereo Sonic ???
- future music festival - no longer!! why??
- Fuji Rock - JAPAN
- Gympie Muster - old
- Tamworth County Music Fest - NSW
- Parishes Elvis Festival
- Kuranda Rocks - NT old
- Happy Daze

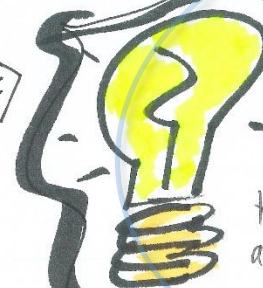
3

Possible identified opportunities...

where is the gap?
what/who can benefit?

WHAT COULD I REDESIGN??

(ADAPT / REPURPOSE / REIMAGINE)



Identified that HUMAN CAPITAL plays a big part in success of a good music festival. The artist have to be good the venue has to be safe, it needs to have a brand, extras like merch, food and place to stay is important and social media plays a large part. People have to want to pay to go and essentially it's a business \$\$\$

PRODUCT?

WHAT IF ICONIC FESTIVAL T-SHIRT COULD BE PRINTED ON SITE??

- TO REDUCE WASTE
- INCREASE PERSONALISATION OF PRODUCT
- GIVE ADDITIONAL 'CRAFTSMAN' APPROACH TO FESTIVAL MERCHANDISE (NOT ALL THE SAME)

The stall could provide screen printing facilities and colours/inks etc and a range of environmentally friendly t-shirts of all sizes etc to print design on. Each year this could be updated with dates and logos and this would make them a collection item without the mass production and wastage that occurs from overproduction and fast fashion.

ENVIRONMENT?

WHAT IF A COMPREHENSIVE DATA BASE COULD BE REUSED AND DESIGNED FOR THE DISTRIBUTION OF THE PROPS OF A FESTIVAL?

LIKE THE BIG STRUCTURES USED TO DECORATE WOODFORD ARE NOT USED AT ALL BETWEEN FEB - NOV AND OTHER FESTIVAL ORGANISERS COULD LOCATE THE PROPS AND HIRE THEM DURING THE YEAR...

perhaps this is more a service ??? and it may already exist? Surely...

SERVICE?

Common element in all festivals/events is staff and consumer. Me and my friends all want to go the festivals but can't always afford. Plus it would be really cool to work at them to see how it works and for future job prospects.

What if I could redesign one of the temp apps that finds people jobs and businesses good people to work for them? Make it so that there was an easy form of communication for staff (like my friends - juniors?) to go to these events and the events people to have some free labour to help keep their events going ??? ? ??

PRODUCT?

TICKETS ???
ARMBANDS

WHAT IF THE FESTIVAL-GOER WHO ABLE TO HAVE AN ARMBAND THAT GOT RE-USED WITH EACH FESTIVAL? LIKE RELOADED WITH EACH YEAR ATTENDED? OR UPGRADED TO SHOW HOW MANY FESTIVAL YOU ATTEND?

IT WOULD BECOME A STATUS SYMBOL AMONGST CONCERT GOERS AND WOULD BE TREATED AS COMMEMORATIVE. NOT WASTFUL? SAME TICKETING SYSTEM COULD BE USED?

- SOMEONE COULD DESIGN THE ACTUAL BAND OUT OF SUSTAINABLE PRODUCTS AND COST WOULD BE (ENTRY) REDUCED IF YOU HAD ONE?
- LIKE FRONT OF LINE PASS @ BUNYAN
- OR GOLDEN TICKET - TRIPLE ? ??

Exploring [4-5]

adequate description of features and sustainable requirements that define a redesign problem and some design criteria based on the requirements of the opportunity and the principles of good design

Exploring [4-5]

appropriate analysis of redesign opportunities using data about existing designed solutions and sustainability to identify features and constraints

Representing and communicating [5-6]

considered representation of ideas, a design concept and sustainability information using proficient schematic sketching and ideation sketching and/or low-fidelity prototyping to progress understanding in the explore and develop phases

adult workforce

- found!!

- * temp service - BACKPACKER GO ABOARD
- * uber based - lift / uber / SDOZAR
- * SEEK - corporate / business
- * super retail groups - like REBEL / SRG
- * hospitality services - pinnacle / zenutti
chefs on run / frontline
- * gumtree
- * SIMBI
- * AIR TASKER
- * job sharing
- * staffing websites

How ARE THESE ACCESSED?? DELIVERED?? MARKETING??

volunteering

- * volunteering gld .. / look up . can.
- * facebook groups / business pages
- * festivals currently - online application portals
- * snapchat group
- * instameet.
- * word of mouth!!

