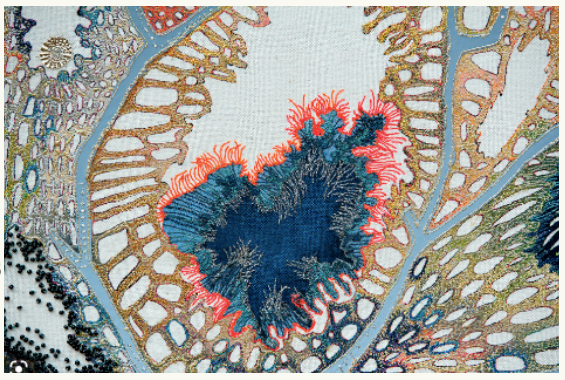
Design Inspiration

Relevance to Apparel Focus Area

I have designed a **1990s** inspired maxi **slip dress** with a feminine, figure skimming silhouette, which fits into the **Apparel** focus area as it is wearable, is functional and easily cared for. A low neckline caters for **surface decoration techniques** of embroidery, beading and fabric sculpture embellishments, creating texture and visual appeal whilst representing the global issue of coral bleaching. **Construction techniques** are inspired by **couture** such as overlocked pressed seams, a double turn hem and bias cut skirt which add elegance to the design. The fabric choice is perfect for a feminine, luxurious haute couture dress that is both **flattering and comfortable.** As the dress can be **washed easily, is wearable and has functionality** the dress is an Apparel item.

This elegant dress has been designed to be worn to the Met Gala 2023, an annual benefit for the Metropolitan Museum of Art in New York City. The slip dress is also a **versatile** dress that can be worn year round with layering and can be moved from day to night with accessorising. It is functional as it is **comfortable** to wear with a lightweight fabric that is soft against the skin and a cut that allows **ease of movement.** The addition of comfortable straps, a semi-fitted bodice and an invisible zip, create comfort, a perfect fit and ease to get on and off. As an occasional wear item, the dress can be spot cleaned easily, allowing it to fit into the **Apparel focus area.**



Louise Gardiner Embroidery

Coral Reef - vibrant to bleached

Design Inspiration

I was inspired by **coral reefs** across Australia and the climatic condition of **coral bleaching.** Corals are sensitive to global warming, as rising sea temperatures trigger bleaching events. This unique dress aims to **bring awareness** to the fact that 91% of the Great Barrier Reef has been affected by coral bleaching. I have emulated this in my design by creating both **colourful and colourless coral designs.** Coral, with its unique texture and appearance can be created into a stunning design and I have chosen to represent coral in a contemporary way by creating a range of decorative techniques through embroidery and beading with a variety of colours and textures to portray the **significance of coral reefs as part of our ecosystem.**

The garment is designed to be worn to this year's **Met Gala** with the 2023 theme 'Karl Lagerfield: A line of beauty.' The Met Gala red carpet is a contemporary source of inspiration. Modern society has developed a **cultural awareness of environmental issues.** Gen 'Z', the age of current school students and young adults, according to a 'Pew' research poll are the most environmentally conscious generation. My dress appeals to this generation as a **timeless piece** not giving way to fast fashion.

Innovative and Creative Ideas and Techniques

The coral will be depicted using a variety of creative and innovative techniques. The combination of textures from 3-dimensional beading, and tactile machine embroidery **combine creatively to reflect the myriad of textures** found within the reef.

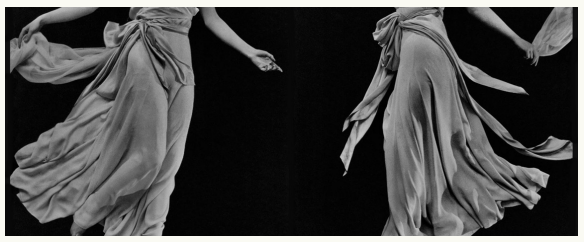
The techniques chosen are "traditional", however, I have chosen to experiment with these techniques to create **innovative and new textures.** I have used bobbin couching to emulate coral, this is new or different from the traditional method of stitching over a yarn and allows for more fluid movement when applied with a free-motion foot, therefore becoming **innovative in its application.** The embroidery techniques employed also **creatively reflect my inspiration of textile artist Louise Gardiner.**

I have taken the traditional technique of shibori used in Japanese dyeing and used the wrap and binding methods to texturize polyester organza fabric through heat-setting. This technique is **innovative as it utilises the thermoplastic properties** of the polyester fibre and the binding techniques of shibori to create a bubble or coral-like appearance in the fabric. This texture and raised appearance produced in the fabric reflects my inspiration of **Mariko Kusumoto in a creative way as it is also 3-dimensional.** I have manufactured my double-turn hem using **innovative foot Bernina #64.** The foot creates a compact 4mm double-turn hem and stitches at the same time. This reflects contemporary manufacturing and removes the need for pressing of a very narrow hem.

Heat Set Shibori

Design Inspiration

1998 Stella McCartney for Chloe



Madeleine Vionnet 1930s bias cut dress

Historical Factors

British designer Stella McCartney became the creative director of French Fashion house 'Chloe' in 1997 - her predecessor was Karl Lagerfield. **The 'Chloe' Spring/Summer collection 1998** was Stella McCartney's first collection for Chloe during Paris Fashion week, and is the inspiration behind my design. The collection was described by Vogue as a simple unpretentious show with slithery negligee dresses. **High end couture finishes** on the dress are inspired by fashion house 'Chloe' and the fabric choice of **satin contributes to the luxurious look.** The runway looks were **simple styles with embellishments** such as lace and embroidery, this is a **simplicity** that I wish to emulate in my design. Some of the designs also featured layered jackets such as **boleros** which I will explore including in my look. Designer Stella McCartney is a well known environmental activist linking to the overarching theme of coral bleaching. **I wish to make a similar statement with the design of my garment through the use of decorative features to achieve this.**
The 1990s slip dress is a play on **vintage underclothes**. In the middle ages a smock was worn under clothes before being replaced with corsets and girdles. In the early 1900s women were fed up with restrictive garments thanks in part to the suffrage movement and the slip became the undergarment for **comfort and modesty**, by the 1970s the slip had faded out of popularity, designers had added linings to garments which made the slip obsolete, it largely disappeared for decades. In the 1990s the slip was **reimagined as outerwear.** It is a defining fashion piece of the glamour of the '90s and the rise of the **celebrity super model**. The slip dress became the iconic look of supermodel Kate Moss. French fashion house 'Chloe' was founded in 1952 by designer Gaby Aghion and produced a luxury fashion, ready to wear line which was an innovation at the time. The design of my dress is **couture ready to wear inspired by a 1998 collection from 'Chloe'.** I wish to use satin for its **lustrous surface** and appearance of **flowing movement.** Satin dates back to mediaeval China where it was made exclusively of silk and traded as a luxury item on the 'silk road' trading route. Satin is a type of weave rather than a fabric, with weft threads skipping over several warp to produce a smooth, shiny fabric. The bias cut dress was pioneered by French Couturier Madeleine Vionnet in the 1930s and remains popular today due to the way it allows the fabric to drape. **Embroidery** has been used as a decorative technique since 30,000 BC and **beading** 40,000 BC - bones and shells were used as decorative items. I also wish to utilise embroidery through freehand stitching and beading as a decorative technique on my garment.

Contemporary Factors

I was inspired by textile artist **Louise Gardiner**, who is a contemporary embroidery artist who creates **machine embroidery artworks**. She has **subverted traditional ideas** of hand embroidery by using a machine to create her works, typically creating large scale artworks which challenge the traditional use of embroidery and its features. Gardiner creates large scale works which utilise contrasting and neon colours, as well as organic shapes and textures. Her work is dense with texture and colour. I wish to **appropriate this use of colour and texture into a smaller scale** suitable for the dress, this creates a wearable decorative feature for apparel design. I will explore using machine embroidery to add **tactile texture** to my design, in a similar way to Louise Gardiner as she uses embroidery for visual appeal. Louise also uses beading to add an extra layer of creativity to her work, by using contrasting colours to draw the eye to the smaller details. Apparel design must be unique and visually engaging for the wearer.
Mariko Kusumoto is a contemporary textile artist who creates various **wearable art** forms **inspired by the ocean and ocean life.** Kusumotos **contemporary manipulation** of organza through **heat distortion** and wire form has allowed her to portray coral in a sculptural manner and create wearable art forms. For my design, I was able to creatively make coral embellishments that are depicted in a detailed and intricate manner. Kusumotos manipulation of fabrics inspire me to manoeuvre polyester organza by heat setting the fabric in the oven, to subtly textures of coral.
The Met gala is a fundraising benefit for the Metropolitan Museum of Art in New York City. Often the focus is on **celebrities and their red carpet** looks rather than the fundraising event. Many celebrities use this as a platform to make a **fashion statement** or to highlight ongoing issues within society. In 2021 celebrities took an opportunity to make a **statement about social issues** in America at the Met Gala. With the theme as "In America; a lexicon of fashion". Congresswoman Carolyn B. Maloney wore a dress with "equal rights for women" printed on the sides, showing her support for the equal rights amendment which would guarantee equality rights for men and women. I wish to make a similar statement in my garment to highlight the current global crisis of coral bleaching.

