



Tech108
Sleepwear Design
& Documentation

Pave Your Own Path

Esprit Brown
s00349479



Chosen colour palette

A set of comfy pajamas inspiring creativity and imagination of one's journey.

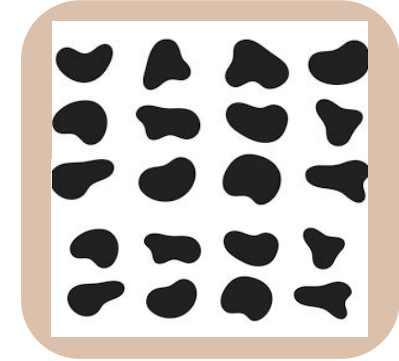
Colour is an element of design commonly used by designers to set the mood. The Cotton poplin fabric is a simple yet busy design, with a range of different muted colours. Muted colours have come to be associated with modernity, the current, progress, and efficiency. They symbolise what is new and signal to individuals that the material they are looking at is relevant, allowing individuals mind



Chosen principle repetition

The repetitive blob formation.

Repetition is a design technique that employs the components line, form, and colour to produce an overall design that urges the eye to move across the garment indefinitely. When making basic items of clothing it is important to capture the eye of the potential consumer. The repetition of the rounded blobs and dots promotes a sense of calmness and interconnectedness.



Chosen element shape

The curved perimeter of the blob shape communicate a sense of flow and softness.

Another design aspect used to create this design is shape. These similar yet opposing blob shapes can represent an individual's journey as unique and shows that no two individuals are the same.

DESIGN DESCRIPTION

Aesthetic features

A non-directional, all over muted multi coloured print is used aesthetically for the short pyjamas. The print adds a level of interest to the modest shape of short.

To deliver cohesiveness I added the short print to the handles on the bag also a square patch on the front, with a large tortoise shell round button to compliment the curves in the print.

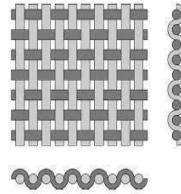
I purchase a rounded neck t-shirt to stick to the rounded theme, and screen printed 3 irregular hand drawn blobs decreasing in size, outlined with a circles. I used 3 different colours to incorporate the multicolor theme. I offset the design and placed it in the bottom left corner of the t-shirt to set a point of difference.

The focal point is the printed pattern used for the shorts and carried on through to the bag on the straps and patch, as it contrasts with the plain white t-shirt and neutral duck fabric.

Functional Features

Functionally the pajamas have many features. Cotton poplin is a woven fabric which was used for the shorts. It is breathable and durable also displaying natural wrinkle-resistance properties. A studier weave duck, was used for the bag due to it be able to hold it shape better and increasing its longevity. The t-shirt is also

made from cotton but a ribbed knitted structure.



Example of cotton woven fabric

The elastic waistband provides structural functional features, as well as thee reinforced crotch seam, openings at the waist and neck and sturdy reinforced pocket on the pants and construction of the straps.

The elastic waistband also allows the consumer to get the pajamas on and off effortlessly. The reinforced crotch seam provides extra strength to increase longevity. The stretchy knit structure provides a soft, comfortable texture on the wearers skin, while the stretchy opening allows the wearer to take it on and off easily.

The bag has a number of features, the square base allows the bag to stand up while being filled for convenience. The size of the bag allows it to be useful for an overnight stay, university and other purposes. The straps are reinforces with the appropriate stitching to prevent the handles from tearing while holding a significant amount of weight.

Print development

Screen print: a multi coloured stencil print.

The 3 blobs of my screen print was hand drawn inspired by the blobs in my pant pattern. The surrounding smaller dots were added to further tie into the design, and took many prototypes to get to the final design.

The larger 3 blobs are cut out using a stencil knife and the smaller surrounding circles are made from a hole puncher. This is done on water resistant paper, which is then taped to a stretch silk screen, and the 'dead space' is covered using scrap paper. Using a squeegee, fabric paint is forced through the areas of the screen which are voil. The print is then heat set using an iron.

The Pattern

The pattern used was Simplicity 5217. The garment made was PANTS C in a size S. The t-shirt was purchased pre-made. The pants were constructed following the instructions. The tote bag was made using the instructions provided in class.



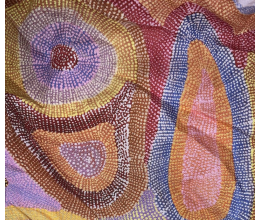
DESIGN SPECIFICATIONS

Costing sheet does not include hours of labour and screen print

Fabric swatches different variations of cotton

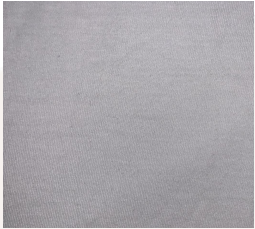
fibre fabric

Pants



Fabric name: Cotton Poplin
Fabric structure: Plain weave
Yarn structure: Spun Fibre
content: 100% cotton End uses:
shirt, pants

