



# Lanique's Closet System



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# Lanique's Closet System

*We all struggle to find the best outfit to wear to events. We forget the clothes in our closets when we shop for new pieces. We even forget which garments look best with others.*



Lanique's Closet System is a closet management system for young American adults that eliminates decision fatigue. This database system will organize garments within your closet.

For Lanique's Closet System, the user will manually enter images of their clothing and its description into our system. Our system will then organize the data based on the type of garment, its color, season, and event.

Our service will automate different clothing choices based on the user's daily events and weather conditions with the support of external data collection via weather.com and from their digital calendars such as Google Calendar.



**Table Names:**

User, Calendar, Closet, Garment

**Column Names:**

Username, Day, Weather, Reccomended Outfits, Outfit\_ID, Outfits, Event, Event\_Perference, Garment\_Type, Color, Image\_File

**Column Types:**

varchar

**Primary Keys:**

Username + Weather\_Condition + Event

**What We Want:**

List of Recommended Garments

**Foreign Keys:**

Day, Outfits, Event, Weather\_Condition



# First Normal Form

1. All fields are atomic
2. Eliminate repeating groups
3. Establish primary key

Lanique Peterson: 1NF

**1st Normal Form**  
All fields are atomic: single domain groups  
Eliminate repeating groups  
Establish primary key: Username && Image File

Primary Key: Username + Weather\_Condition + Event → List of Recommended\_Outfits

Username	Garment_Type	Color	Cool_Season	Warm_Season	School	Work	Date_Night	Wedding	Professional_Event	Indoor_Party	Outdoor_Party	Gym	WFH	Casual_Day_Out	Image_File	Day
LP	Dress	Black	No	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No	<IMG_0293813628.JPG>	8/20/22
LP	Shirt	Blue	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	<IMG_0293813628.JPG>	8/20/22
LP	Jeans	Light-Wash	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	No	Yes	<IMG_0293811628.JPG>	8/22/22	
LP	Blouse	Pink	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	<IMG_1293813628.JPG>	8/20/22
LP	Pant	Brown	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	<IMG_0293813625.JPG>	8/20/22
RK	Suit	Blue	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	No	No	No	<IMG_5293813628.JPG>	8/22/22
RK	Button-Down Shirt	Yellow	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	<IMG_0553813628.JPG>	8/20/22
RK	Pant	Black	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No	<IMG_0293813338.JPG>	8/20/22
RK	Jeans	Dark-Wash	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No	Yes	<IMG_1113833628.JPG>	8/22/22
RK	Tie	Purple	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	No	No	No	<IMG_0864813628.JPG>	8/20/22
JD	T-Shirts + Tanks	Red	No	Yes	No	No	No	No	No	No	No	No	Yes	Yes	<IMG_2223813628.JPG>	8/20/22
JD	Shorts	Medium-Wash	No	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	<IMG_0293819008.JPG>	8/22/22
JD	Activewear	Gray	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	<IMG_4093813628.JPG>	8/20/22
JD	Hoodies	White	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	<IMG_777813628.JPG>	8/20/22
JD	Loungewear	Brown	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	<IMG_7776413628.JPG>	8/22/22

```
create table LANIQUE_CLOSET_SYS_RAW_NF1 (
    Username varchar(128),
    Garment_Type varchar(64),
    Color varchar(32),
    Cool_Season varchar(16),
    Warm_Season varchar(16),
    School varchar(4),
    Work varchar(4),
    Date_Night varchar(4),
    Professional_Networking_Event varchar(4),
    Indoor_Party varchar(4),
    Outdoor_Party varchar(4),
    Gym varchar(4),
    Concert varchar(4),
    WFH varchar(4),
    Casual_Day_Out varchar(4),
    Image_File varchar(128),
    Day varchar(64)
);
```



Lanique's Closet System

## Second Normal Form

1. All fields are atomic
2. Eliminate repeating groups
3. Establish primary key
4. No partial dependency



Lanique Peterson: 2NF

### 2nd Normal Form

All fields are atomic: single domain groups

Eliminate repeating groups

Establish primary key

No partial dependency

User			
Username (PK)	Day (PK)	Weather_Condition	Reccomended_Outfits
LP	8/20/22	Cool	A000000123
RK	8/20/22	Warm	A000000234
JD	8/22/22	Warm	A000000432