Celebrities using the Met Gala carpet to make a statement

Visual Design Development

Design One:

Key: Design One.

1. Coral machine embroidery
2. Coral hand embroidery
3. Linen underskirt/Organza overskirt.
4. Linen top
5. Buttons/Rouleau loops
6. Linen fabric top to allow for stability of machine embroidery
7. Rolled hem
8. Wire form coral

Links to Inspiration:

My first design features a **full length**, **strapless dress** decorated with **machine and hand embroidery** positioned on the bodice and a linen skirt with an organza over skirt. The strapless neckline allows for the **coral embroidery** inspired by **Lousie Gardiner** to be the showcase of the dress. Whilst the designs of **Stella Mcartney's for Chloe collection** can be seen in the shape of the skirt and bodice. **The covered buttons** and **rouleau loops** allow the wearer to close the design, compared to a zipper the buttons display a more sophisticated look, without gaping or gathering of fabric. The length and shape of the dress allows it to be worn at formal events. **Couture techniques of finishes**, the seam finish and hem finishes allows the garment to be washed and not fray. The freehand machine embroidery combined with hand embroidery in **bright colours** on the front of the bodice relates back to the inspiration and reflects coral as well as the work of Lousie Gardiner. Whilst the linen skirt with organza overskirt gives the dress an elegant formal feel.

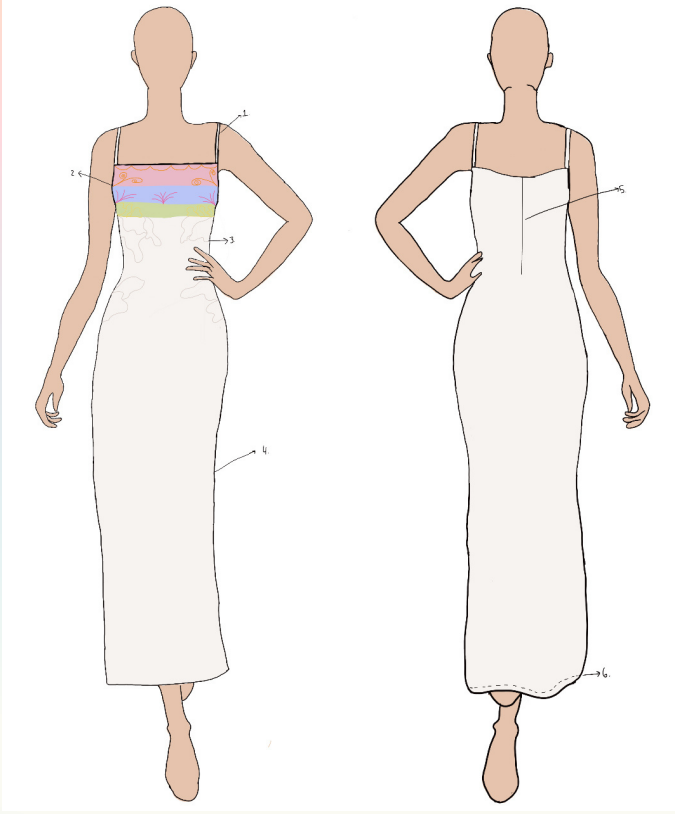
Strengths:

A formal evening dress that is able to be worn to a range of occasions, with sophisticated detail of buttons and rouleau loops. Colourful machine embroidery and wire form across the bodice give the dress an aesthetic and unique look reflecting Louise Gardiner works. The linen bodice is able to hold the machine embroidery and allow it to hold its shape.

Weaknesses and evaluation:

The coral bleaching section of the machine embroidery sits too far down the bodice causing proportional problems.The large area of embroidery takes away from the slip dress design. It does not reflect the simple designs of the Chloe by Stella McCartney collection and haute couture designs. The Wire form doesn't allow for the dress to be washed, limiting its wearing abilities. In design 2, straps will be added to aid comfort for the wearer and the top and skirt will be changed to make a dress so that a more 1990s inspiration is achieved.

Design Two:



Key: Design Two.

1. Spaghetti straps
2. Coral machine embroidery
3. Bleached coral machine embroidery
4. Linen skirt to allow for stability of embroidery
5. Invisible back zipper
6. Rolled hem

Links to Inspiration:

My second design aligns with my inspiration of a **1990s slip dress** with the smaller area of embroidery allowing the fabric to drape and create the feminine silhouette. The combination of **beading and embroidery** create texture. The issue of coral bleaching is now subtly raised without becoming the whole focus of the dress. The addition of spaghetti strap and back zip enhance comfort and ease of wear making it more functional as an apparel item. The **free-hand machine embroidery** and **beading** representing coral, whilst still a feature of the dress, do not take away from the desired silhouette. The bias cut allows the fabric to **drape and accentuate the line of the body**.The combination of **beading and embroidery** create texture. The smaller area of embroidery does not create an unnatural contrast of heavy embroidery to the lightness of the dress design and fabric. Too much embroidery takes away from the feature of the bias cut satin. The issue of coral bleaching is now subtly raised without becoming the whole focus of the dress.

Strengths:

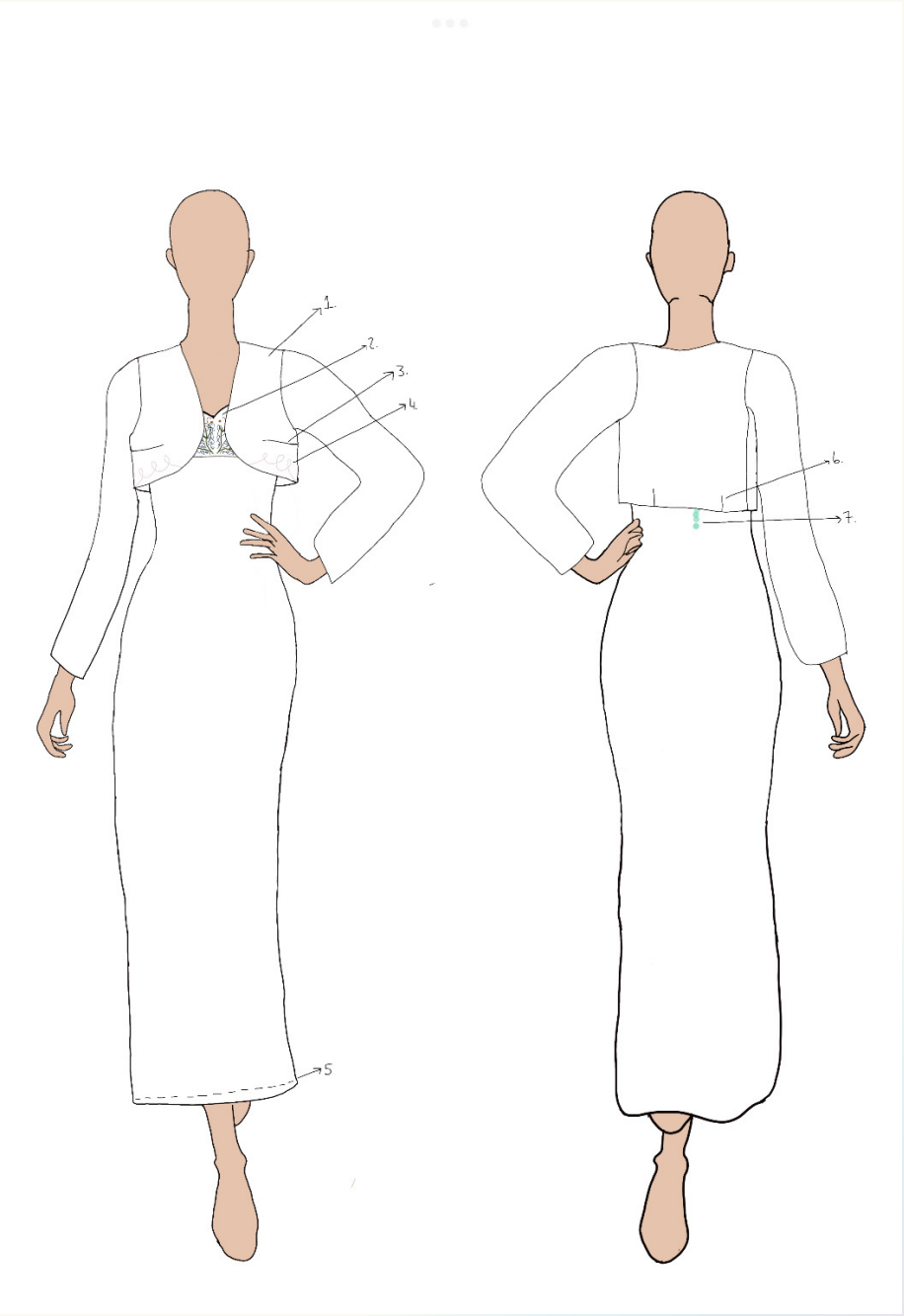
Satin symbolising luxury becomes more of a feature of the highly lustrous dress. The smaller area of embroidery allows for the bias cut skirt to be a showcase . The straps and zipper enhance comfort and ease of wear. The one layer skirt also allows for ease of movement and comfort when wearing the dress.