- humans talking to humans!

at & cool music festivals

what already exists...

PLATFORMS

database

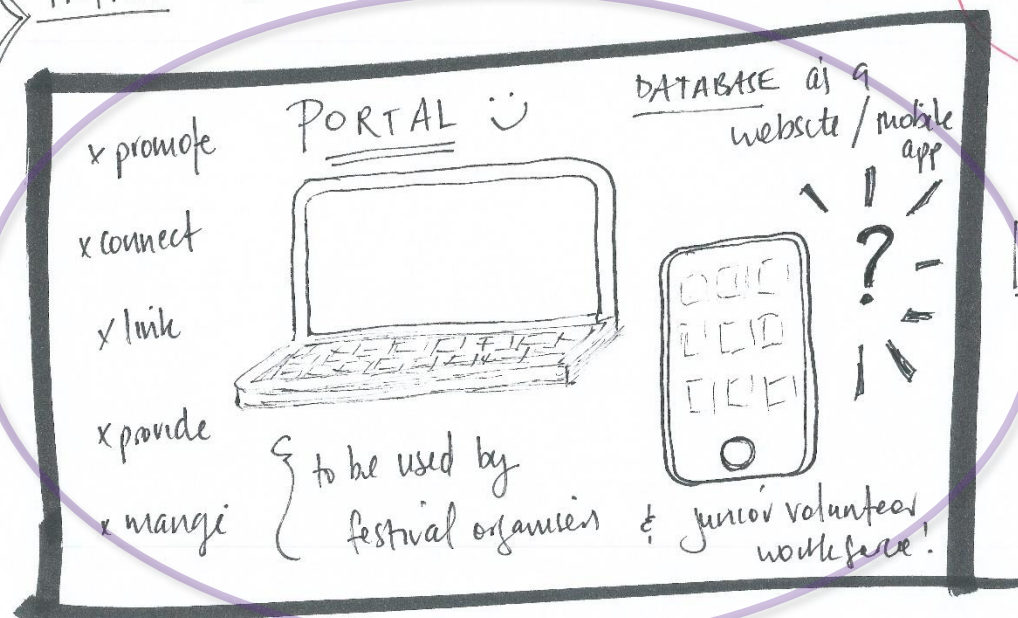
portals

profiles

resumes

website

mobile app



CONSIDERATION

music

- * Festivals have closed... why?
- * what is the economic viability of a volunteer workforce
- * would sponsorship be an option??
- * is this a social benefit?
- * how do you sustain a music festival?

like

Found

next generation hiring.

How TO ADAPT THIS... Concept - adult workforce / volunteering ⇒ business ... for

festival organisers



+ junior volunteer workforce

construct a platform as a way of linking the two stakeholders to ensure wellbeing and benefit to both

⑥

OPPORTUNITY

Platform for which high school peeps could 'work' at festivals and create employment skills and networking...
++ so much more...

ECONOMIC ?
SOCIAL ?
ENVIRONMENTAL ?

WILL IT EXTEND
THE LIFE BEYOND
ORIGINAL INTENDED
PURPOSE ??

WHAT CAN I
REDESIGN ??

: identified stakeholder ...

— look into further ...
— ③ potential paid staff members (to consider - economic cost)...

① festival organisers / event managers

② junior volunteer workforce? (Me and my friends? — music festival attendees that can't always afford (music lovers) (live music)!!! :o to go?)

① FESTIVAL ORGANISERS

HAVE : — staff already : but not guaranteed.
(casual workforce)
— cool event with musicians.

NEED : — young hipsters! to help promote their event to keep it relevant
— low cost ways of ensuring staffing their events.

WANT : — a sustainable business that has a socio-economic conscience.
— growth workforce — like people have worked their as young adults, attended as consumers and promote their event as the best — (promotional market, for free)!!!
— ongoing business — to make money also.

② JUNIOR VOLUNTEER WORKFORCE (students aged 15-18)

HAVE : — different interests, music, food, tech, sport, values
— varied availability and free time
— already a bank of skills and attributes to offer employers
— school / work / family commitments

NEED : — opportunities to build their resume whilst still at school
— to increase their 'social network' for future #adulting

WANT : — to volunteer to help others and be part of the bigger community
— meet other 'like minded' people in an environment that is fun and awesome.
— exposure to work environments that are varied and different to the usual
— to increase employability skills and increase future money making potential.
— to attend cool music festivals and other events for minimal \$\$ money.

