

UNDERGRADUATE FINAL YEAR PROJECT REPORT



**Faculty of Engineering
Department of Textile Engineering**

DESIGN OF WOVEN TOP AND BOTTOM FOR YOUNG FEMALE CONSUMER

Course Code: TE427

Course Title: Project (Thesis)

Submitted By

**Shorifur Rahman Ayon
Abdullah Al Masud**

**ID: 191-23-5594
ID: 191-23-5517**

Advised By

**Abdullah Al Mamun
Associate Professor
Department of Textile Engineering**

**This Report Presented in Partial Fulfillment of the Requirements for the Degree
of Bachelor of Science in Textile Engineering**

Advance in Apparel Manufacturing Technology

Fall – 2022

Author's Declaration

We declare that we are the sole authors of this project. It is the actual copy of the project that was accepted by our advisor(s) including any necessary revisions. We also grant Daffodil International University permission to reproduce and distribute electronic or paper copies of this project.



.....

Signature

Abdullah Al Masud

191-23-5517

abdullah23-5517@diu.edu.bd



.....

Signature

Shorifur Rahman Ayon

191-23-5594

sharifur23-5594@diu.edu.bd

Statement of Contributions

Shorifur Rahman Ayon and Abdullah Al Masud carried out the experiment. Shorifur Rahman create the design of the garments, and also made all the samples. Shorifur rahman takes feedback from the target audience and communicates with them to improve the design. Shorifur Rahman also calculated the consumption and CM of garments. Abdullah Al Masud took all the measurements of the garments and also did the testing of the fabric as well.

Abdullah Al Masud made the beginning part of the order sheet and Shorifur Rahman made the ending part of the order sheet. Shorifur Rahman Ayon took the lead in writing the manuscript. All authors provided critical feedback and helped shape the research, analysis, and manuscript. Shorifur Rahman Ayon and Abdullah Al Masud conceived the original idea. Abdullah Al Mamun supervised the project.

Acknowledgments

“In the name of ALLAH, the most Merciful and Beneficent”

At first, we would like to thank almighty ALLAH for allowing us to complete the report. we also want to thank all the people who have given their support and assistance and an extremely grateful to all of them for the complete report successfully. Daffodil International University provided us with enormous support and guidance for my internship program to be completed successfully. It is for the first time that we can gather real-life experience working on a comparison report. We also like to express our deepest sense of gratitude to supervisor professor Abdullah Al Mamun, Associate professor, Department of Textile Engineering for his continuous advice, encouragement, and guidance to make the Project report. Last but not least, Appreciation goes to our precious family for their never-ending love and inspiration at every stage of our life. Without their continuous, we realize that we would not be the person we are right now.

Executive Summary

This study looked at the specific parts, needs, and preferences that women have for the clothes they wear every day. It paid special attention to how the clothes work, how they look, and how they affect the environment. At first, it was thought that useful features would be the most important. However, the study found that aesthetic features were more important, while expressive features were less important overall. But the participants still liked things that had feminine touches, and unique design elements, and showed off their own personalities. This study gives important information about the fashion tastes and concerns of a certain group of businesswomen. This can help clothing companies figure out what features women want in their everyday clothes.

The study shows how important it is to think about how clothes make people feel, how they can be used, and how they affect the environment. Even though most of the participants were happy with the options for formal and casual clothes, there was still room for improvement. The study involved getting feedback from the participants, making prototype clothes based on their ideas, and judging the designs. The suggestions were then put into a second round of prototypes, which were shown to the participants. Based on their feedback, more changes were made. The local apparel industry might benefit from this all-around look at the creative and ordering processes. When designers know what their target women want from their clothes, they can make clothes that are not only needed but also wanted.

Table of Contents

Executive Summary	iv
Table of Contents	v
List of Tables	ix
List of Abbreviations	x
CM Cost of Manufacturing	x
ETP International Organization for Standardization	x
cm Centimeter	x
HPS Highest shoulder point	x
WB Waistband	x
SMV Standard Minute Value	x
List of Formula	xi
Similarity Index Report	xii
<i>Project Title</i> DESIGN OF WOVEN TOP AND BOTTOM FOR YOUNG FEMALE	
CONSUMER	xii
Chapter 1: Introduction	1
1.1 Background Information	1
1.3 Aims and Objectives	2
1.4 Methodology	3
1.5 Report Outline	6
1.6 Prototype Development	6
1.6.1 Fabric and Trim Sourcing	6
Chapter 2: Literature Review	7
Chapter3: Experimental Procedures – Model Description	9
3.1 Idea Generation:	9
3.1.1 Choosing the target audience	10
3.2.1 Choosing the type of product	10
3.2 Sketched the design	11
3.3 Draw it digitally	13
3.4 Fabric sourcing	13
3.5 Fabric testing	14
3.5.1 Lab test results for top part fabric	14

3.5.1.1 Using the strip method to figure out maximum force and length at extreme load:	14
3.5.1.2 Determination of the abrasion resistance of fabrics by the Martindale method	15
3.5.1.3 To use an altered Martindale method to find out how resistant fabrics are to pilling, fuzzing, and moldings	15
3.5.1.5 Colour Fastness to Washing	16
3.5.2 Lab test results for bottom part fabric	16
3.5.2.1 Determination of maximum force and elongation at maximum force using the strip method	16
3.5.2.2 Determination of specimen breakdown	17
3.5.2.4 Determine the pH of the aqueous extract in the textile.	18
3.5.2.5 Colour Fastness to Washing	18
3.6 Taking the measurements	18
3.7 Creating the first or proto sample	23
3.7.1 Consumption of the proto sample	24
3.7.2 Consumption of bottom part	26
3.7.3 CM of the proto sample	28
3.7.3.2 CM of bottom part	29
Sample Costing Format:	29
3.8 Identify mistakes and find room for improvement	30
3.9 Changes made according to the suggestions	30
3.10 Second sample making	30
3.11 Displaying it to the target audience	32
3.12 Create photo sample	33
3.13 Create of pp sample	33
Chapter 4: Result and discussion and Project Demo	34
4.1 Order sheet	34
Chapter 5: Professional Responsibilities, Health, Safety, Socio-cultural, and environmental consideration	46
5.1 Introduction	46
5.2 Codes and standards used in the design approach	46
5.3 Ethical principles	47
5.3.1 Livable Wages	47

5.3.2 Going Green	48
5.3.3 Fair Labor Practices	48
5.4 Health, safety, legal and cultural issues	48
5.5 Impact of the project on the environment and sustainability	49
Chapter 6: Conclusions	50
Chapter 7: References	52

List of Figures

Figure 1: Detailed flowchart of Phase Model	15
Figure 2: final sketch.....,	21
Figure 3: Digital Draw.....	22
Figure 4: Figure 5: Measurement points of top part.....	30
Figure 5: Figure 5: Measurement points of bottom part.....	31

List of Tables

Table .1: Measurement sheet of top part.....	27
Table .2: Measurement sheet of bottom part.....	28
Table .3: Sample costing format for top.....	33
Table .4: Sample costing format for bottom.....	34
Table .5: Second Sample costing format.....	36

List of Abbreviations

CM	Cost of Manufacturing
ETP	International Organization for Standardization
cm	Centimeter
HPS	Highest shoulder point
WB	Waistband
SMV	Standard Minute Value

List of Formula

1. Fabric consumption formula for the Body Parts:

$$\{ (\text{Centre Back length} + \text{Allowance}) \times (\frac{1}{2}\text{Chest} + \text{Allowance}) \} \times 2$$

Formula = ----- + Wastage%

$$36 \times \text{Fabric width} \times 2.54 \times 2.54$$

2. Fabric consumption for the sleeve Parts:

$$\{ (\text{Sleeve Length} + \text{Allowance}) \times (\text{Arm hole} + \text{Allowance}) \} \times 2$$

Formula = ----- + Wastage%

$$36 \times \text{Fabric width} \times 2.54 \times 2.54$$

3. Fabric consumption for Pant:

$$\{ \frac{1}{2} \text{ waist cir.} \times \text{front rise} \} \times 2 + \{ \frac{1}{2} \text{ thigh cir.} \times \text{inseam} \times 4 \}$$

----- + wastage%

$$36 \times \text{fabric Width} \times 2.54 \times 2.54$$

Similarity Index Report

Following students have compiled the final year report on the topic given below for partial fulfillment of the requirement for Bachelor's degree in Textile Engineering.