Weaknesses and evaluation:

The square neckline isn't flattering on the wearer and does not reflect the round and organic shaped machine embroidery of the coral bodice. The back of the dress is very plain for a special occasion, with one colour and no embellishments. The dress may not suit the weather of an evening event. The large amount of freehand machine embroidery takes away from the satin skirt. The satins off white colour takes away from the contrast of the machine embroidery. The zipper also takes away from the designs creative front bodice. The smaller area of embroidery does not create an unnatural contrast of heavy embroidery to the lightness of the dress design and fabric. Too much embroidery takes away from the feature of the bias cut satin. In design 3, the neckline will be altered to create a sweetheart shape, making it more flattering for the wearer, and a jacket will be added to further embellish, reinforcing the coral bleaching inspiration.

Visual Design Development

Design Three:



Key: Design Three.

1. Bolero jacket
2. Freehand machine embroidery
3. Bolero darts
4. White "coral bleached" freehand machine embroidery
5. Rolled hem
6. Back darts
7. Zipper covered by buttons/rouleau loops

Bodice Detail:

Links to Inspiration:

My third design has allowed me to showcase the climatic concern of **coral bleaching** in a creative and innovative manner. The addition of a **cropped bolero jacket** has added a stylish finish to the dress as well as functionality of warmth for an evening event. Organically placed **organza coral creations** have emphasised the message of my dress. Modifying the bodice to a flattering sweetheart shaped bodice complements the **embroidery patterns** and aligns to a **classic slip dress** design. The addition of **rouleau loops and pearlized buttons** over the **invisible zip**, adds contrast, texture and interest to the back of the dress. Rouleau loops and buttons are also a symbol of an elegant design and hide the functionality of the zipper.

Strengths:

This design is a balance between function and aesthetic appeal whilst showcasing a global environmental issue. Appropriations of textile artist Louise Gadiner are able to complement the outfit with overpowering it. The jacket can be removed from the outfit for all weather and is bemsilk lined for comfort and a high end couture finish. The elegance is also emphasised with the rouleau loop and button finish on the centre back. The same fabric choice for jacket and dress creates a seamless look.

Weaknesses and evaluation:

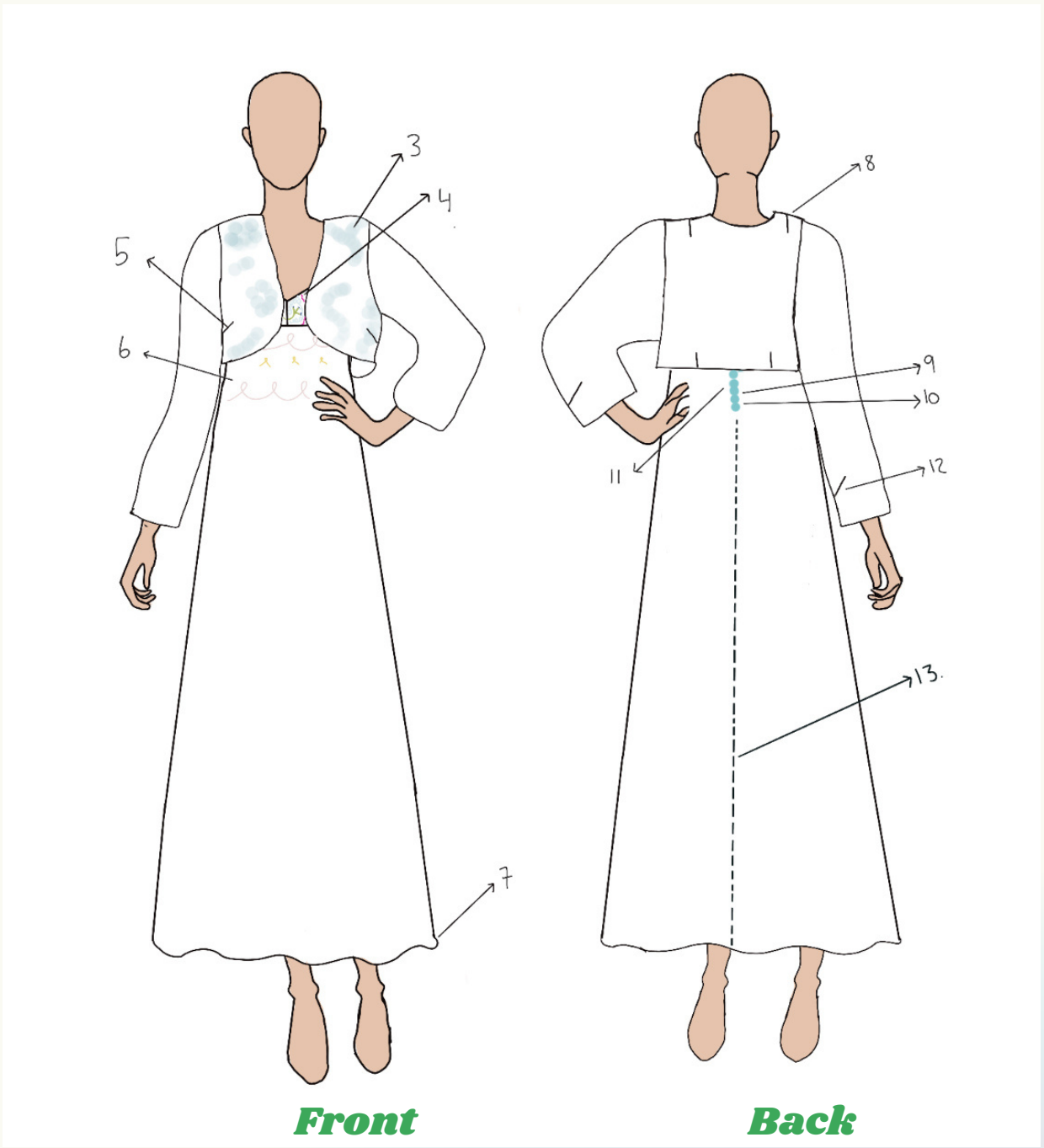
Although the skirt and jacket have a luxurious appeal, without further embellishment they may appear plain. The design is also flat and doesn't have a three dimensional coral feel. The buttons take time to dress and may require assistance. Without a back-seam on the dress it wont fit the wearer as well lessening the elegant feel of the dress. In the final design, the jacket will feature a textured surface to resemble coral, creating a more cohesive outfit reflecting the sources of inspiration.

Aesthetic Analysis of final design:

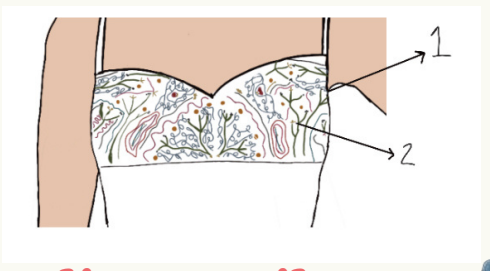
The aesthetic features of the final design combine to create the desired outfit that may be worn to a formal occasion such as the Met Gala.
-**Freehand machine embroidery**, using a range of rayon embroidery threads, has been used on the upper bodice area to convey the images of coral and the bright colours that are abundant in a healthy coral feature.
-**Heat set organza** fabric has been manipulated in its positioning on the bolero jacket to contrast with the freehand embroidery on the dress, to create a three-dimensional texture, drawing the eye around this area of the outfit.
-**Reverse bobbin couching**, using white yarns, is seen below the freehand machine embroidery to provide contrast and draw the viewer's attention to the issue of coral bleaching and the impact it is having on our coral reefs.
-The use of **white 100% polyester satin weave** fabric has been used to construct the dress and bolero jacket due to its smooth and lustrous appearance which creates the desired appearance and will stand out under lights. It also provides a suitable surface for the freehand machine embroidery to embellish the surface.