⑤

Exploring [4-5]

adequate description of features and sustainable requirements that define a redesign problem and some design criteria based on the requirements of the opportunity and the principles of good design

ideas appropriately devised --- with each idea incorporating credible and detailed attributes --- using a divergent thinking strategy and aspects of circular design methods in response to a redesign problem in the develop phase

Develop

a database "hub" dedicated to music festival organisers and the junior volunteer workforce. A platform where social connection can occur to benefit all involved to ensure successful music festivals !! and happy teens :)

what will it be?

① web page with 2 main points

② each is themed and aimed at the appropriate audience

- business like for festival organisers
- cool easy profiles / images etc for junior workforce volunteers

③ able to upload profile - think facebook / insta? to see history and skills etc. (think junior workforce)
- businesses / event organisers have their own profiles. (think user)?

④ only for age 15-18 - exclusivity / contemporary / vibrant. - can progress to other job seeking apps after school.

⑤ rating systems can apply for both users and venue preference etc can be added.

⑥ festival organisers can utilize the social media skills of their volunteer workforce to promote their event.

Need a brand? a name?
- identifying
+ PORTAL

WHO CAN BENEFIT?

How will it look?

Who will look after it??

Strengths

Limitations

Implications



BENEFITS

a living portal which will change and evolve as the users age + change.

sponsorship? or paid for website maintenance by the employers i.e.: the businesses involved

- festival / event organisers
- community events
- possible government???

live feeds of photos of work / skills learned / friendship made etc.

businesses can create more paid jobs at festivals by increased patronage created by the junior workforce.

the economic benefits are for both parties < cheap music festivals for students
free workforce / labour for event organisers ⑦

Representing and communicating [5-6]

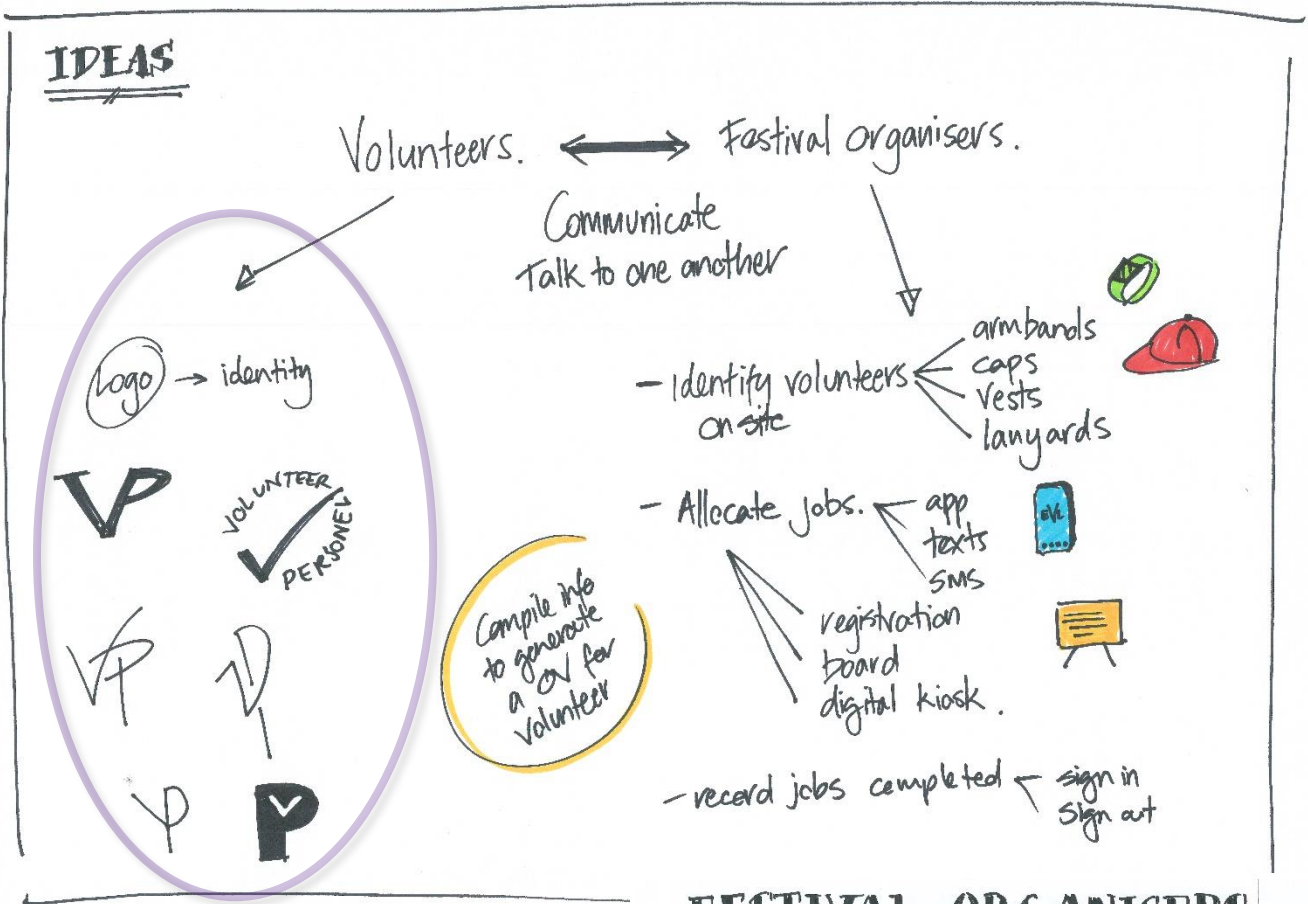
considered representation of ideas, a design concept and sustainability information using proficient schematic sketching and/or ideation sketching and/or low-fidelity prototyping to progress understanding in the explore and develop phases