Project Title DESIGN OF WOVEN TOP AND BOTTOM FOR YOUNG FEMALE CONSUMER

S. No.	Student Name	ID Number
1.	Shorifur Rahman Ayon	<u>191-23-5594</u>
2.	Abdullah Al Masud	<u>191-23-5517</u>

This is to certify that Plagiarism test was conducted on complete report, and overall similarity index was found to be less than 20%, with maximum 5% from single source, as required.

Signature and Date



.....

Abdullah Al Mamun
Associate Professor
Department of Textile Engineering

Chapter 1: Introduction

1.1 Background Information

The primary objective of this study was to create a product that would gauge female opinion in the direction of a style appropriate for business meetings and social gatherings. As many women are starting new jobs at the firm, and since the proportion of women in the consumer market is steadily rising, this action was taken. Besides wanting to spend extra for environmentally friendly goods, women are also looking for clothing designed specifically for them to wear to the office and social gatherings.

Garment design incorporates elements such as color, fabric, volume, lines, form, structure, proportion, stability, emphasis or focal point, rhythm, and symphony. Each one contributes to the garment's overall attractiveness and psychological ease of use. Using ideas from mirages, designers may create illusions that make users look better (Davis, 1996). The researcher took into account the linguistic, aesthetic, and environmental components of women's clothes to come up with two designs for the top and bottom of the overall look. Attitude and attractiveness have been shown to affect a woman's assessment of the significance and appeal of the clothes she chooses to wear when going out. This project established a framework for the two garments that prioritizes the need for expression and visual appeal in apparel.

1.2 Significance and Motivation

It's been theorized that women can achieve greater success if they dress correctly, which could lead to greater job satisfaction. Women who are just starting their careers or adult lives in general but who bring unique perspectives to the table might be a valuable customer base.

It is uncertain if the needs are being met at the present time because the opinions of Bangladeshi women on corporate clothes have not been investigated, thus this study is centered on them.

The research also intends to tackle the growing issue of women's hesitation to purchase environmentally safe goods.

We would disagree that a generic assessment of fashion attributes may be extremely simplified and may not effectively represent the specific interests of different client groups because fashion taste is heavily impacted by culture. For instance, women between the ages of 18 and 25 tend to choose more modern western apparel, whereas women beyond the age of 25 tend to prefer fashionable gear that leans more toward the traditional. Again, preferences can run the gamut from, say, casual clothes to business attire. The problem for most 18-25 year old ladies is that their go-to clothes are either too formal or too casual for the event. This style was developed as a compromise between too formal and too casual.

1.3 Aims and Objectives

This project's overarching objective is to compile a comprehensive set of considerations that young consumers make while shopping for casual wear. This study provides strong evidence that cultural factors like location have a significant impact on individuals' sense of style. So, the indicated Bangladeshi fashion features cannot be universally applied. Customers make purchases in an effort to maximize profits while minimizing outlays, as stated by the rational choice theory.

Similarly, several things influence a shopper's final decision when it comes to clothing purchases. Features of the product that deliver the intended perceived

advantage indicate a set of 12 universal criteria for evaluating apparel, including brand, value, color, aesthetic, style, fabric, uniqueness, lifespan, and warmth. Although there is a sizable market for textile items in developing countries like Bangladesh, there is a lack of research and products that explore the desired fashion traits of the younger generation's buyers. The traditional clothing worn by ladies in Bangladesh dates back centuries. The idea behind this type of clothing is to bridge the gap between overly formal and too casual attire. between Western-style extremes and slavish adherence to tradition. In order to meet the United Nations' Sustainable Development Goals (SDGs), we intend to keep the product's price as low as is practicable while still using at least adequate components and, ideally, the greatest service levels possible. To that end, we're working on making a structure with a top and bottom. to identify the obstacles encountered during development of the aforementioned items. in order to identify possible answers to the problems encountered when developing these goods. try on the top and bottom and see how they feel. The author's goal in designing for the local market is to attract the attention of potential international clients so that the finished product may be exported from Bangladesh.

1.4 Methodology

To enable the researcher to fully understand exactly what women wanted from their outerwear, qualitative data were gathered. Two models, a top and a bottom, were created taking into account the participant's feedback, the resources that were available, and the researcher's design concepts. The author interviewed with ten participants that lies in the determined target market. The participants next assessed pictures of the sample clothes. In order to determine the consumption and CM of our

two outfits, we will apply the merchandiser approach. The design is sketched up digitally using illustrator software.

The following model was developed to graphically illustrate every step in the flowchart of this project. (see Figure 1).

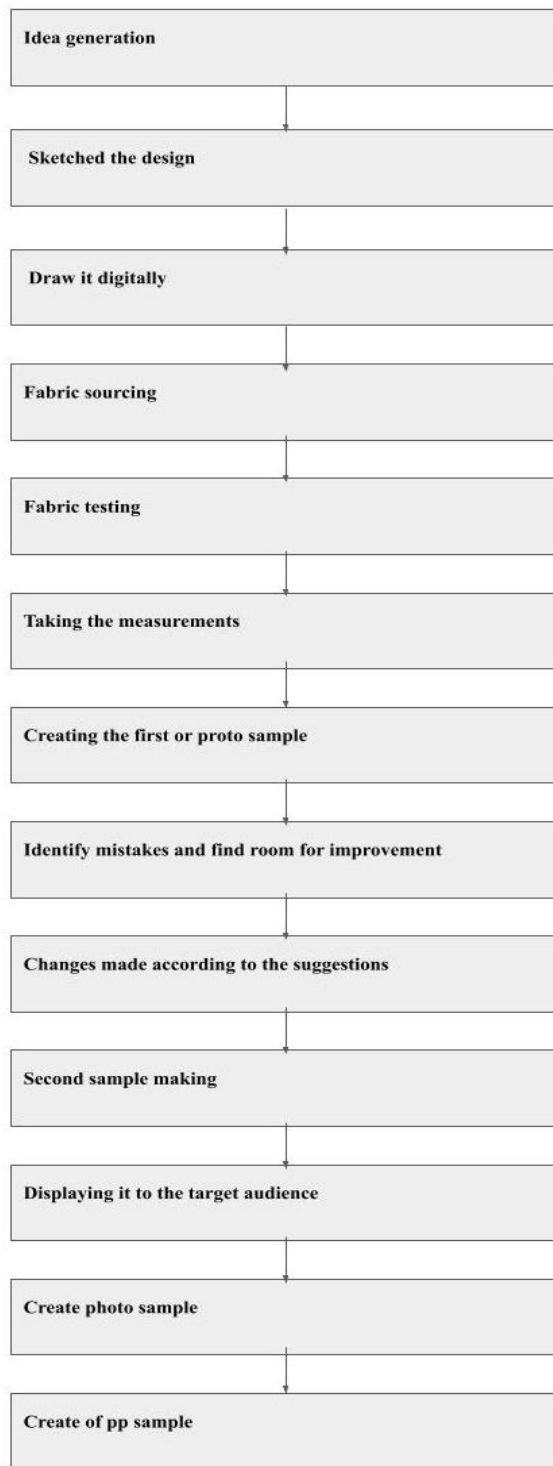


Figure 1. Detailed flowchart of Phase Model

1.5 Report Outline

In this report, we explained our project in detail. In chapter 1, we described the background, aims and methods. In chapter 2, we reviewed some literature. In chapter 3, we discussed the procedure and model description. Methodology and implementation. In chapter 4, we talked about results and discussion. In chapter 5, Professional Responsibilities, Health, Safety, Socio-cultural, and environmental considerations are given. In chapter 6, we concluded the report. lastly, we give references.