Visual Design Development

Final Design



Front Back



Bodice Detail:

1. Freehand machine embroidery
2. Beading
3. Heat set organza
4. Freehand machine embroidered bodice
5. Bodice darts
6. Reverse bobbin couching
7. Edge stitch hem
8. Back darts
9. Rouleau loops
10. Pearlised buttons
11. Invisible zipper
12. Sleeve darts
13. Centre back seam

Links to Inspiration:

The freehand machine embroidery on the dress bodice is inspired by the beauty of colourful coral reefs and the work of textile artist Louise Gardiner, whilst the white bobbin couching on the skirt reflects coral that has bleached. The heat set organza on the jacket bodice inspired by textile artist Mariko Kusumoto reflects the delicate nature of living coral reefs. The conscious statement of designs to be worn to the Met Gala was also an inspiration of my outfit.

Functional Analysis of final design:

The overlocked seams used throughout the garments are highly functional. The satin dress and the lining feature seams constructed using overlocked open seams that are functional due to their **strength and durability**. The dress and bolero are both lined for additional **comfort and resilience** when laundering. This is a suitable feature of the design as it allows for the **end-use** to also include everyday wear. The separate lining on the dress skirt further allows for ease of movement. The dress has an invisible zipper at the centre back which allows for **easy access** and **comfort** when wearing the dress. Rouleau loops and buttons are an additional feature, however, their function is not as a closure and only decorative. This does not affect the wear of the garment when worn to special occasions such as the Met Gala, as the item is intended as apparel and is not required for quick changes as in some costume instances. The darts on the bust of the dress, and the body and sleeve of the bolero are functional, **fitting** the garments to the wearer's figure and adding to **comfort**. The satin fabric has a **silky, smooth handle** and is cool against the skin which allows it to be worn comfortably over a period of time. The straps on the dress serve a function to hold the garment up on the body.The hem on the dress skirt is narrow allowing the fabric to hang without weight and allows for **easy care** without fraying.

Elements and Principles of Design of final design

Colours throughout the design are deliberately chosen to reflect the **vivid** colours of coral before bleaching and the white tones after bleaching. The bodice features various **complementing tones** which work in **harmony** to evoke imagery from the design inspiration of coral. The three dimensional **texture** created through textile embellishment such as couching, machine embroidery and beading, similarly reflects the coral inspiration. These bright tones are **contrasted** with a monotone white-on-white embellishment of the skirt. The contrasting change from colour to white effectively reflects the coral bleaching process. The organic shapes of the embellishments **contrast** with the straight lines created by the straps and neckline of the dress. This adds **interest** and draws the eye up towards the wearer, the **silhouette** of the dress is A-line which **enhances** the waist and creates the illusion of being taller by drawing the eye upward. This sense of **direction** complements the use of colour from above. The skirt is cut on the bias, allowing it to drape beautifully. The **balance** between the bodice and skirt is not in **proportion** which further **emphasises** the impact of coral bleaching as there is more white than colour. The buttons at the centre back of the dress are an aesthetic feature and use **repetition** of a circular shape to create a focal point on the otherwise simple back of the garment. Pale green, pearlised button is intended to create **contrast** with the plain white garment, whilst also reflecting the inspiration of the ocean. The **curved lines** of the freehand machine embroidery draw attention to the bodice of the dress, showcasing the coral design. The **vertical** seams of the empire dress, draw the eye out from the body, with the **curved** front of the bolero jacket, contrasting to create attention.

The bolero jacket is **complementary** to the dress **silhouette** as it also cuts the wearer at the waist and **emphasises** the hourglass figure. The jacket is constructed from the same delustered satin which **harmonises** the two pieces as one garment. The three dimensional **texture** created by heat set shibori creates a raised coral-like dimension to the fabric. The iridescent organza used in the texturisation is a **soft blue hue** which complements the pearlised buttons and again links back to the inspiration of coral and the ocean. Together the pale green buttons, soft blue organza and white fabric create a **monochromatic** colour scheme which is intended to depict the low contrast colours as seen in bleached coral. This is in contrast to the **bright values** of the embroidery and beading on the dress bodice. The **curved shape** of the bolero front panel softens the **lines** created by the sleeves and darts, and complements the **organic shape** of the heat set shibori manipulation.

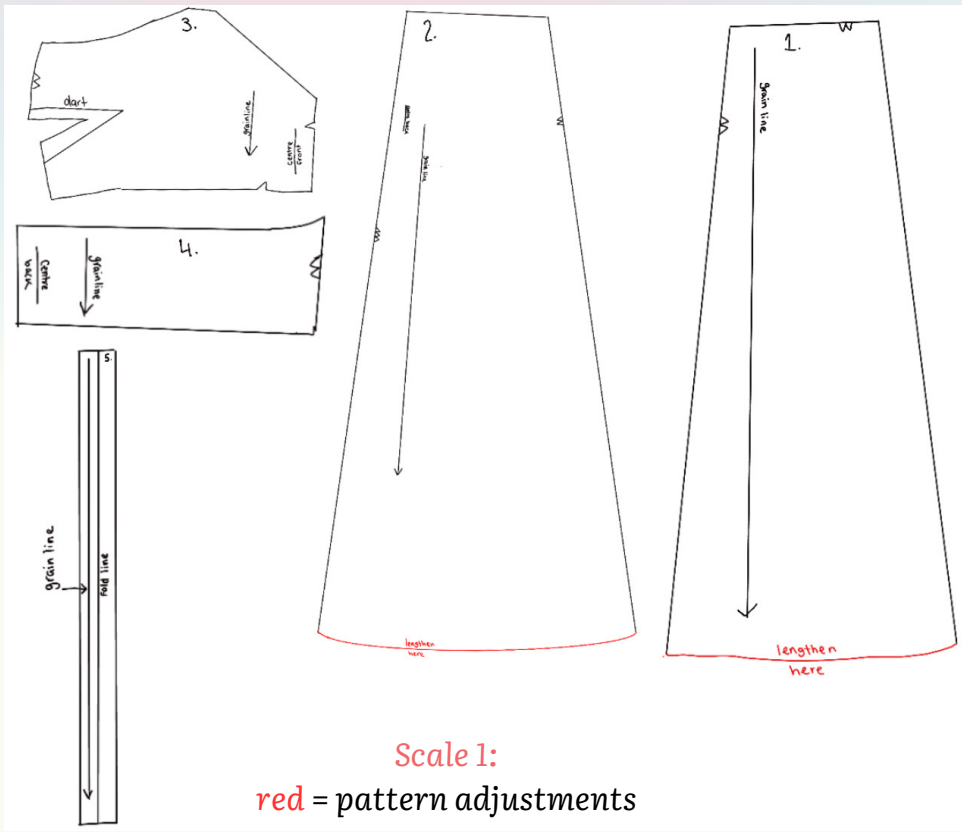
Manufacturing Specifications

Description:

The 1990s inspired maxi-length dress consists of a bias-cut skirt and empire line, sweetheart cut bodice with couched embroidery detail. The dress is constructed from white 100 % polyester Delustered Bridal Satin, which is fully lined with 100% acetate plain weave fabric.The bodice includes bust darts for shaping and thin straps to hold the dress on the wearer. The dress is finished with an invisible zip at the centre back. The coral inspired freehand machine embroidery, using 100% rayon threads and beading is multicoloured on the bodice and changes to white on the skirt to reflect coral bleaching. The dress is finished with an edgestitch hem. The dress was created using the **Vogue V9278** pattern and the **length adjusted** from a midi to a maxi-length dress by extending the length of the skirt by 30cm.
The cropped bolero jacket features curved shaping on the front panel. The bolero is constructed from white 100% polyester Delustered Bridal Satin and lined with 100% acetate plain weave fabric. Front panels include bust darts for shaping. A heat-set organza overlay is included on the front panels of the jacket. This texture is created using a heat-set shibori technique from the complimenting blue organza before basting onto the front of the jacket. The jacket was created using the **Burda 7686** pattern and **modified** to include front overlay panels and is fully lined instead of a double-turn hem. The pattern was **modified** by cropping the jacket and shortening the arms.