Devising [2-3]

ideas appropriately devised --- with each idea incorporating credible and detailed attributes --- using a divergent thinking strategy and aspects of circular design methods in response to a redesign problem in the develop phase

Synthesising and evaluating [2-3]

feasible evaluation of the strengths and limitations of ideas and sustainable design concept against some design criteria to make adequate refinements



FESTIVAL ORGANISERS

One site for organisers to post jobs for volunteers that need doing.

Must be easy to contact others
- contact details.

Include statement on bottom of your side about what the volunteer gets for hours work.

Possible contact for next festival.

CHALKBOARD

Other side for volunteers to post time availability and skills they have.

Must be easy to contact others
- contact details.

Statement about what volunteer hopes to be offered by volunteering.

Possible contact for next festival.

	+	-
useful		✓✓
accessible	✓	
aesthetic		✓✓
innovative		✓✓
sustainable	✓	

- single location, outdated, easy to ignore.
- hard to control, no usable record.

Representing and communicating [5-6]

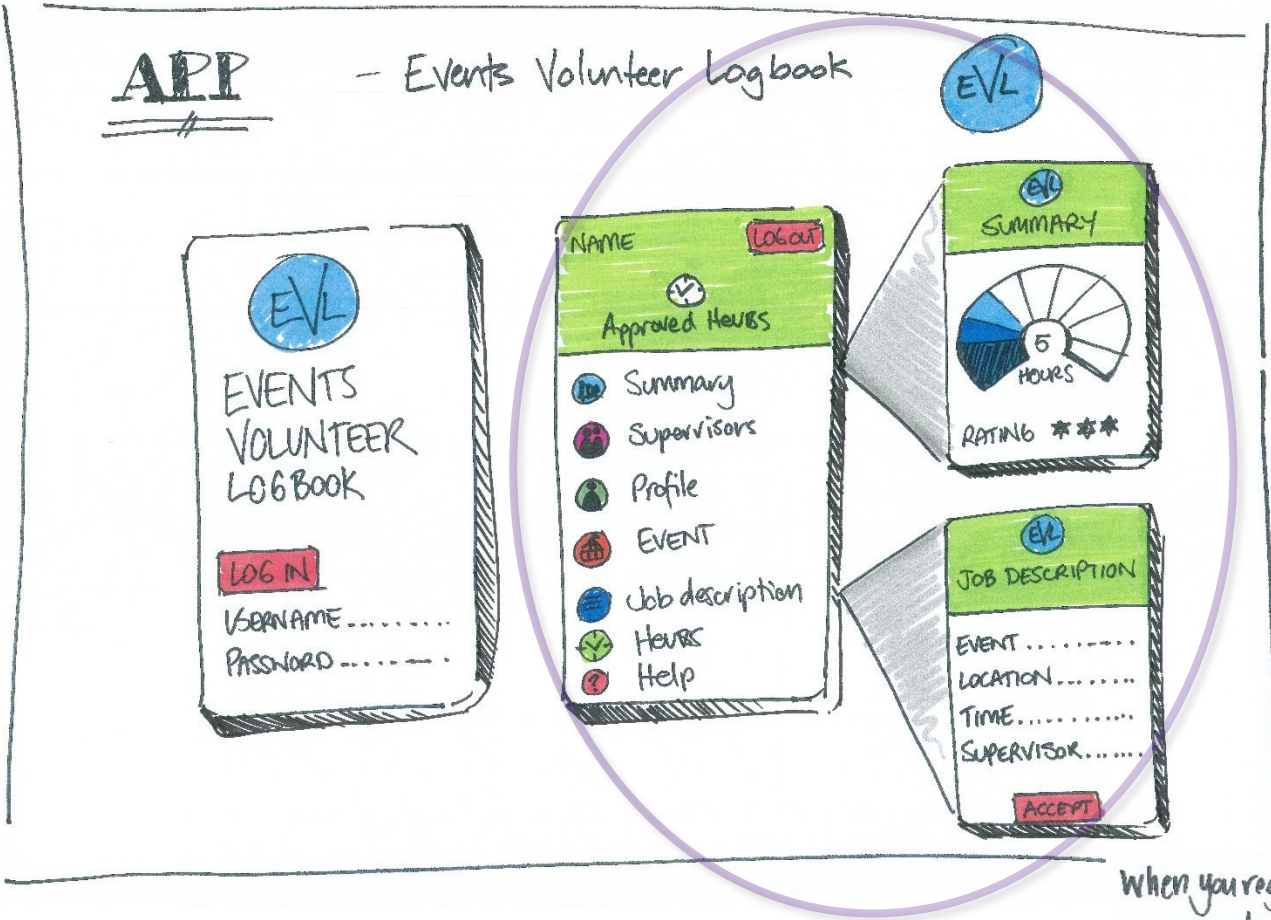
considered representation of ideas, a design concept and sustainability information using proficient schematic sketching and ideation sketching and/or low-fidelity prototyping to progress understanding in the explore and develop phases