1.6 Prototype Development

1.6.1 Fabric and Trim Sourcing

Even though the researcher wanted to use environmentally friendly fabrics no matter what the answers were, she couldn't because they were hard to find and expensive. For this study to be finished, there also had to be a less expensive option.

The researcher made two outfits that go together and also made four separate items of clothing. Because of this, it was important that the main colors or materials for each outfit go well with the pieces that go with it.

It was hoped that the fabrics, designs, and looks of each outfit would now show what the participants liked, based on what they said in the discussion.

Chapter 2: Literature Review

Author[1] has made an article about fashion design based on new materials. In this article, the author explains the material and design. The author managed to put a clear knowledge of the relationship between clothing material and clothing design art, the development of new clothing for different purposes, etc. They did some research on the improvement, development, and evolution of clothing and design. It would be more helpful if they provided visual representations and specific detailed examples. They did not talk about any specific design or clothing. Author[2] did their research on female fashion consumer behavior from the perspective of a shop which is called fever. This article has a clear analysis of female consumer behavior and the shop's situation which is struggling with female fashion products. But the author mentioned that female consumers want cheap and fashionable products and they don't prefer brands that much. This is doubtful because in this world there are so many expensive female brands and shops doing pretty well. Other than that author said that female consumers like chain stores which we agree on. Author[3] did their article on how young consumers think about clothing fit. They did pretty well to explain the gap between researcher and consumer language and the dimensions that consumers consider about clothing fit which are physical fit, aesthetic fit, and functional fit. But the researchers did their research on a US university with a majority of US students. It would be better if they did this research with more diversified ethnic students. Author[4] did their research on female apparel consumers' understanding of body size and shape, the Relationship among body measurements, fit satisfaction, and body cathexis. They did their research on college and university female students. Mainly

they discussed bottom garments like pants. They did pretty well to explain the relationship between fit satisfaction, body satisfaction, and body perception. Mostly female's body perceptions and actual size have differences and are pretty opposite. There is no relationship between body perception and fit satisfaction but there is a bit of an association between body satisfaction and fit satisfaction. The author also found that females have misconceptions about the ideal body because of the media. And companies also make garments according to that ideal body. People also get less opportunity to get knowledge about their actual body shape. The author could've done more by researching other diversified universities or areas rather than the Northeast region of the United States. Author[5] has talked about fast fashion. They did their research based on how fashion has changed since 1990. Especially young consumers are the reason the fast fashion term came. The author mentioned that generation y tends to buy many cheap, low-quality products for fashion rather than a few high-quality products and then throw that away after fashion changes. This is actually not applicable to the lower-income country. But from a first-world country perspective, it is quite accurate. Author [6] did their experiment on a model with datasets of 80,000 fashion products sold in six years on Amazon. They tried to forecast the future popular fashion trend. Their model predicts the future popularity of the styles and reveals their life cycle and status. This is a great experiment for companies to make their product by predicting the future of style. Prediction can be wrong sometimes but mostly it comes out accurate in the fashion world just like a weather forecast. Author[7] researched consumer attitude and purchase decision towards textiles and apparel products. His research discussed the market and what affects women from various countries to buy or evaluate apparel. Various country has various aspects but there are

some common facts that affect buying. Such as price, country of origin comfort, etc. This research is helpful for retailers and manufacturers to understand what to be done to attract consumers and make a quality product. Author[8] did their research on Perceptions and attitudes towards sustainable fashion design: challenges and opportunities for implementing sustainability in fashion. They talked about the unsustainable method of textile manufacturing and the involvement of a designer. A designer faces internal and external challenges to make a sustainable design. Also, there are attitude and behavior gaps in consumer purchasing decisions on sustainable fashion clothing. Proper equipment is also a challenge. But nowadays we think consumers, companies, and designers started to take the initiative to make the sustainable process of making apparel.

Chapter3: Experimental Procedures – Model Description

As described in the previous segment, the project is divided into thirteen segments, each of which is further divided into a variety of phases and steps. This process' various phases and steps were all equally significant.

3.1 Idea Generation:

Making sure the product will sell and that the target market will find it appealing was the first stage in developing this design. As a result, the researcher

separated the task into two stages: selecting the target audience and then deciding on the kind of product.

3.1.1 Choosing the target audience

When it comes to retail apparel, selecting the target audience is essential. The researcher tends to focus on women's clothing because there is a considerably larger market for garments among women than among males. The entire women's market has a large target population, which the researcher must focus on. Data collection was essential to determining the kinds of clothing that may be designed. Therefore, the data's accessibility and availability were just as crucial as the data itself. Check the rationale behind selecting women between the ages of 18 and 25 as the target audience. The retail sector also sees the most activity from customers in this gender and age bracket.

3.2.1 Choosing the type of product

It is crucial to have an idea in your head of the kind of clothing you want to create and the niche market you want it to fill before you start designing anything. Participants in the study were interviewed in-depth by the researcher. After engaging in a brief conversation with them, the author observed that the majority of the participants had difficulty wearing clothing that was both too formal for after-work activities and too informal for formal settings. Additionally, it is too western or too traditional for them to fit in with casual society. Therefore, the researcher chose to create a product that would be ideal for this framework that focuses on the participant's response.

3.2 Sketched the design

Designers employ sketches, a specific type of design, to suggest, investigate, fine-tune, convey, and implement ideas. It is the first step in making the notion a reality. Interacting in the drawing phase helped the designer establish a distinctive style and better understand a better grasp of design aspects. The designer had full control over the drawing process, which also helped to organize all the small elements and rid the designer's head of any hazy vision.



Figure 2: final sketch

3.3 Draw it digitally

The design was first created on paper before being converted to digital using Adobe Illustrator. Evidently, the goal of digital drawing was to rapidly and effectively modify color or garment designs. The framework for this project is laid out in this sketch design. All the procedures and duties are completed after being mostly reliant on the digital sketch. Any endeavor, whether this involves designing clothing or something else entirely, involves modifications in some form. It is far simpler and less work-intensive to make revisions to the project using computer programs or digitally than by hand. Researchers protected their work from being harmed whenever the study was completed digitally. Designs could be kept in numerous versions and were secure. When the designs were created digitally rather than physically, it required less time. Time is saved because the procedure is speedier. They are also simple to share and may be done repeatedly.



Bottom



Top

3.4 Fabric sourcing

The two main, interrelated aspects that enhance or limit clothing comfort are fabric characteristics and garment design. Weight, density, rigidity, stretch, and rebound are material characteristics that have an impact on the motion. Knitted fabrics

have a lot of leeway because of the interlinked pattern of the yarns in knits, whereas woven fabrics are often stiffer. Since it fits the design better, the researchers selected woven fabric for the project. The goal of the fabric was to obtain eco-friendly material to satisfy consumer requests and worries, however, obtaining this type of fabric in such a small number proved challenging. Additionally, the designer chose to use only cotton in the cloth. Cotton was selected because it is commonly acknowledged in society and because most participants favored cotton over any other material for their leisure clothing. The all-over print was selected again for the top portion in accordance with the design. Since it is printed everywhere, there is also dyeing material and other things, which makes the eco-friendly aspect more challenging. Therefore, numerous tests and certificates are required to guarantee that it is environmentally friendly, which the designer is unable to obtain. In order to obtain the environmental-friendly certification from a respectable organization, one of the manufacturers contributed the appropriate fabric with the desired pattern, and they only purchase fabric from suppliers that rigorously comply with all requirements. Since the necessary fabric could not be found in the same location as the top, the portion fabric again for the bottom was obtained at a nearby market. The same is true of each of the trims and finishing touches that were applied to the project.

3.5 Fabric testing

Testing of the Fabric was done for the top and bottom separately.