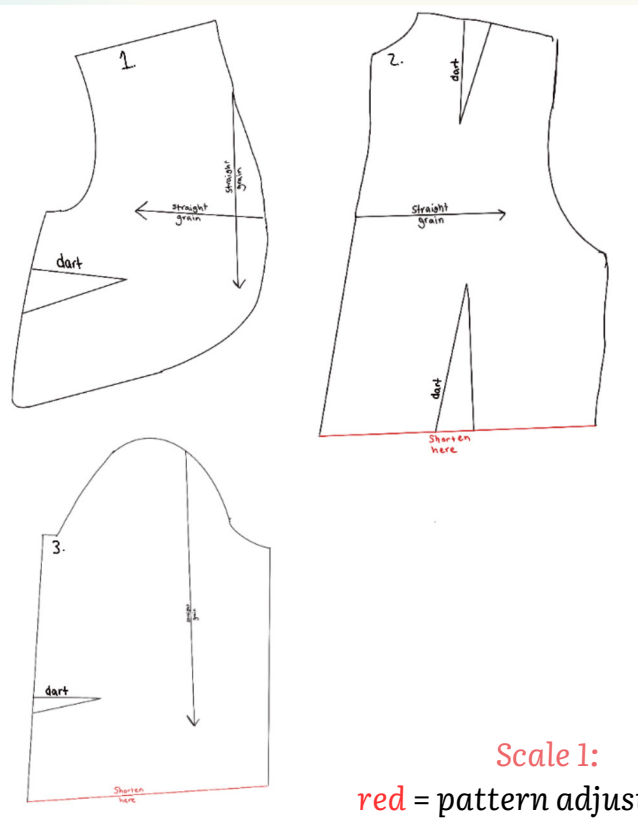
Pattern Pieces

Dress



Scale 1:
red = pattern adjustments

Bolero



Scale 1:
red = pattern adjustments

Key:

Ratio 1:10
Seam Allowance 1.5cm
Hem Allowance 2cm
< Dart
Notches
Grain-line
Zipper

Cutting Table: Dress

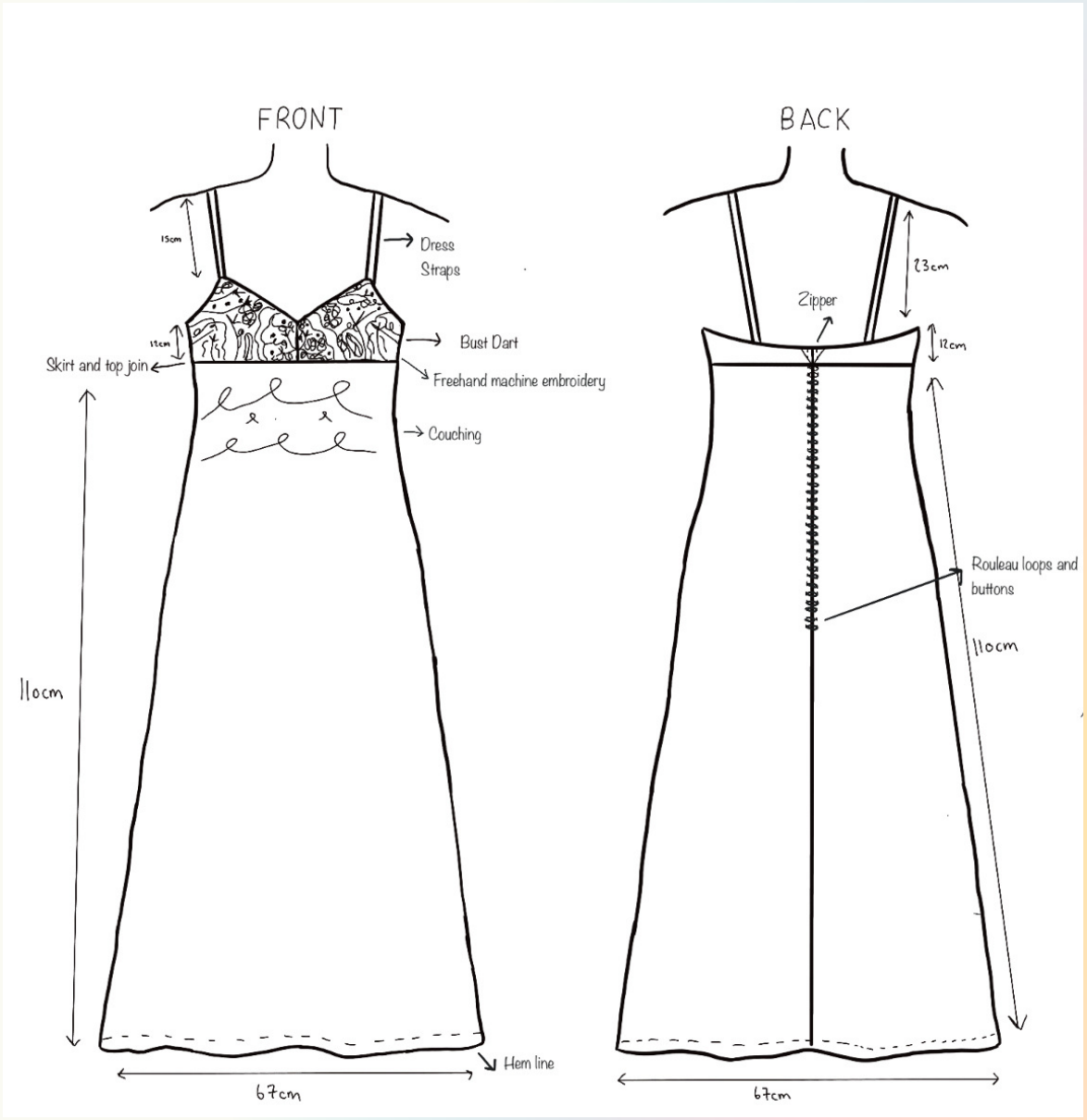
Pattern Piece #	Main fabric (Delustered Bridal Satin 100% polyester)	Lining (100% acetate)	Tear away
1. Skirt front	Cut 1 on fold	Cut 1 on fold	
2. Skirt back	Cut 2	Cut 2	
3. Bodice front	Cut 1 on fold	Cut 1 on fold	Cut 1 on fold
4. Bodice back	Cut 2	Cut 2	
5. Straps	Cut 2		