T-shirt



Fabric name: Cotton Knit Fabric
structure: jersey knit Yarn
structure: Spun Fibre content:
Cotton and polyester End uses:
shirt, dresses

Main bag



Fabric name: Duck Drill Fabric
structure: Basket weave Yarn
structure: Spun Fibre content:
100% cotton End uses: bags,
work uniform, camping shelter

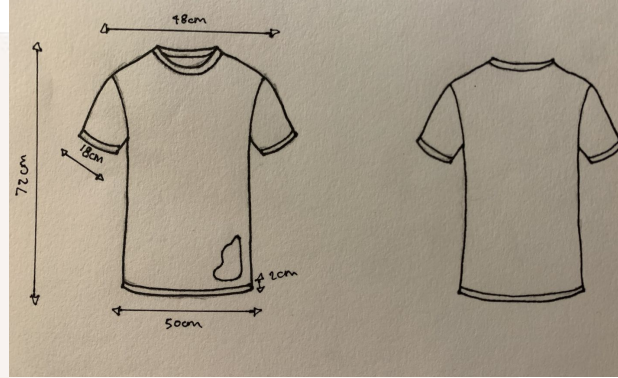
Description	Composition	Colour	Width	Supplier	Amount used	Cost per unit	Cost
Pants: cotton poplin	100% cotton	Muted multi coloured	112cm	Spotlight	1.2m	\$15/m	\$18
T-shirt: cotton knit	Cotton and polyester	White	87cm	Kmart	Store bought	\$5	\$5
Bag: cotton duck	100% cotton	stone	112cm	Spotlight	0.6cm	\$10.25/m	\$6.15
Bag handle/ pocket: cotton poplin	100% cotton	Muted multi coloured	112cm	Spotlight	Offcut from pants	\$15/m	\$0
Button	Plastic	Crean	1.5cm	Spotlight	1	\$3	\$3
Interfacing	42% Polyester 31% Polyurethane 17% Acrylic 10% Rayon	White	2cm	Supplied by uni	60cm	\$4.75/m	\$0
Elastic	Nylon elastane	White	2cm	Supplied by uni	80cm	\$6.50/m	\$0
Thread	100% cotton	White	N/A	Supplied by uni	½ real	\$3.75	\$0
Total cost: \$32.15							

Fabric Evaluation

Cotton poplin is used to make the pants, which is resilient, sturdy, and abrasion resistant (von Mengerson, 2016). Cotton poplin is extremely lightweight and breathable, which is important for sleepwear (Shirts in Bulk, 2011).

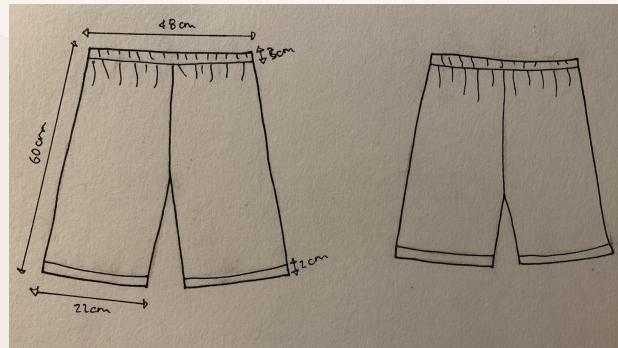
The fabric used for the foldable tote bag, duck drill, is normally used for textile objects that require a high level of strength and durability (Kadolph, 2013). A substantial weight fabric like this is essential because bags must potentially support weight and are subjected to situations that may damage them.

DESIGN ILLUSTRATIONS



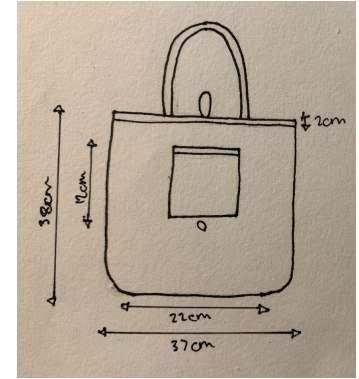
Front view
Cotton knit shirt

Back view
Cotton knit shirt

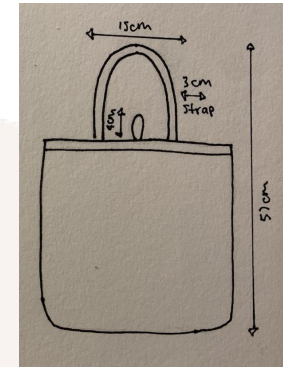


Front view
Cotton poplin shorts

Back view
Cotton poplin shorts



Front view
Duck drill tote bag

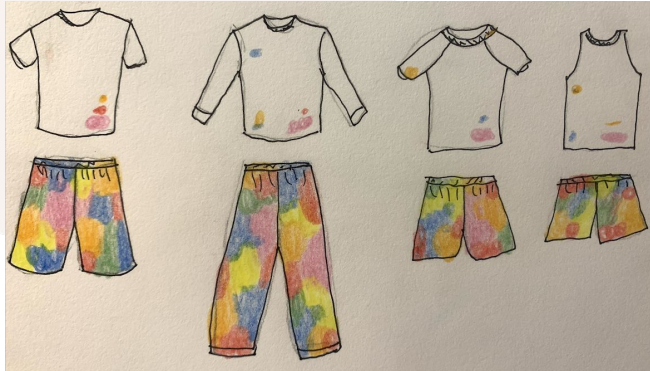


Back view
Duck drill tote bag

DESIGN DEVELOPMENT

Stage 1:

Four alternative combinations of sleepwear sets have been produced based on variants of the irregular circle theme and the chosen colour palette. Variations in the length of the pants, the style of the top, and the positioning of the appliqué motif have been tested. In all cases, balance and harmony have been considered in each set.