3.5.1 Lab test results for top part fabric

3.5.1.1 Using the strip method to figure out maximum force and length at extreme load:

a) ISO 13934-1

b) Result:

1) Warp: 142.8 kg

2) Weft: 112.33 kg

The results indicate that the fabric's tensile modulus in the direction of the warp is higher than its tensile strength in the direction of the weft.

There were numerous things that led to this. During the procedure for becoming ready to weave, the size material is put on the warp yarn, whereas the weft yarn has no size material.

- The ends/inch of the fabric is more than that of picks/inch of the fabric.

3.5.1.2 Determination of the abrasion resistance of fabrics by the Martindale method

a) ISO 12947-2

b) Results:

1) Shade Change: 4

2) Yarn Breakage at 7000 cycles

3) Weight Loss: 11.11%

This means that the fabric we used can be used in a light way. Because a score of less than 10,000 isn't for domestic use. This top is not suitable for regular use.

3.5.1.3 To use an altered Martindale method to find out how resistant fabrics are to pilling, fuzzing, and moldings

a) ISO 12945-2

b) Results:

1) Pilling in 2000 cycles

2) Grade 2

Severe pilling, with different-sized and-density pills trying to cover most of the specimen's exterior.

This implies the top won't hold up well to heavy use, and it will pill a lot, so it will get worn out quickly.

3.7.1.4 Determine the pH of the aqueous extract in the textile.

a) ISO 3071

b) Result:

1) pH: 6

The pH value is a measure of how safe a fabric is, and the benchmark says that it should be between 4.0 and 9.0. Better or lesser pH value not only affects how well the fabric works, but it may also be bad for people's health when they use it.

3.5.1.5 Colour Fastness to Washing

a) ISO 105 C06 C2S

b) Result:

1) Rating: 4

How well a fabric doesn't fade or run after being exposed to the weather is determined by simple evaluating on a scale from 1 to 5, where 5 is the best and 1 is the worst.

3.5.2 Lab test results for bottom part fabric

3.5.2.1 Determination of maximum force and elongation at maximum force using the strip method

a) ISO 13934-1

b) Result:

1) Warp: 144.3

2) Weft: 112.3

The results show that the fabric's tensile modulus in the direction of the warp is higher than its tensile strength in the direction of the weft. There were numerous things that led to this:

- During the process of getting ready to weave, size material is added to the warp yarn, but not to the weft yarn.
- There are more ends per inch of fabric than picks per inch of fabric.

2. Determination of the abrasion resistance of fabrics by the Martindale method —

3.5.2.2 Determination of specimen breakdown

a) ISO 12947-2

b) Results:

1) Shade Change: 4

2) Yarn Breakage at 8000 cycles

3) Weight Loss: 12.27%

This means that the fabric we used can be used in a light way. Because a rub score of less than 10,000 is not good for home use. This top is not good enough to use often.

3.7.2.3 Using a modified Martindale method, find out how resistant fabric is to pilling, fuzzing, and moldings.

a) ISO 12945-2

b) Results:

1) Pilling in 2000 cycles

2) Grade 2

Serious pilling, with different-sized and-density pills covering most of the specimen's

surface.

This means that the top won't hold up well to heavy usages, and it will pill a lot, so it will get worn out rapidly.

3.5.2.4 Determine the pH of the aqueous extract in the textile.

a) ISO 3071

b) Result:

1) pH: 6

The pH value is a measure of how safe a fabric is, and the standard says that it should be between 4.0 and 9.0.

Higher or lower pH value not only affects how well the fabric works, but it can also hurt people's health when they use the fabric.

3.5.2.5 Colour Fastness to Washing

a) ISO 105 C06 C2S

b) Result:

1) Rating: 4

The ability of a fabric to not fade or run after being exposed to the elements is simply graded on a scale from 1 to 5, with 5 becoming the best and 1 being the worst.

3.6 Taking the measurements

For any sort of clothing to flow and balance properly on an active physique,

proper fit is also necessary. The creation of garment shapes that offer the right comfort is necessary for good clothing design. The length or increased girth of the garment enables the body to relax. The garment's "balancing" holds it in place, preventing movement-induced displacement of the garment on the body as a result of gravitation and the frictional qualities of the fabric also known as a correct set. After choosing a dummy for measurement the author made the measurement sheet for both the top and bottom.

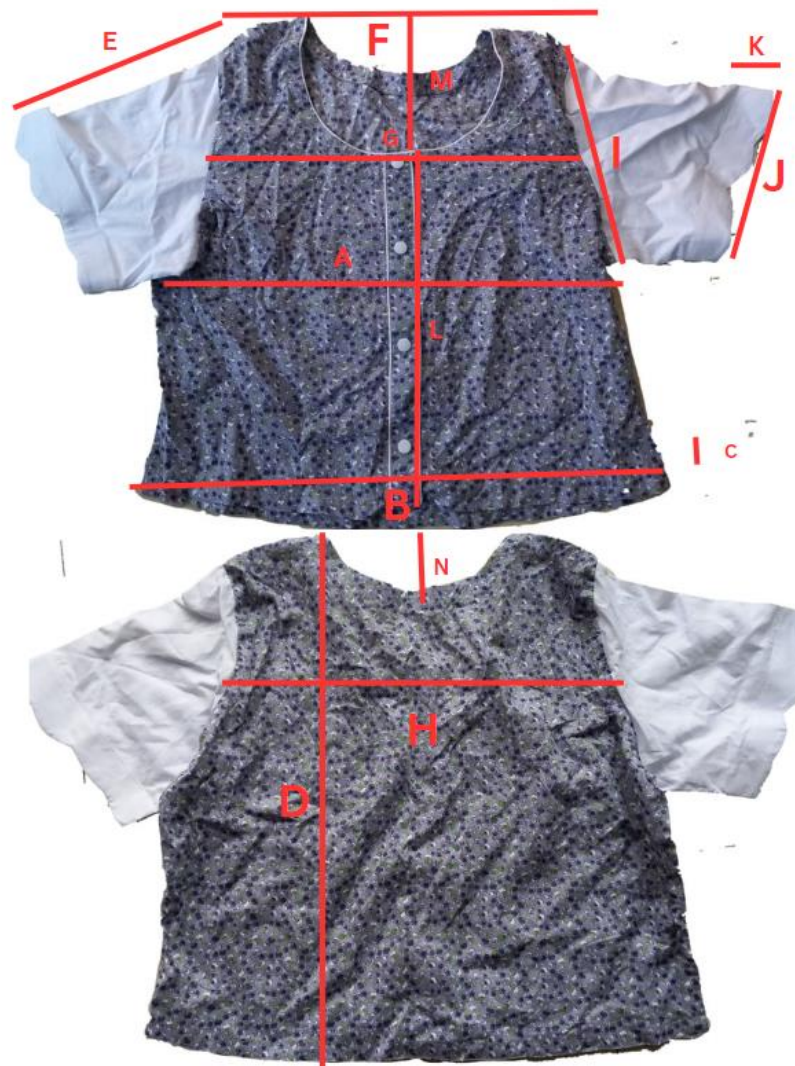


Figure 4: Measurement points of top part

Measurement sheet of top part

POM CODE	POINT OF MEASUREMENT	REQ SPEC <u>M</u> (cm)
A	Chest at 1" below armhole	49
B	bottom hem width	48
C	bottom hem height	1.5
D	Back Length from HPS	45.5
E	Short sleeve length from shoulder	21.5
F	across shoulder	35.5
G	Across front 15cm from hps	35.5
H	Across back 15cm from hps	37.5
I	Armhole Straight	21
J	Short sleeve hem open	17.5
K	sleeve hem height	4

L	Hps to center of the Trim	52
M	Center front to center of the Trim	10
N	Placket width	2.8
O	Placket Length	31.5
P	Front Neck Drop	14
Q	Back Neck Drop	4.5



Figure 5: Measurement points of bottom part

Measurement sheet of bottom part

POM CODE	POINT OF MEASUREMENT	REQ SPEC M (cm)
A	Waistband Height	4
B	Front Waist – At 6” below WB Seam - Straight	59
C	Back Waist – At 6” below WB Seam - Straight	59.5
D	Waistband Length– Top Edge - Relaxed	31

E	Low hip – 7” below top edge	59
F	Thigh - below crotch seam	36
G	Knee - 9” below crotch seam	27
H	Leg Opening	28.5
I	Front Rise – From Crotch to top edge	37
J	Back Rise – From Crotch to top edge	29
K	Inseam	61
L	Side Seam below WB	85.5
M	Bottom hem Height	3

3.7 Creating the first or proto sample

The designer made the first sample based on the design, measurement sheet, and tech pack that had already been made. Most of the time, the sample is used to judge how it looks and decide if any changes need to be made. The first example is also the first time the design moves from the computer and paper to the real world. So, it's important to make sure that the design matches the designer's idea of how it should look. The first sample was made in a nearby clothing factory on the sample line. For the researcher to do this, he or she had to get permission from someone else. The designer came up with a plan and a schedule for figuring out the SMV of both the tops

and the bottoms. The designer moved on to each step, making sure to pay close attention to the measuring steps, which are very important. After that, CM and consumption were both worked out.