Synthesising and evaluating [2-3]

feasible evaluation of the strengths and limitations of ideas and sustainable design concept against some design criteria to make adequate refinements

Devising [2-3]

ideas appropriately devised --- with each idea incorporating credible and detailed attributes --- using a divergent thinking strategy and aspects of circular design methods in response to a redesign problem in the develop phase



	+	-
useful	✓	
accessible	✓	✓
aesthetic		✓
innovative		✓
sustainable	✓	

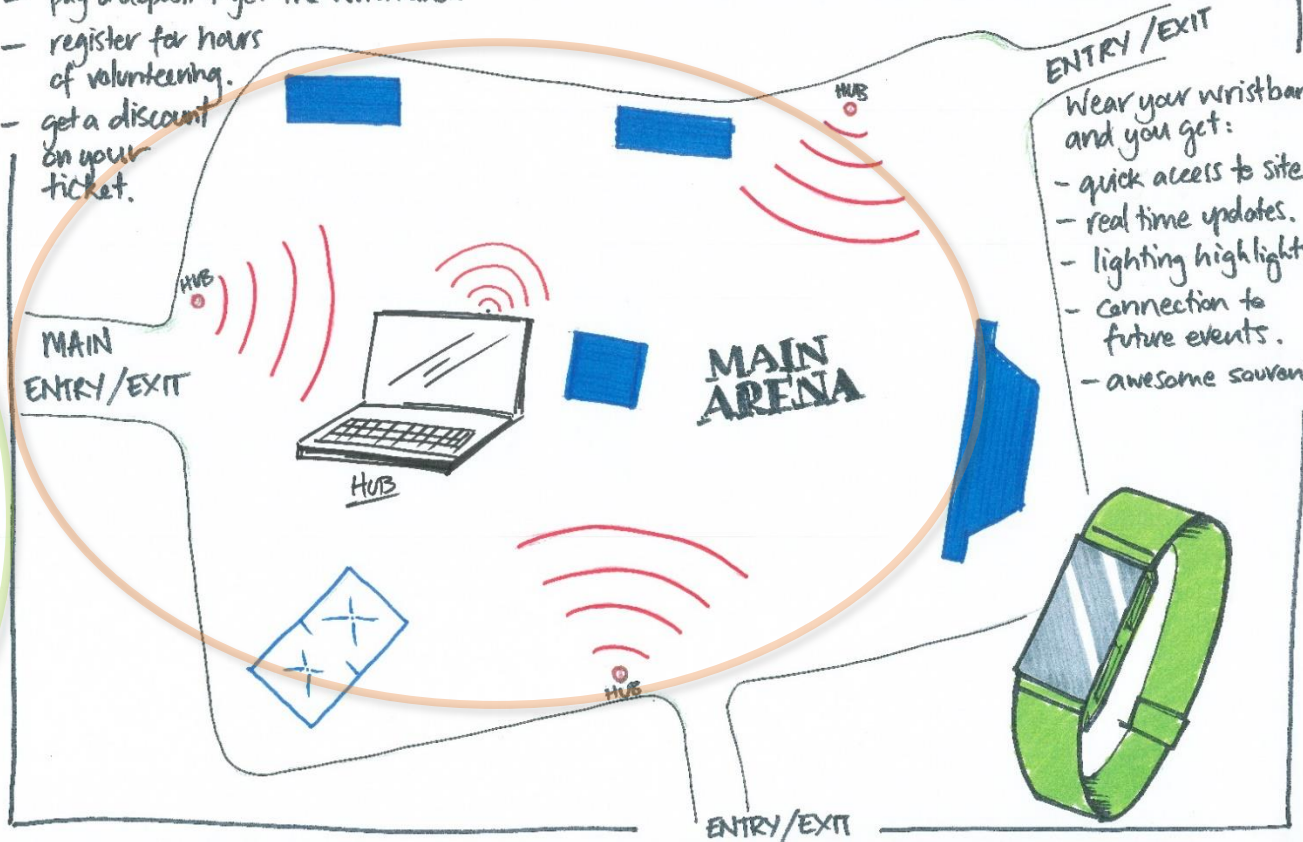
- convenient to use
- data can be kept and reused by both parties.
- familiar format, a redesign of learners logbook.