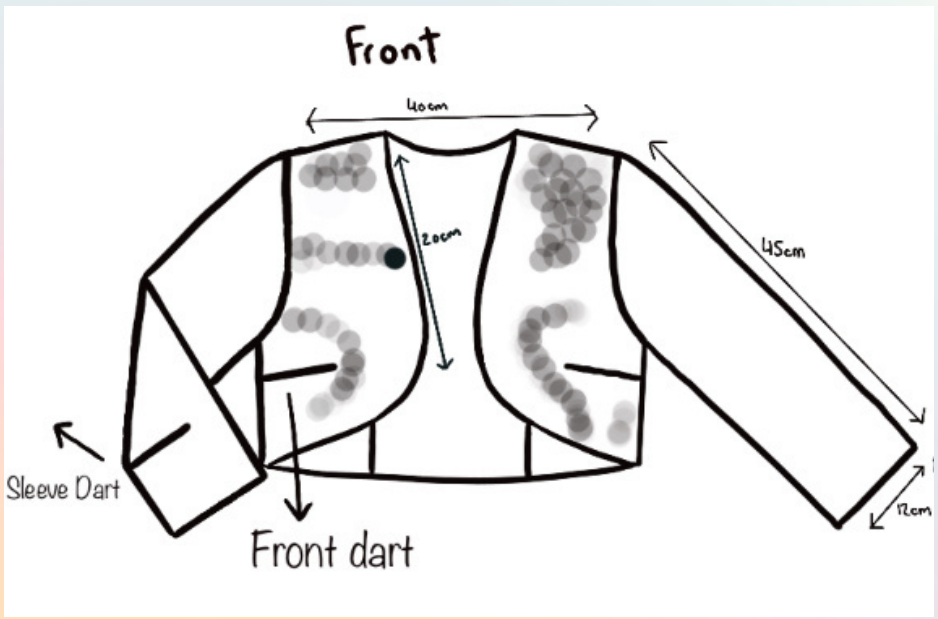
Cutting Table: Bolero Jacket

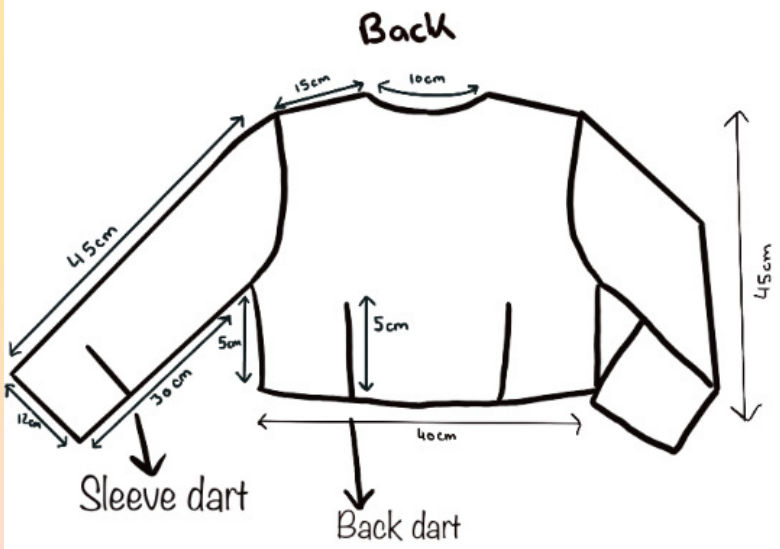
Pattern Piece #	Main fabric (Delustered Bridal Satin 100% polyester)	Lining (100% acetate)	Organza overlay (100% polyester)
1. Front	Cut 2	Cut 2	Cut 2 (once heat set)
2.Back	Cut 1 on fold	Cut 1 on fold	
3. Sleeve	Cut 2	Cut 2	

Manufacturing Specifications

Production Drawings







Key:

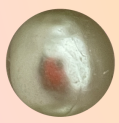
1.5cm Seam Allowance
30cm invisible zipper
20mm hem allowance
Scale 1:10

Order of Construction:

1. Cut out fabric pattern pieces for bolero and dress following cutting table.
2. Ensure to cut the skirt on the bias.
3. Overlock delustered satin dress pieces and bolero pieces to prevent prevent fraying and create clean, finished edges.
4. Draw embroidery design with Frixion pen. Attach freehand foot, drop feed dog. Place tearaway behind base fabric. Freehand machine embroider design.
5. Hand sew beads onto bodice.
6. Sew Bodice darts, sew dress straps then attach to bodice, sew skirt side seams and attach to bodice.
7. Repeat step 5 with lining and attach lining to dress.
8. Straps: with right sides together, stitch seam. Trim excess seam allowance. Turn to right side. Pin in position on dress and baste.
9. Sew skirt side seams and attach to bodice at waist.
10. Insert invisible zipper and rouleau loops on the centre back of the dress. Hand sew buttons to fit loops.
11. Hem the dress and lining to desired length, using top stitching hem.
12. Tie the marbles into the organza with string and put in the oven for 25 minutes at 165^{o}C. Allow fabric to cool, remove marbles.
13. Cut the organza into coral shapes and hand stitch onto the front of the jacket.
14. Sew sleeve, bodice and back darts on the bolero.
15. Sew side and shoulder seams on bolero.
16. Sew sleeves together then attach to jacket sleeve hole.
17. Attach heat set organza to the bodice of the dress.
18. Repeat steps 11-13 with jacket lining and attach to base fabric. Stitch , leaving a 10cm gap along lower edge.
19. Turn jacket to right side, top stitch around outer edge of seam to secure and blind stitch sleeve lining to base.

Manufacturing Specifications

Costing table:

Sample	Item	Amount	Cost per unit	Total
Dress Pattern 	Vogue pattern V9278 misses slip style dress with back zipper.	1 pattern	$12.99/ pattern	$12.99
Lining	100% acetate - lining fabric white.	3m	$7.20/m	$21.60
Dress and jacket fabric	100% Polyester - Romance delustered satin fabric white.	4m	$18.00/m	$72.00
Thread	Gutermann Polyester Thread white.	4 reels	$2.50/reel	$10.00
Machine embroidery thread	100% rayon emboidery thread (varying colours - red, green, blue, ochre)	8 reels	$5.70/reel	$45.60
Machine embroidery thread	Metallic thread	1 reel	$10.20/reel	$10.20
Zipper 	Invisible zip - white - 30cm	1 zipper	$5.50/zipper	$5.50
Beads	Ribtex glass toho seed bead metallic yellow gold	1 packet	$11.00/packet	$11.00
Beads	Ribtex Glass Seed and Bugle Beads - Steel Blue	1 bag	$4.00/bag	$4.00
Bolero pattern 	Burda pattern 7686	1 pattern	$9.49/pattern	$9.49
Organza fabric	100% Polyester - Fairy organza - blue	3m	$12.00/m	$36.00
Crochet Thread	Milford 100% cotton soft 3 ply yarn - White	1- x 50g ball	$8.00/ball	$8.00
Rouleau Loops	Rouleau Loops - white	50cm	$5.50/m	$2.75
Pearl Buttons 	Pearl Buttons - Green	3 packets	$3.00/packet	$9.00
Tear away	100% Polyester non woven - tearaway	1m	$8.00/m	$8.00
Total Cost:				**$266.13**

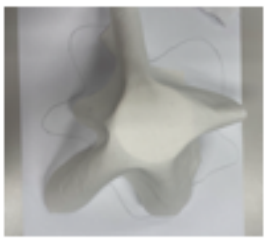
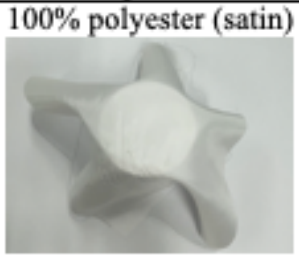
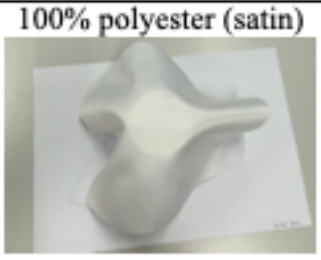
Swing Tag:

Investigation, Experimentation & Evaluation

Materials #1 – Drape of dress fabric

Aim: To determine the most suitable fabric to use for the dress so it will hang with a medium drape, so it sits well on the body and enhances the aesthetic of the garment, and the freehand machine embroidery is able to be seen.

Method: Cut a 10cm-by-10cm circle of each fabric. Stand a tall glass and place the fabric over the top. The fabric with the greater number of folds indicates the fabric with the best drape. Observe results.

100% linen	100% polyester (satin)	100% polyester (satin)
		
Results: Medium to soft drape - 5 soft folds that hang down. Fabric has a slightly textured surface and no lustre.	**Results:** Dancetime satin has soft drape - The fabric has 5 folds and hangs over the cup. The fabric is highly lustrous.	**Results:** Bridal satin has medium drape - fabric falls over the cup into 3-4 larger folds. The fabric is lustrous.

Conclusion: The 100% linen fabric produces a soft to medium drape, however the texture is undesirable and will not add to the aesthetic of the garment. The 100% polyester satin weave (dancetime) fabric is too soft and may not support the addition of freehand machine embroidery in a way that the dress exhibits these features effectively. The 100% polyester satin weave (bridal) has a medium drape and good lustre, holding its shape and allowing the dress skirt to stand out from the body.

Justification: The 100% polyester satin weave (bridal satin) is the most appropriate fabric for the dress as it has medium drape that will complement the design of the garment creating a delicate and glamorous aesthetic appeal. It has medium weight, so will be suitable to support the addition of freehand machine embroidery and its lustre will highlight these features.

Materials #2 – Freehand machine embroidery stabiliser

Aim: To determine the most suitable stabiliser to use for the freehand machine embroidery, that creates an aesthetically pleasing design and supports the addition of the yarns on the fabric.

Method: **A) Tear Away stabiliser:** Cut tearaway and satin. Transfer design onto fabric. Place stabiliser behind fabric and secure in embroidery hoop. Machine embroider pattern onto fabric. **B) Solvy:** Cut solvy and satin. Transfer design onto fabric. Place solvy behind fabric and secure in embroidery hoop. Machine embroider pattern onto fabric. Place in water to dissolve solvy. Allow to dry. **C) Vilene 541 dissolvable material:** Cut Vilene 541 and satin. Place Vilene 541 on top of satin fabric. Transfer design onto Vilene 541. Secure fabric and Vilene 541 in embroidery hoop. Machine embroider pattern onto fabric. Place in water to dissolve the Vilene 541. Allow to dry. Observe results.