3.7.1 Consumption of the proto sample

It is not necessary to remember any formulas for calculating fabric consumption in order to make accurate evaluations. Mathematics and logic are essential. I'd want to imply that, if we can determine the area of a rectangle, we can also determine how much cloth will be needed to complete an undertaking.

The reading length and maximum breadth of this top section are needed to calculate the total amount of fabric needed for this top section. The amount of fabric needed for this and similar components is calculated by multiplying the length by the breadth.

Required measurement of the top:

Centre Back length = 45.5 cm

Chest = 49 cm

Sleeve Length = 25 cm

Armhole = 20.5 cm

1. Fabric consumption for the Body Parts (Body + Chest):

Here, we will apply the following formula (per dozen),

$$\{ (\text{Centre Back length} + \text{Allowance}) \times (1/2\text{Chest} + \text{Allowance}) \} \times 2$$

Formula=-----

+Wastage%

$$36 \times \text{Fabric width} \times 2.54 \times 2.54$$

$$\{(45.5+2) \times (49+3)\} \times 2$$

$$= \text{-----} + 15\% \text{ Yards/piece}$$

$$36 \times 36 \times 2.54 \times 2.54$$

$$\{(47.5) \times (51)\} \times 2$$

$$= \text{-----} + 15\% \text{ Yards/piece}$$

$$36 \times 36 \times 2.54 \times 2.54$$

$$= 0.579 + 0.579 \times 15/100 \text{ yards/piece}$$

$$= .66585 \text{ yards/piece}$$

$$= 7.99 \text{ yards/dozen}$$

(Note: 2.54 used to convert into inch from cm and 36 used to convert into yds from inch).

For required fabric: $\{(\text{Sleeve length} + \text{allowance}) * (\text{Armhole} + \text{allowance})\} * 2 * 12$
inch²

1. Fabric consumption for the sleeve Parts ((Sleeve length + Armhole):

Here, we will apply the following formula (per dozen),

$$\{ (\text{Sleeve Length} + \text{Allowance}) \times (\text{Arm hole} + \text{Allowance}) \times 2 \} \times 2$$

Formula=-----

+Wastage%

$$36 \times \text{Fabric width} \times 2.54 \times 2.54$$

$$\{ 27 \times 22.5 \} \times 2 \times 2$$

$$= \frac{\quad}{\quad} + 15\% \text{ Yards/piece}$$

$$36 \times 36 \times 2.54 \times 2.54$$

$$= .290 + .290 \times 15/100 \text{ yards/piece}$$

$$= .333 \text{ yards/piece}$$

$$= 4.00 \text{ yards/dozen}$$

(Note: 2.54 used to convert into inch from cm and 36 used to convert into yds from inch).

Total fabric consumption is (.665+.333) = .998 yards

3.7.2 Consumption of bottom part

Consumption per piece:

$$\frac{1}{2} \text{ Waist Cir.} = 46\text{cm} + 8 \text{ cm (s)} = 54 \text{ cm}$$

$$\text{Front Rise} = 28 \text{ incl. WB} + 8 \text{ cm} = 36 \text{ cm}$$

$$\frac{1}{2} \text{ Thigh Cir} = 36 \text{ cm} + 4 \text{ cm} = 40 \text{ cm}$$

$$\text{Inseam} = 82 \text{ cm} + 4 \text{ cm} = 86 \text{ cm}$$

Fabric width: 59 inch

Marker Efficiency: 85%

$$\left\{ \frac{1}{2} \text{ waist cir. X front rise} \right\} \times 2 + \left\{ \frac{1}{2} \text{ thigh cir. X inseam} \times 4 \right\}$$

+wastage%

$$36 \times 59 \times 2.54 \times 2.54$$

$$\{54 \times 36\} \times 2 + \{40 \times 86 \times 4\}$$

+15%

$$36 \times 36 \times 2.54 \times 2.54$$

$$3888 + 13760$$

+15%

$$36 \times 36 \times 2.54 \times 2.54$$

$$= 2.110 + 2.110 \times 15/100$$

$$= 2.42 \text{ yards/ pisces}$$

$$= 29.11 \text{ yards/ dozon}$$

3.7.3 CM of the proto sample

3.9.3.1 CM of the top part

Sample Costing Format:

ITEM	DESCRIPTION	RATE/yd	TOTAL COST
FABRIC	1. Main fabric 1 yard	500 x 1 BDT	500 BDT
CUT MAKE AND TRIM	1. Cutting and sewing	400 BDT	400 BDT
ACCESSORIES	1. Buttons, main label, brand tag, Individual polybag	50 BDT	50 BDT
OVERHEADS	1. Factory, administrative work. 2. Telephone charges, internet charges,	6% to 10%	70 BDT
WASTAGE	1. Rejection ratio for each segment	2% to 5%	40 BDT
ADDITIONAL/ OTHER CHARGES	1. Textile testing charges, clearing, domestic transport	100 BDT	100 BDT
TOTAL			1160 BDT
COMMISSION OF AGENT	As per the standard ratio	6% to 10%	85 BDT
TOTAL PROFIT MARGIN		20% to 30%	290 BDT
TOTAL COST IN BD			1535 BDT

ITEM	DESCRIPTION	RATE	TOTAL COST
FABRIC	Main fabric req 2.42 yards	165 BDT x 2.42 yards	400 BDT
CUT MAKE AND TRIM	1. Cutting and sewing	400 BDT	400 BDT
ACCESSORIES	1. Buttons, main label, brand tag, Individual polybag	50 BDT	50 BDT
OVERHEADS	1. Factory, administrative work. 2. Telephone charges, internet charges,	6% to 10%	60 BDT
WASTAGE	1. Wastage ratio	2% to 5%	25 BDT
ADDITIONAL/ OTHER CHARGES	1. Textile testing charges, clearing, domestic transport	100 BDT	100 BDT
TOTAL			1135 BDT
COMMISSION OF AGENT	As per the standard ratio	6% to 10%	80 BDT
TOTAL PROFIT MARGIN		20% to 30%	285 BDT
TOTAL COST IN BD			1500 BDT

3.7.3.2 CM of bottom part

Sample Costing Format:

3.8 Identify mistakes and find room for improvement

The first prototype developed by the designer was placed inside a dummy to examine it, spot any flaws that have been made, and discover any potential areas for development. Three points were noted while thoroughly analyzing the two garments: first, the sleeve length needs to be decreased by 2 inches; second, the bottom fabric needs to be replaced because it is quite see-through; and third, the sleeve end needs to be fluffier.

3.9 Changes made according to the suggestions

Only one change was made after displaying it to the target audience. And it was the location of the triangle-shaped trim that was located in the bottom hem of the top part and it was relocated to the waist of the bottom garment.