Garment			
Garment Type	Color	Weather_Condition	Image_File
T-Shirts + Tanks	Black	Cool	<IMG_0293813628.JPG>
Blouses	Blue	Warm	<IMG_0293813628.JPG>
Jeans	Brown // (tan + neutral colors)	Warm	<IMG_0293813628.JPG>
Pants	Clear	Cool and Warm	<IMG_1293813628.JPG>
Shorts	Green	Warm	<IMG_0293813625.JPG>
Skirts	Gray	Cool	<IMG_5293813628.JPG>
Activewear	Multi-colored	Cool	<IMG_0553813628.JPG>
Hoodies	Navy	Cool	<IMG_0293813338.JPG>
Jackets + Coats	Orange	Cool	<IMG_1113833628.JPG>
Loungewear	Pink	Cool and Warm	<IMG_0864813628.JPG>
Sweaters + Pullovers	Purple	Cool and Warm	<IMG_2223813628.JPG>
Cardigans + Blazers	Red	Cool and Warm	<IMG_0293819008.JPG>
Skirts	White	Cool and Warm	<IMG_4093813628.JPG>
Dresses	Yellow	Warm	<IMG_7777813628.JPG>

Outfit		
Outfit_ID	Event	Weather_Condition
A000000123	Wedding	Cool
A000000234	WFH	Cool and Warm
A000000432	Casual Day Out	Warm

Calendar	
Day	Weather_Condition
School	Cool
Work	Warm
Gym	Warm



1. All fields are atomic
2. Eliminate repeating groups
3. Establish primary key
4. No partial dependency
5. Transitive dependency

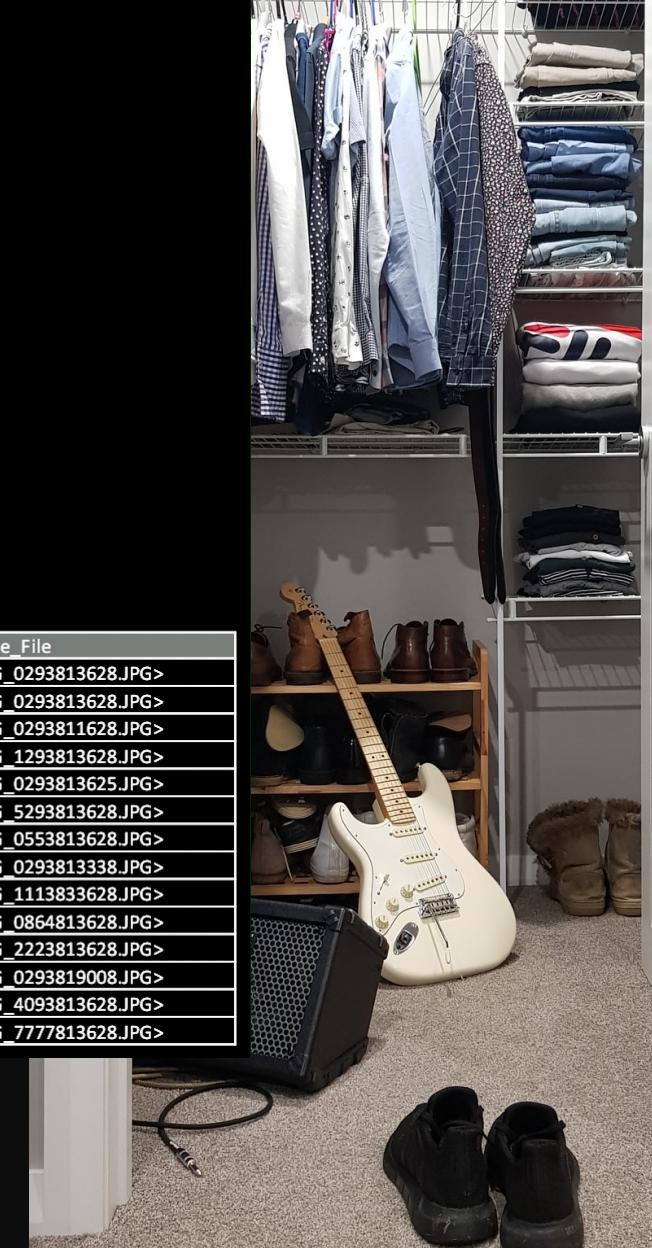
Lanique Peterson: 3NF

**Third Normal Form**  
 All fields are atomic  
 Eliminate repeating groups  
 Establish primary key  
 No partial dependency  
 Transitive dependency

User		
Username (PK)	Day (PK)	Outfit_ID
LP	8/20/22	A000000985
RK	8/20/22	A000000482
JD	8/22/22	A000000553