Tear Away stabiliser	Solvy	Vilene 541
Results: Tear away creates a stable surface and prevents the fabric from puckering and bunching.	**Results:** Solvy doesn't create a flat surface as it is a flimsier material. When creating machine embroidery, it caused puckering within design.	**Results:** Vilene 541 creates stable surface to machine embroider on, causes the embroidery to shrink/pucker once it has been washed away.

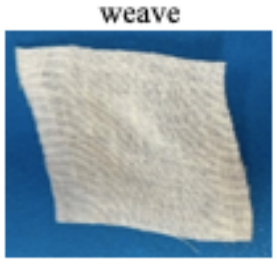
Conclusion: Tearaway creates stability when stitching and the yarns sit flat against the satin fabric. Using solvy behind the satin fabric created a design with puckers, which is not desirable. The Vilene 541 dissolvable material created a flat surface to stitch the design, although when it was dissolved under water, the final stitching was slightly puckered. There is also the risk of colour run off when washing away the material.

Justification: Tearaway is the most suitable material for using as stabiliser when creating the machine embroidered coral on the garment as it is the easiest to work with, allowing the design to be produced effectively and professionally. It provides a consistent surface, allowing the design to look aesthetically pleasing to the eye and can be easily removed from the back.

Materials #3 – Dimensional stability of dress lining

Aim: To determine the most suitable fabric for the dress lining that has a high degree of dimensional stability and will not pull out of shape when worn and won't distort over time.

Method: Cut 2x pieces of each fabric to 5cm by 5cm. One piece of each fabric is the control; the other piece will be tested. Pull diagonally opposite corners of the test fabric. Hold for five seconds, still pulling. Compare the tested fabric to the control square and measure the degree of change.

100% acetate, plain weave	100% polyester satin weave	100% cotton, plain weave
		
Results: Pulls out of shape and then returns quickly to original shape.	**Results:** Stretches out of shape and takes a few seconds to return to shape, although still slightly distorted.	**Results:** Distorts out of shape, takes a few seconds to return to original shape, still slightly distorted.

Conclusion: The 100% acetate plain weave fabric returned to its original shape very quickly after being pulled, indicating good dimensional stability. Samples 2 and 3 distorted out of shape when pulled and did not return to their original shape very quickly so once the fabrics would be made into the lining, this could lead to the dress becoming saggy and change shape, especially after yarns/freehand machine embroidery will be added to enhance its texture. The satin fabric, as lining, will add weight to the dress, making it heavier to wear.

Justification: 100% acetate plain weave fabric is the most suitable fabric to use as the lining as it pulled out of shape and returned quickly to its original shape. The fabric needs to last the length of use as the dress lining and the fabric's strength and excellent dimensional stability will support the satin dress without adding extra weight on the wearer and hold its shape as an Apparel item.

Materials #4 – Yarn for Embroidered coral

Aim: To determine the most suitable yarn to create the embroidered coral on the dress that looks aesthetically appealing and creates the desired texture.

Method: Cut three pieces of 100% polyester satin weave fabric**.** Place tearaway behind fabric and secure in embroidery hoop**.** Attach a freehand embroidery foot and lower the feed dog**.** Sew coral on the fabric using **100% Rayon thread** and **100% Polyester thread**. Thread an embroidery needle with **100% cotton stranded thread** and using running stitch and French knots, create a coral design. Observe results.

100% Rayon thread	100% Polyester thread	Stranded cotton
Results: Lustrous yarn, easy to stitch and aesthetically appealing appearance, tearaway enhances design.	**Results:** Dull appearance, easy to stitch with and wide range of colours available.	**Results:** Care needed when stitching design to make it look visually appealing so the image looks good.

Conclusion: The rayon thread allows the use of bright, vibrant colours which introduces an element of creativity and interest, as well as being easy to stitch with and producing a pleasing appearance. The polyester yarn is not as lustrous so does not produce an aesthetically appealing appearance on the items. It is a strong yarn however and as a result will be used for construction of the item. The stranded cotton yarn is too fiddly to use, making it ineffective and time consuming, and making the stitches look neat was also difficult.

Justification: Rayon sewing thread has proven to be the most effective thread to use for the freehand embroidery for the coral, as it provides a lustrous appearance and is easy to stitch with. The use of the rayon threads allows a wide range of colours to be used to reflect the inspiration and creates an Apparel item that will stand out and be aesthetically appealing to the wearer.

Investigation, Experimentation & Evaluation

Manufacturing Process #5– Suitable seam for dress

Aim: To determine the most suitable seam to use to construct the dress and lining, so they are professional, have minimal bulk and hold the garment together.

Method: Cut 6x 5cmx5cm squares of satin weave fabric. **A) Overlocked closed seam:** Pin right sides together of 2 pieces. Straight stitch 1.5cm from the edge. Overlock edges together. **B) Overlocked open seam:** Overlock raw edge of 2 pieces. Place right sides together and stitch 1.5cm seam. Iron seam open. **C) French seam:** Pin wrong sides together. Stitch 1cm straight stitch. Trim excess fabric away, leaving 3mm seam. Press fabric with right sides together, and pin. Stitch 0.5cm in a straight stitch to secure the seam. Observe results.

Overlocked edges together	Overlocked edges separately	French seam
Results: Prevents fraying to create a neat finish. Quite bulky for fabric type.	**Results:** Prevents fraying to create a neat finish. Time consuming to overlock each edge separately.	**Results:** Quite bulky for fabric type. Time consuming. Neat seam finish.

Conclusion: Overlocked edges together creates a bulky seam, especially due to the quality of the fabric. The open overlocked seam was easy to complete and when the seam is ironed open flat, it will sit against the body. The French seam is strong however it is not suitable for the fabric type as there is bulk created and this may be uncomfortable for the wearer.

Justification: The open overlocked seam is the most appropriate as it is the tidiest finish that is strong and professional to hold the seams together for the life of wear and care and be comfortable for the wearer and offers the most desirable aesthetic appearance.

Manufacturing Process #6 – Suitable hem on dress

Aim: To determine the most suitable hem for the dress and lining so that it is secure and will prevent fraying and provides structure to the design.

Method: Cut 3 pieces of satin fabric 5cmx5cm. **A) Overlocked hem:** Overlock edge of fabric. Fold up 1.5cm, press, pin and stitch 1.3cm from fold. **B) Slip stitch hem**: Fold up fabric 5mm to wrong side and press. Fold up again 1cm and press. Thread needle and use slip stitch to secure. **C) Calvin Klein hem:** Fold up fabric 1cm from lower edge. Attach edgestitch foot #10 to machine, place folded edge next to blade. Move needle position twice to left and stitch. Use duckbill scissors to trim 1mm away from stitching. Fold up fabric 3mm and stitch on top of original stitching. Observe results.

Top stitch hem	Slip stitch hem	Calvin Klein hem
Results: Stitching is seen through the fabric, matching coloured thread to be used. Overlocking can be seen on wrong side.	**Results:** Care needed to make it look good, so no stitches were seen on the right side of fabric. Time consuming method.	**Results:** Neat finish, time consuming to stitch, stitching is seen on the right side of the fabric, easy to stitch around curved edges.

Conclusion: Top stitched hem can be seen on right side of fabric, care needed. Overlocking can be seen if fabric folds up. Slip stitch hem was hard to keep neat and even, although it cannot be seen on right side, making it aesthetically appealing, however it was time consuming. Calvin Klein hem can be seen on right side, although it is neatly stitched, and easy to manipulate around curved edges.

Justification: Calvin Klein hem is the most appropriate hem to finish bottom of dress. This was the most effective method, producing tidiest finish that encloses raw edges, especially due to the fabric type. Using white thread will blend in with fabric and not seen, creating visually appealing Apparel item. Hem is also appropriate for the garment as this hem finish is used by couture labels.

Manufacturing Process #7 – Suitable thread for attaching beads for coral

Aim: To determine the most suitable thread to use to create the three-dimensional aspects of the beaded coral so it is aesthetically pleasing and secure.

Method: Cut 3x 3cmx3cm squares of fabric. Thread beads onto material to create rows of coral that will sit off the dress to create a textured appearance, using the following threads: **A) Florist wire; B) 100% Polyester sewing thread; C) Invisible sewing thread.** Observe results.