3.10 Second sample making

Following the listing of all the errors and corrections, the second sample began to be used. While the second sample was being created, instructions were being followed to incorporate all the first sample's changes. It was created in the same location as the initial sample. The measurement sheet, CM, and consumption of the second sample have changed due to the new measurements. Except for the measurement, all the other things in the second sample are similar to the first sample.

Measurement sheet of Second Sample

POM CODE	POINT OF MEASUREMENT	REQ SPEC <u>M</u> (cm)
----------	----------------------	---------------------------

A	Chest at 1" below armhole	49
B	bottom hem width	48
C	bottom hem height	1.5
D	Back Length from HPS	45.5
E	Short sleeve length from shoulder	21.5
F	across shoulder	35.5
G	Across front 15cm from hps	35.5
H	Across back 15cm from hps	37.5
I	Armhole Straight	21
J	Short sleeve hem open	17.5
K	sleeve hem height	4
L	Hps to center of the Trim	52
M	Center front to center of the Trim	10
N	Placket width	2.8
O	Placket Length	31.5
P	Front Neck Drop	14
Q	Back Neck Drop	4.5

3.11 Displaying it to the target audience

Even when it was used by a dummy, the designer also couldn't uncover any flaws or areas for development in the clothing after the second sample was created. Since the entire thing was created for this specific group, it was therefore shown to the primary target audience. Email, Facebook Messenger, WhatsApp, and other social media were used to send the picture. When asked if they have the opportunity to wear it, they gave a rather positive reaction. A few recommendations were made as well, although not strongly sufficient. For instance, the intended triangle trim component was supposed to be in the bottom half instead of the top part.

3.12 Create photo sample

After the second sample did it was time to make the photo sample. This one was made exactly the same as the second sample with all the changes that were needed. It was made to take photos for advancement. So this sample was made with extra care as it will be stuck to the audience to buy the product. Also, this sample is the first impression that sets in the mind of the consumer. So no mistakes were made and no mistakes was affordable for this sample as well.

3.13 Create of pp sample

The last sample made is a pre-shipment sample. For this author wanted to make it in an actual production line. Due to some technical and internal rules, it was quite difficult to get permission from any garment manufacturer small and large alike. So it was also made in the same process as the photo sample. As it was the last sample of the project it was critical to make this the best sample out of all. So extra detailing and focus were put on it. From measurement to hand feel everything was done with extra effort and it was sent to some participants to get their review and their insight as well.

Chapter 4: Result and discussion and Project Demo

4.1 Order sheet

After all the initial work and designs were done an order sheet was created and was ready to send to the selected manufacturer.

SNS LIMITED

Order Number: 11BANTB2301

Issued by:

SNS LTD.

East box nagar, sarulia, Demra, Dhaka 1361, Bangladesh

Delivery address:

East box nagar, sarulia, Demra, Dhaka 1361, Bangladesh

Beneficiary client and Payment Address:

SNS LTD

East box nagar, sarulia, Demra, Dhaka 1361, Bangladesh

Incoterm: FOB

Loading Location: Borobari, Gacha, Gazipur

Supplier:

ABA FASHIONS LTD.

Borobari, Gacha, Gazipur

Bangladesh

Receive Location: East box nagar, sarulia, Demra, Dhaka 1361
Currency: BDT

Payment: LC AT 120 DAYS FROM SHIPMENT DATE

PRODUCT DESCRIPTION

PRODUCT / PACKING

Packing: SOLID COLOR-1 COLOR/6 SIZES

Product Description: Summer and Spring Female Top

Product composition: 100% COTTON

Color	Size	Assortment		Master CTN barcode	Unit barcode	Master carton (cm)	Gross WT (kg)	Quantity ordered	
		Master	Break					Master	Unit
AOP	XS	12	1	X	X	L: 60.0 W: 40.0 H: 15.0	7	100	100
	S		2	X	X				200
	M		3	X	X				300
	L		3	X	X				300
	XL		2	X	X				200
	XXL		1	X	X				100
	TOTAL								700

PRODUCT DESCRIPTION

PRODUCT / PACKING

Packing: SOLID COLOR-1 COLOR/6 SIZES

Product description: Summer and Spring Female Bottom

Product composition: 100% COTTON

Color	Size	Assortment		Master CTN barcode	Unit barcode	Master carton (cm)	Gross WT (kg)	Quantity ordered	
		Master	Break					Master	Unit
BLACK	XS	12	1	X	X	L: 60.0 W: 40.0 H: 15.0	6.5	100	100
	S		2	X	X				200
	M		3	X	X				300
	L		3	X	X				300
	XL		2	X	X				200
	XXL		1	X	X				100
	TOTAL								650

SPECIFIC DOCUMENTS

Document Description	Nb original	Nb copy
CERTIFICATE OF ORIGIN GSP FORM A	1	1

SPECIFIC CUSTOMS INSTRUCTIONS:

CERTIFICATE OF ORIGIN FOR TEXTILE PRODUCTS UNNECESSARY IF AN APPLICABLE AND VALID GSP FORM A IS PROVIDED

Document Description	Nb original	Nb copy

CERTIFICATE OF ORIGIN GSP FORM A	1	1
----------------------------------	---	---

SPECIFIC CUSTOMS INSTRUCTIONS:

CERTIFICATE OF ORIGIN FOR TEXTILE PRODUCTS UNNECESSARY IF AN APPLICABLE AND VALID GSP FORM A IS PROVIDED

Description	Nb original	Nb copy
CERTIFICATE OF ORIGIN GSP FORM A	1	1

SPECIFIC CUSTOMS INSTRUCTIONS:

CERTIFICATE OF ORIGIN FOR TEXTILE PRODUCTS UNNECESSARY IF AN APPLICABLE AND VALID GSP FORM A IS PROVIDED

GENERAL DOCUMENTS REQUIRED

Document Description	Nb Original	Nb Copy
PACKING LIST	1	2
COMMERCIAL INVOICE	1	3
FORWARDER'S CERTIFICATE OF RECEIPT	1	1

WAREHOUSES ADDRESSES:

Address
DHAKA WAREHOUSE - East box nagar, Sarulia, Demra, Dhaka 1361, Bangladesh

Shipping Mark SOLID COLOR N SIZES

SNS LTD
11BANTB2301
100% COTTON FEMALE TOP AND BOTTOM

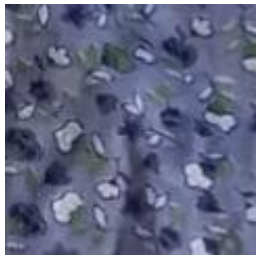
ABA FASHIONS LTD.

Side Mark: Packing assorted by size

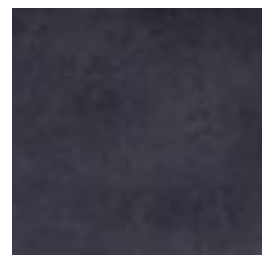
NET WEIGHT : _____KGS							
GROSS WEIGHT: _____KGS							
COLOR: STONE DARK							
Size	XS	S	M	L	XL	XXL	UNITS
Qty	1	2	3	3	2	1	12
CARTON NO: XXXXXXXXXXXXXXXXXXXXX							
NET WEIGHT : _____KGS							
GROSS WEIGHT: _____KGS							
COLOR: NAVY DARK							
Size	XS	S	M	L	XL	XXL	UNITS
Qty	1	2	3	3	2	1	12
CARTON NO: XXXXXXXXXXXXXXXXXXXXX							

Fabric swatch card :

TOP:



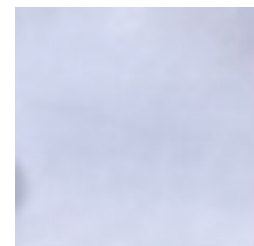
BOTTOM:



BODY



TRIM:



SLEEVE

MEASUREMENT CHART

SNS LTD									
Style no:	SNS202401	BUYER:	SNS LTD						
Description:	Summer and Spring Female Top	SEASON:	Summer and Spring						
FABRIC:	100% Cotton	COLOR:	All over print Light blue and White						
TRIMS:	N/A	PRINT COLOR:	All over print light blue						
POM CODE	POINT OF MEASUREMENT	GRADE RULE	REQ SPEC <u>XS</u>	REQ SPEC <u>S</u>	REQ SPEC <u>M</u>	REQ SPEC <u>L</u>	REQ SPEC <u>XL</u>	REQ SPEC <u>XXL</u>	TOL +/- CM
			ALL MEASUREMENTS IN CMS FLAT						
A	Chest at 1" below arm hole	2.5	44	46.5	49	51.5	54	56.5	1.0
B	bottom hem width	2.5	43	45.5	48	50.5	53	55.5	1.0
C	bottom hem height	0	1.5	1.5	1.5	1.5	1.5	1.5	0.0
D	Back Length from HPS	2	41.5	43.5	45.5	47.5	49.5	51.5	1.0
E	Short sleeve length from shoulder	1	19.5	20.5	21.5	22.5	23.5	24.5	1.0
F	across shoulder	2	31.5	33.5	35.5	37.5	39.5	41.5	1.0
G	Across front 15cm from hps	2	31.5	33.5	35.5	37.5	39.5	41.5	1.0
H	Across back 15cm from hps	2	33.5	35.5	37.5	39.5	41.5	43.5	1.0
I	Armhole Straight	1	19	20	21	22	23	24	0.5
J	Short sleeve hem open	0.5	16.5	17	17.5	18	18.5	19	0.5
K	sleeve hem height	0	4	4	4	4	4	4	0.0
L	Placket Length	2	27.5	29.5	31.5	33.5	35.5	37.5	0.3
M	Front Neck Drop	0.5	13	13.5	14	14.5	15	15.5	0.3
N	Back Neck Drop	0.5	4.5	5	5.5	6	6.5	7	0.3



Front



Back

SNS LTD									
Style no:	SNS202402	BUYER:	SNS LTD						
Description:	Summer and Spring Female Bottom	SEASON:	Summer and Spring						
FABRIC:	100% Cotton	COLOR:	BLACK						
TRIMS:	1	PRINT COLOR:	NA						
POM CODE	POINT OF MEASUREMENT	GRADE RULE	REQ SPEC <u>XS</u>	REQ SPEC <u>S</u>	REQ SPEC <u>M</u>	REQ SPEC <u>L</u>	REQ SPEC <u>XL</u>	REQ SPEC <u>XXL</u>	TOL +/- CM
			ALL MEASUREMENTS IN CMS FLAT						
A	Waistband Height	0	3.5	3.5	3.5	5	5	5	0.5
B	Front Waist – At 6” below WB Seam - Straight	2	51	53	55	57	59	61	1.0
C	Back Waist – At 6” below WB Seam - Straight	2	53	55	57	59	61	63	1.0
D	Waistband Length– Top Edge - Relaxed	2	27	29	31	33	35	37	1.0
E	Low hip – 7” below top edge	2	55	57	59	61	63	65	1.0
F	Thigh - below crotch seam	2	32	34	36	38	40	42	1.0
G	Knee - 9” below crotch seam	2	24	26	28	30	32	34	1.0
H	Leg Opening	1	26.5	27.5	28.5	29.5	30.5	31.5	0.5
I	Front Rise – From Crotch to top edge	1	35	36	37	38	39	40	0.5
J	Back Rise – From Crotch to top edge	1	27	28	29	30	31	32	0.5
K	Inseam	2	57	59	61	63	65	67	1.0
L	Side Seam below WB	2	81.5	83.5	85.5	87.5	89.5	91.5	0.5
M	Bottom hem Height	0	3.5	3.5	3.5	3.5	3.5	3.5	0.3



Front



Back

TOP

BODY COLOR	LABEL	BUTTON COLOR	THREAD COLOR	POCKET COLOR	NECK BINDING	ZIPPER
AOP, WHITE	NA	WHITE	DTM TO BODY	NA	DTM	NA

BOTTOM

BODY COLOR	LABEL	BUTTON COLOR	THREAD COLOR	POCKET COLOR	NECK BINDING	ZIPPER
BLACK	NA	NA	DTM TO BODY	NA	DTM	NA

TRIMS



COLOR:

WHITE

ATTACHED WITH:	BOTTOM
DISTANCE OF CENTER OF TRIM FROM TOP OF FRONT RISE:	11.5 CM
POSITION OF CENTER OF TRIM FROM TOP OF WAISTBAND:	3 CM
HEIGHT:	15 CM
WIDTH:	30 CM

PRICING

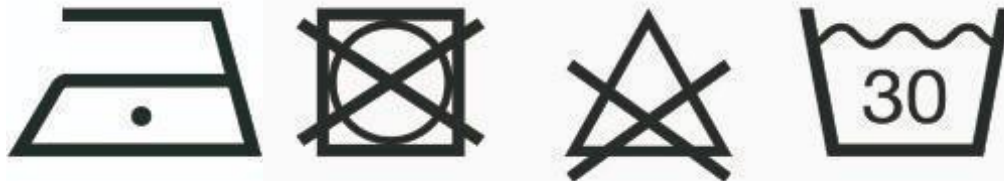
Retail price of top

Product code	Color	Size	Price	currency
833067003	Light blue aop and white sleeve	M	2000	BDT

Retail price of bottom

Product code	Color	Size	Price	currency
833067003	black	M	2200	BDT

Care Labels



EXCLUSIVITY CLAUSES

GARMENTS, ACCESSORIES AND PACKAGING SHOULD BE CONFORM TO BUYER 's SPECIFICATIONS

THE SUPPLIER MUST AGREE WITH THE QUALITY
PROCESS

A PART OF THE QUALITY COSTS IS PAID BY THE
SUPPLIER

THEY WILL BE EXCLUSIVELY FOR CARREFOUR 's
STORES

DATE :

SUPPLIER 's SIGNATURE

COMPANY 's STAMP

Chapter 5: Professional Responsibilities, Health, Safety, Socio-cultural, and environmental consideration

5.1 Introduction

While working on this project, there were other things to think about besides the designs, costs, market analysis, etc. Some of the most important things that the designer thought about were the codes and standards used in the design, moral values and participation, the impact of the project on social, health, safety, legal, and cultural issues, and the impact of the project on the environment and sustainability.

5.2 Codes and standards used in the design approach

The greater good is a primary motivation for establishing norms and regulations. The purpose of laws and regulations is to prevent wrongful injuries, deaths, and destruction of property. To accomplish these objectives, we will use the data we have gathered to either eliminate, significantly minimize, or at least mitigate the threats we have discovered.

One must first have an understanding of the distinction between codes and standards. When an organization establishes a set of regulations to ensure the welfare of its members and the general public, it is said to have established a code. When we talk about "standards," we're referring to benchmarks that have been endorsed by an authoritative group or the public at large.

The author has ensured that the plant where the manufacture takes place does not employ any children. The manufacturing facility is both WRAP- and LEED-approved.

The design strategy was developed after confirming that the manufacturing facility has complied with all applicable regulations and standards.

5.3 Ethical principles

The creation of clothing should be conducted in a socially and environmentally responsible manner if it is to be considered moral. The author has ensured that the SDGs set forth by the United Nations are strictly adhered to. The Sea, the Land, Justice, and Powerful Institutions

Companies that care about their workers' well-being and the environment will provide them with fair wages and safe working conditions free from bias and demotivation. The designer has guaranteed that all moral standards are met.

5.3.1 Livable Wages

Simply put, a livable income is one that doesn't require you to take on additional responsibilities or resort to excessive forms of charity. While some companies in the fashion sector pay the minimum wage, others offer fair wages for their employees. There is a risk that manufacturers would try to avoid paying workers a living wage by shifting operations to the poorest areas of the country. Because of this, the author advocated for fair trade as a possible remedy. All producers of fair trade clothes have committed to paying their employees a wage that allows them to provide for themselves and their families. This contributed to the end of extreme poverty and the eradication of world hunger, two of the United Nations' Sustainable Development Goals.