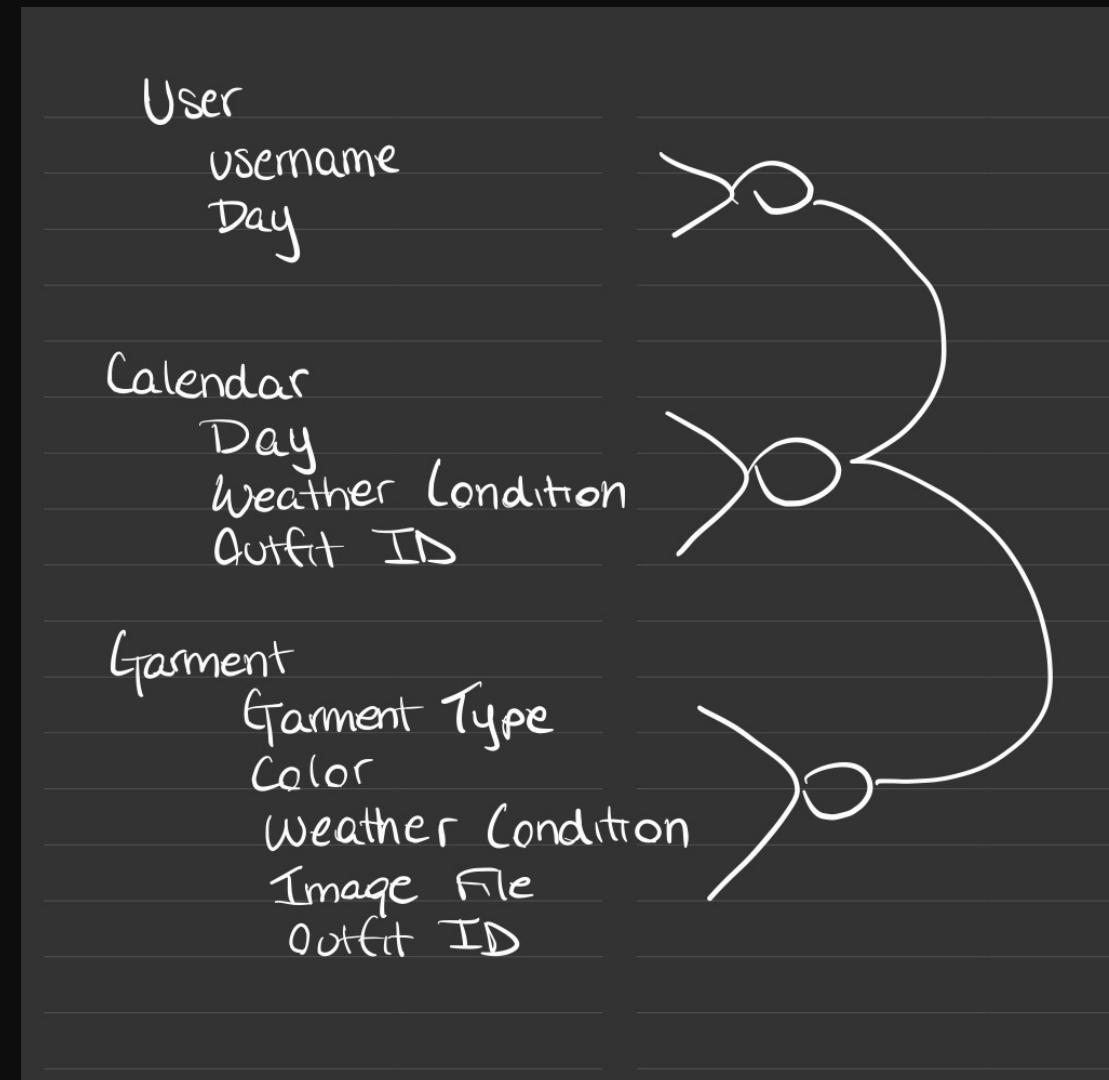
Calendar			
Day (FK)	Weather_Condition	Event	Outfit_ID
School	Cool	Work	A000000985
Work	Warm	School	A000000482
Gym	Warm	Date Night	A000000553