Florist wire	100% Polyester sewing thread	Invisible Sewing Thread
Results: The florist wire created an accurate representation of a coral tower. However, it was hard to attach to the fabric without hiding the florist wire.	**Results:** The polyester thread recreated coral in an accurate matter. The thread was also able to be attached to the fabric easily and neatly.	**Results:** The invisible sewing thread was hard to work with and difficult to tie knots in. It was also difficult to attach to the base fabric.

Conclusion: The florist wire was efficient and easy to use, as it keeps the beads in place, however, it restricted the graceful nature of the coral. The polyester thread matched the colour of the beads, and therefore could be easily hidden. It was also strong and secured the beads in place. The invisible sewing thread was difficult to work with and wasn't able to be secured well causing beads to fall off, it was also hard to attach to the fabric.

Justification: The most suitable thread to use to attach the beads to the dress, creating the desired appearance of the three-dimensional coral is using the 100% polyester sewing in matching coloured thread as it the most effective and efficient method that creates the desired appearance. It is strong and allows the beads to be delicate and elegant on the dress.

Manufacturing Process #8 –Suitable Beading technique

Aim: To determine the most suitable beading technique to create various textures which reflect my coral inspiration on the dress so that it will look aesthetically pleasing and neat.

Method: Cut 3x 5cmx5cm squares of satin fabric. **A) Seed bead tower:** thread beads onto strand of thread and knot at end. Secure to fabric at one end. **B) Seed bead loops:** Attach multiple beads on one needle/strand of thread. Secure to fabric at both ends. **C) Bugle bead tower**: thread bugle beads onto strand of thread and knot at end. Secure to fabric at one end.

Seed bead 'towers'	Seed bead 'loops'	Bugle bead 'tower'
Results: Time-consuming method to thread all the beads on the needle due to their size, inconsistent, and weak.	**Results:** Provides structure and strength to the design. Strong and secure method of attaching the beads to the desired effect.	**Results:** Quick and easy to attach beads to thread. Due to bulky bead and dangling nature, beads may not be secure.

Conclusion: Stitching bead towers is a time-consuming method, which requires a lot of precision to ensure they are securely attached. This beading method allows you to create your own designs with the beads, placing them individually wherever you want, however it is not suitable for the dress as they may snag and catch. Stitching seed bead loops is a fast method and allows a change of direction without changing thread. It is also a very secure method. Using the bugle beads to create the tower is not accurate, creating lines of beads that are not strongly secured to the fabric, which is undesirable for my design, as I want it to be long lasting.

Justification: To bead the coral bead features on my dress, I will attach the beads in 'loops' as it is more accurate and enables me to stitch the beads in a variety of directions, whilst knowing they are secure. This will create a successful finished product that is suitable for an Apparel item as the beads will stand out on the design features, making it aesthetically appealing.

Investigation, Experimentation & Evaluation

Equipment #9 – Needle Selection for Beading

Aim: To determine the most appropriate needle to use to attach beads to the satin fabric that creates a neat stitch without pulling or snagging the fabric or creating holes in the fabric that are visible.

Method: Cut 3x squares of satin fabric. Thread needles and prepare desired beads. Using **A) Beading needle, B) Chenille Needle #26 and C) Chenille needle #24,** stitch 4-5 beads onto fabric in a row. Observe the efficiency of the needle, in terms of ease of use and suitability of the beads and project.

Beading Needle	Chenille Needle #24	Chenille Needle #26
Results: Easy to use for continuous beading as it slightly bends and has a small eye that holds the thread when beading for longer.	**Results:** Easy to thread due to size of eye. Thread falls out easily when working quickly, disrupting the process of beading, leaves a hole in fabric.	**Results:** Needle hole is large, needle is stiff which makes stitching a few beads at a time slow the process down. Small holes were left in the fabric.

Conclusion: Beading needle allowed for continuous use, whilst maintaining its shape and structure. It was sharp and its small eye minimised the thread from falling out. Chenille needle #26 was easy to use and thread, although the thread fell out of the eye too often, slowing down the process of beading and leaving small holes in the fabric, which is undesirable for the finished product. Chenille needle #24 was also not suitable for the project, as it was unsustainable for the level of beading required on the dress and left small snags in the fabric.

Justification: The most appropriate needle for the beading would be the Beading needle as it was the most consistent in terms of stability and efficiency. There was little to no issues with the thread falling out, and therefore the beading process was coherent and neat stitches were achieved with no pulling or snagging of the fabric.

Equipment #10 – Needle Selection for Satin fabric

Aim: To determine which needle is most appropriate for stitching the polyester satin fabric for the garment that creates no pulls or snags.

Method: Cut six 5cm by 5cm squares of polyester satin weave fabric. Place two pieces together (right sides) and stitch a straight seam (SW – 0.0, SL – 2.5), using **universal 90 and 70** needles and a **Sharps** needle. The needle that leaves the least snags is the most appropriate for use on the silk chiffon plain weave fabric.

Universal 90	Universal 70	Sharps
Results: Slight puckering and pulls in the fabric area surrounding the stitch.	**Results:** Slight puckering and leaves visible holes in the fabric.	**Results:** Smooth surface achieved with no visible marks or snags.

Conclusion: The universal 90 and universal 70 needles are unsuitable for creating seams as they both produced puckers and pulled in the fabric that resulted in a seam that does not sit flat. In comparison to the other needles, the Sharps needle doesn't leave any aspects of visible holes or snags/pulls, stitches evenly and smoothly, producing a neat finish.

Justification: The Sharps needle is the most appropriate to use on the 100% polyester satin weave fabric as it produces smooth stitches, which creates an aesthetically appealing Apparel items, without leaving visible holes or snags/pulls. By replacing the sharps needle at regular intervals, this will also ensure that smooth even stitches are produced on the costume so it will look effective on the wearer.

Equipment #11 – Most Effective Marking Tool

Aim: To determine which tool of marking is the most effective when marking construction points and decorative features for freehand machine embroidery on Delustered Bridal Satin.

Method: **A) Carbon paper and tracing wheel**: Place carbon paper face down on the fabric, place pattern to be drawn on top and use a tracing wheel to mark the fabric. **B) Dressmaker Pencil**: Draw a single line. Rub to remove. **C) Frixion pen**: Draw single line. Iron to remove. Observe results.

Carbon paper and tracing wheel	Dressmaker Pencil	Frixion pen
Results: Easy and quick to use although care needed when going around corners to achieve accuracy. Distinctive to see.	**Results:** Dressmaker pencil is efficient and easy to draw curves, although it was difficult to remove.	**Results:** Easy to use to draw features, line is removed effectively when ironed.

Conclusion: The carbon paper and tracing wheel successfully created accurate lines on the fabric, however over small sections are time consuming and difficult to manage around odd shapes. It is also difficult to remove and as it needs to be used to distinguish where beads will be placed, etc, this is not desirable. Dressmakers pencil was easy to use although faint lines were created, and they may be difficult to see on the fabric. The Frixion pen is very quick and easy to use and will effectively iron off after use.

Justification: The Frixion pen will be used for design features such as freehand machine embroidery and on the fabrics when making lines to outline the construction techniques and can be easily removed so the final design is not affected, making it suitable for utilization on an Apparel item.

Equipment #12– Tool to create Bleached Coral

Aim: To determine the most suitable tool for couching which will create the desired textures mimicking my coral inspiration and be aesthetically appealing.

Method: **A) Bobbin couching:** Wind the crochet yarn onto the bobbin. Thread machine with 100% polyester sewing thread. Place fabric right side down and stitch. Crochet yarn side will be used. **B) Spool couching:** Thread sewing machine with 100% polyester sewing thread. Thread crochet yarn on separate thread stand and then under the machine foot. Stitch. **C) Machine foot**: Place yarn on fabric in desired pattern and stitch over the top of the yarn using zigzag stitch to secure. Observe results.

Bobbin couching	Spool couching	Machine foot
Results: The bobbin couching was easy to use. It accurately recreated an effective representation of bleached coral.	**Results:** The spool couching was harder to use as there was excess thread around the machine. It was also hard to control and didn't recreate coral accurately.	**Results:** The machine foot was easy to use and recreate coral. Although it didn't wasn't neat and accurate.

Conclusion: The bobbin couching worked the best as it was sewn evenly down onto the fabric and didn't have any extra thread. It was also easier to sew down onto the fabric as there wasn't any extra thread hanging over the machine. It also allowed for the most accurate recreation of coral.

Justification: The bobbin couching work is the most suitable method of couching the yarns to the fabric as it was easy to stitch and was able to accurately recreate the coral inspiration, creating visual appeal for the Apparel item.

NOTE:
Experiments are missing as they are physical.