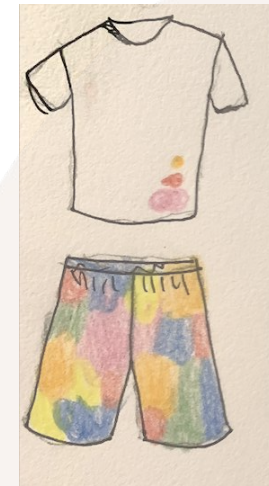
Stage 2:

When reducing the design alternatives to two, both of these sets attain a level of balance as well as visual intrigue. The pair on the left would be appropriate for warmer weather, while the other would be appropriate for cooler weather with long sleeves and full-length pants.



Stage 3:

The final design chosen combines a functional sleep short design with a short-sleeved t-shirt, combining function and pleasant aesthetics. It has an effective visual balance. The use of the uniquely placed screen print adds a point of difference and a level of interest.



Design criteria	Plus	Minus	Interesting
Colour coordination	The colour palette is essentially a 'muted rainbow'. It is completed quite nicely with the stone colour in the bag and the white t-shirt.	The colour of the screen print is a little bright. I think it would have been more effective if they were darker.	It is interesting how the pyjamas are very busy, but isn't overpowered by the block neutral colours.
Incorporation of design element	The continuation of the irregular circles connects the top to the overall set.	The colours don't completely match and are too pastel for the colour palette.	The off set of the design adds another element and adds a point of difference.
Incorporation of design principle	This sleepwear set skilfully utilises the design principle of repetition. Shape, colour, and line repetition all contribute to a unified set.	Because the printed pants fabric already uses repetition extensively, there is a risk that the set will be perceived as visually overwhelming.	The potentially overpowering design is brought back down through block neutral colours.
Textile construction quality	Cotton poplin is an excellent choice for sleepwear since it breathes well and is tightly knit for durability. Cotton knit t-shirts stretch and move with the body, whereas duck is tough.	Some cotton poplins can be stiff at first. This may become less noticeable if the clothing is washed and worn.	The bag and pyjama shorts are both woven, whilst the t-shirt is knit. In terms of sleepwear comfort and durability, this combines the best of both worlds.
Interpretation of commercial pattern	The commercial pattern fit together perfectly and taught me the fundamentals of using a commercial pattern.	There were a couple adjustments I needed to make to get the fit I desired.	With a single pattern, you may create a variety of looks, such as long trousers, 3/4 length pants, or short shorts.
Safe use of textile manufacturing techniques and equipment	The equipment is safe to use if the procedures are followed.	When I'm guiding my garment through the overlocker cutter, I have to keep my fingertips away from it.	A sleepwear set can be created using a variety of procedures.

Bibliography

Castle, C & Peters, L. (2009). Nelson textiles technology. South Melbourne, VIC.

Fabric 101: Canvas vs. Duck. (2018). Fabric.com. Retrieved from: <https://www.fabric.com/blog/fabric-101-canvas-vs-duck/>

Incredible Feather Art by Kate MccGwire. (2014, January 03). Retrieved from <https://twistedsifter.com/2010/03/feather-art-by-kate-mccgwire/>

Kadolph, S. (2014). Textiles (Eleventh ed., Pearson custom library). Chapter 3: textile fibers and their properties, pp. 27-51.

Kliever J. (2020). Canva. Retrieved from: <https://www.canva.com/learn/monochromatic-colors/>

Mangurten B. (2020). Chicago canvas and supply. Retrieved from: <https://www.chicagocanvas.com/cotton-duck-classifications/>

Principal of Repetition and Pattern. (2013). Visual communication design. Retrieved from: <https://visscom.wordpress.com/2013/04/16/principle-of-repetition-pattern/>

Diary of a wildlife garden: The robin's return | Kate Bradbury. (2016, October 04). Retrieved from <https://www.theguardian.com/lifeandstyle/gardening-blog/2016/oct/04/diary-of-a-wildlife-garden-the-robins-return>

Thompson, M. (2013, December 18). Everything You Need To Know About Feathers: Bird Academy • The Cornell Lab. Retrieved from <https://academy.allaboutbirds.org/feathers-article/>

von Mengersen, B (2019). Cotton (tutorial notes). Retrieved from Australian Catholic University Learning Environment Online: http://leo.acu.edu.au/pluginfile.php/1494783/mod_book/chapter/36999/

DESIGN
EVALUATION