5.3.2 Going Green

Dyeing natural fibers is less complicated than dyeing synthetics. Manufacturers often add harmful chemicals and poisonous compounds to the water to help the colors stick to such inorganic surfaces. Hence, water bodies like lakes, streams, and oceans get polluted due to runoff. Concerns about contributing to this contamination have prompted several companies to switch to greener alternatives. The designer paid special attention to utilizing organic cotton and only chemicals derived from plants for dyeing the cloth. It was inexpensive and provided clean energy while also contributing to the United Nations' health and sanitation, energy, and prosperity targets.

5.3.3 Fair Labor Practices

The author checked that the firm adhered to ILO rules, which are used by businesses to ensure proper equal employment conditions. ILO guidelines are used by most Bangladeshi manufacturers. Examples of proper ethical behavior include not using child labor or exploiting illegal immigrants, paying salaries that are in line with today's standards, and ending business relationships when ethics are broken. This helped to achieve the United Nations sustainable development goals and helped achieve gender equality and decent work.

5.4 Health, safety, legal and cultural issues

Both employers and employees have a duty to ensure a safe and healthy workplace in the garment industry. To ensure everyone's safety, personnel must follow all rules and laws regarding health and safety. Thus the writer suggested the following guidelines

that the creator should follow. Sound levels can be reduced and headphones made available if the first piece of equipment is regularly maintained and fixed. Masks, gloves, and good lighting and ventilation in the workplace are essential for the safe management of chemicals. Most importantly, businesses are responsible for covering the cost of annual physicals for their staff. Finally, they need to make sure there are sufficient fire extinguishers and first aid supplies. About the law, the author checked to make sure everything was done properly. The manufacturer's lack of involvement in any illegal conduct was also confirmed before moving forward. Reduced inequality, more prosperity, and improved educational opportunities were all made possible because to this.

5.5 Impact of the project on the environment and sustainability

It's often accepted that all manufactured goods have some sort of ecological footprint. Nevertheless, the typical consumer has no idea whether the product is more or less influential. Any product or service that significantly reduces the potential negative effects on the environment during manufacture, usage, or disposal is considered environmentally friendly. The author's goal is to lessen the project's impact on the environment through the use of organic and recycled cotton fabric. Instead, people were urged to dress themselves in organic or recycled cotton. Sustainable Towns and Communities, Responsible Consumption and Production, and Climate Action were all made possible because of this.

Chapter 6: Conclusions

This study analyzed the needs, wants, and preferences of women on the clothing they wore on a daily basis, taking into account elements such as functionality, individuality, beauty, and environmental impact. Despite widespread assumptions that utility considerations would take precedence, the research found that aesthetic considerations really matter more. There was a general consensus that expressive details were unimportant. Participants who identified as female continued to place a priority on items that had a feminine touch, stood out visually, and allowed them to show their individuality. This study benefits the fashion industry by providing insight into the clothing preferences of a specific group of professional women.

The focus of this study was on the desires, expectations, and sartorial norms of modern-day women. Research participants were polled on what they valued most in terms of functionality, unique expression, aesthetics, and environmental impact in their daily wear. The aesthetic intricacies of a garment are what ultimately determine its success or failure, despite initial impressions to the contrary. Women were found to place a higher value on aspects that showed their personality than on those that merely expressed an idea, yet it was evident that functionality and visual appeal were more significant than expressive elements of clothing. Participants in the project were not prepared to spend more than 100 taka for an item of clothing because of its ecological features. This finding could be related to the current status of the economy. This study shed light on the attitudes and worries of working women about their appearance. The

results of this study will elucidate the most crucial features that women seek out in their everyday garments.

All components of clothing—emotional, creative, functional, and ecological—should be treated with equal weight. Most people appreciated the options for appropriate attire, however some guests did have criticisms.

Suggestions from the participants were taken into account while creating clothing prototypes, which were then tested and assessed. Afterwards, a revised sample was prepared that took into account all of the comments and input from the focus group. The optimistic outlook of the study's analysis of the design process and the purchase process is good news for the local clothing industry. Retailers and designers might use this as a gentle reminder to focus on the fundamentals, while also seizing the chance to dive more deeply into the aesthetic and expressive demands of women.

Designers may better meet the needs of their female consumers if they take the time to understand what it is that they anticipate from the clothing they are making for them.

Chapter 7: References

1. Jiang, Z.H., 2013. Art of Fashion Design Based on New Materials. In Applied Mechanics and Materials (Vol. 340, pp. 374-377). Trans Tech Publications Ltd.
2. Holmberg, J. and Öhnfeldt, R., 2010. The female fashion consumer behaviour- From the perspective of the shop Fever in Gothenburg.
3. Shin, E. and Damhorst, M.L., 2018. How young consumers think about clothing fit?. International Journal of Fashion Design, Technology and Education, 11(3), pp.352-361.
4. Song, H.K. and Ashdown, S.P., 2013. Female apparel consumers' understanding of body size and shape: Relationship among body measurements, fit satisfaction, and body cathexis. Clothing and Textiles Research Journal, 31(3), pp.143-156.
5. Bhardwaj, V. and Fairhurst, A., 2010. Fast fashion: response to changes in the fashion industry. The international review of retail, distribution and consumer research, 20(1), pp.165-173.
6. Al-Halah, Z., Stiefelhagen, R. and Grauman, K., 2017. Fashion forward: Forecasting visual

7. style in fashion. In Proceedings of the IEEE international conference on computer vision (pp. 388-397).

8. Sanad, R.A., 2016. Consumer attitude and purchase decision towards textiles and apparel products. *World*, 2(2016), pp.16-30.

9. Hur, E. and Cassidy, T., 2019. Perceptions and attitudes towards sustainable fashion design: challenges and opportunities for implementing sustainability in fashion. *International Journal of Fashion Design, Technology and Education*.

FYDP - Design

ORIGINALITY REPORT

10%	8%	2%	6%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.coursehero.com Internet Source	1%
2	www.garmentsmerchandising.com Internet Source	1%
3	www.slideshare.net Internet Source	1%
4	Submitted to University of Westminster Student Paper	1%
5	Submitted to Higher Education Commission Pakistan Student Paper	1%
6	Submitted to Daffodil International University Student Paper	<1%
7	ecommons.cornell.edu Internet Source	<1%
8	Submitted to University of Glamorgan Student Paper	<1%
9	Submitted to South Bank University Student Paper	<1%

10	med.neduet.edu.pk Internet Source	<1%
	(8-17-14)	<1%
	http://219.238.178.49/FileServer/Attach/L00101.doc Internet Source	
12	DİRGAR, Esra. "CUPRO VE DİĞER BAZI REJENERE SELÜLOZ LİFLERİNDEN ÜRETİLEN KUMAŞLARIN PERFORMANS ÖZELLİKLERİ", Ege Üniversitesi, 2017. Publication	<1%
13	Submitted to University of Southern Mississippi Student Paper	<1%
14	www.researchgate.net Internet Source	<1%
15	textileinsight.blogspot.co.nz Internet Source	<1%
16	www.ebay.com Internet Source	<1%
17	repository.nwu.ac.za Internet Source	<1%
18	dspace.daffodilvarsity.edu.bd:8080 Internet Source	<1%
19	www.alfachemic.com Internet Source	<1%

20	en.skate-europe.com Internet Source	<1%
21	journals.sagepub.com Internet Source	<1%
22	researchspace.ukzn.ac.za Internet Source	<1%
23	Submitted to University of Leeds Student Paper	<1%
24	www.ijser.org Internet Source	<1%
25	www.kebs.org Internet Source	<1%
26	Submitted to University of South Florida Student Paper	<1%
27	investors.vodafone.com Internet Source	<1%
28	mspace.lib.umanitoba.ca Internet Source	<1%
29	www.scientific.net Internet Source	<1%