	+	-
useful	✓	✓
accessible	✓	
aesthetic	✓	
innovative	✓	
sustainable	?	✓

- has its own local network
- upfront cost
- colour easily identifies volunteers
- reusable for future festivals.
- could be less complex and cheaper in a paper only function.

- When you register your interest you can:
- pay a deposit + get the wristband.
 - register for hours of volunteering.
 - get a discount on your ticket.

FESTIVAL WRISTBAND



Part B

Design Brief

Festivals are common in Australia however, many large festivals such as Big Day Out and Future Music have not been socially and economically sustainable and are no longer in existence. The target market for these festivals is young people (18 to 25). Volunteering helps the organisers to keep costs down, allows young people to access expensive festivals and builds a sustainable social network that supports the ongoing viability of festivals. A further benefit is that a junior volunteer workforce would be developing employability skills that could be recorded and added to their resume. Volunteers need to be recognisable at festivals without the use of merchandise that is quickly disposed of after the festival.

There is an opportunity to redesign how volunteers are managed at events. This includes how they are identified within the festival environment and how organisers and volunteers communicate. The product, service or environment must be developed using a circular design approach so that it has ongoing useability beyond a single festival.

Design Criteria

Design a service that

- allows organisers and volunteers to communicate in the festival environment (useful)
- provides a way of identifying volunteers at the event (useful)
- is easily understood by organisers and volunteers with a minimum of training (accessible)
- encourages young people to feel a sense of social connection including visual identity (aesthetic)
- includes new or unique ways of improving communication (innovative)
- has ongoing relevance for future festivals and avoids elements that are discarded at the conclusion of a festival (sustainable)

Representing and communicating [7–8]

effective decision-making about, and fluent use of, - written and/or spoken conventions, features and design-specific language to present a design brief for a specified audience

Exploring [4–5]

adequate description of features and sustainable requirements that define a redesign problem and some design criteria based on the requirements of the opportunity and the principles of good design

Part C

Representing and communicating [2–3]

effective decision-making about, and proficient use of, illustrations and/or low-fidelity prototypes to promote a design opportunity with sustainable attributes for relevant stakeholders

Synthesising and evaluating [2–3]

simple synthesis by combining ideas and sustainability information to propose a sustainable design concept

Synthesising and evaluating [2–3]

feasible evaluation of the strengths and limitations of ideas and sustainable concept against some design criteria to make adequate refinements



Event Volunteer Logbook

a service for 21st century festivals connecting volunteers and event organisers.

App Strengths

- task description and history with performance rating
- familiar format, easily understood, minimum training
- redesign based on Qld Learner Logbook

Limitations

- cost
- distribution of wristbands
- app must be downloaded prior to festival where internet is not available

Implications

- field testing is needed to identify how well EVL will relate to and encourage young people to volunteer

Wristband Strengths

- multi festival use
- volunteers easily identified
- notifications received during festival, light and vibrate function
- app & band linked to festival wifi hubs