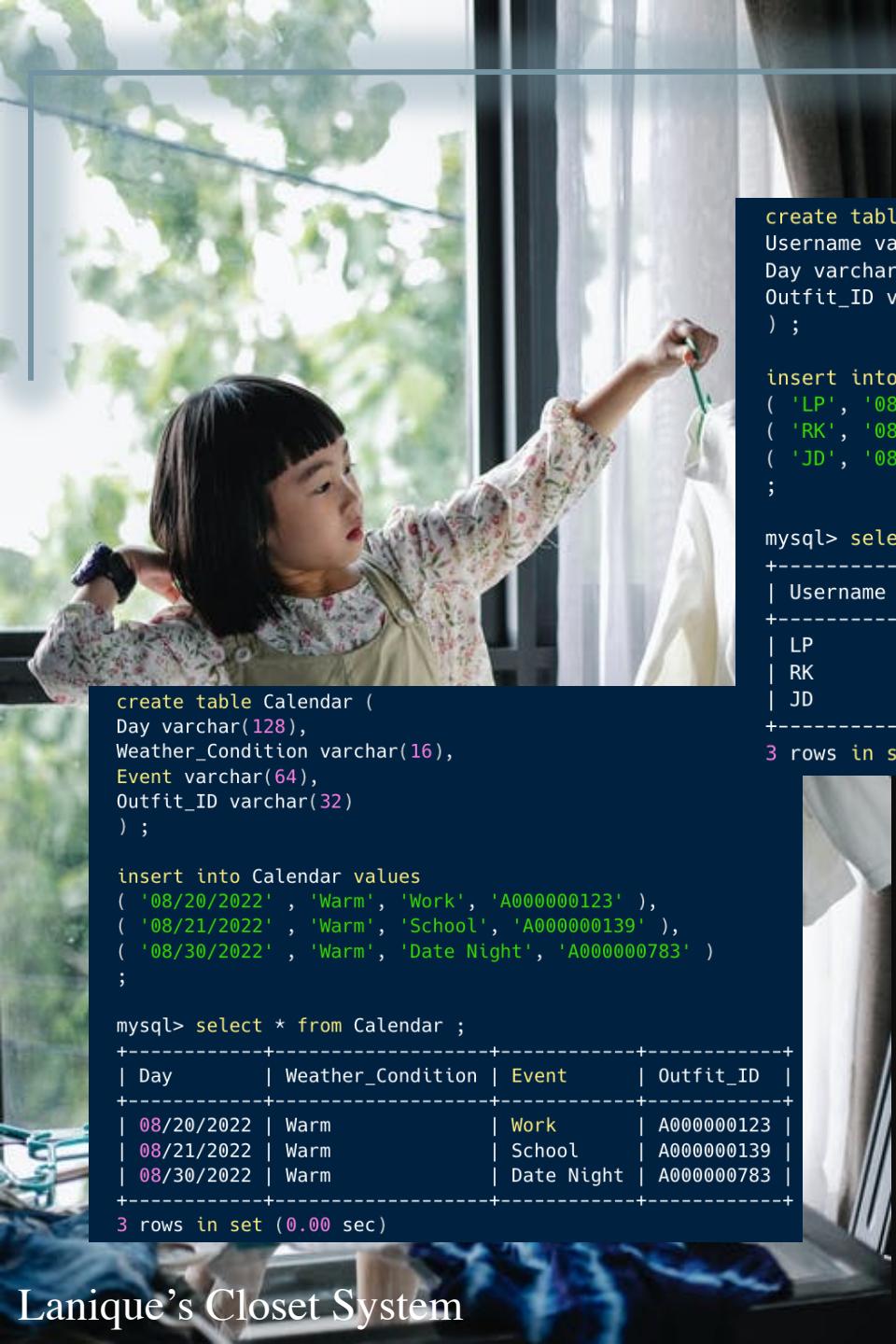
Garment				
Outfit_ID (FK)	Garment Type	Color	Event	Image_File
A000000432	T-Shirts + Tanks	Black	School	<IMG_0293813628.JPG>
A000000432	Blouses	Blue	Work	<IMG_0293813628.JPG>
A000000763	Jeans	Brown # (tan + neutral colors)	Date Night	<IMG_0293811628.JPG>
A000000743	Pants	Clear	Wedding	<IMG_1293813628.JPG>
A000000985	Shorts	Green	Professional Networking Event	<IMG_0293813625.JPG>
A000000482	Skirts	Gray	Indoor Party	<IMG_5293813628.JPG>
A000000553	Activewear	Multi-colored	Outdoor Party	<IMG_0553813628.JPG>
A000000112	Hoodies	Navy	Gym	<IMG_0293813338.JPG>
A000000063	Jackets + Coats	Orange	WFH	<IMG_1113833628.JPG>
A000000001	Loungewear	Pink	Casual Day Out	<IMG_0864813628.JPG>
A000000003	Sweaters + Pullovers	Purple	Date Night	<IMG_2223813628.JPG>
A000000985	Cardigans + Blazers	Red	Professional Networking Event	<IMG_0293819008.JPG>
A000000482	Skirts	White	Outdoor Party	<IMG_4093813628.JPG>
A000000553	Dresses	Yellow	Outdoor Party	<IMG_7777813628.JPG>





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```

create table Calendar (
Day varchar(128),
Weather_Condition varchar(16),
Event varchar(64),
Outfit_ID varchar(32)
) ;

insert into Calendar values
( '08/20/2022' , 'Warm' , 'Work' , 'A000000123' ),
( '08/21/2022' , 'Warm' , 'School' , 'A000000139' ),
( '08/30/2022' , 'Warm' , 'Date Night' , 'A000000783' )
;

mysql> select * from Calendar ;
+-----+-----+-----+-----+
| Day | Weather_Condition | Event | Outfit_ID |
+-----+-----+-----+-----+
| 08/20/2022 | Warm | Work | A000000123 |
| 08/21/2022 | Warm | School | A000000139 |
| 08/30/2022 | Warm | Date Night | A000000783 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

create table User (
Username varchar(128),
Day varchar(128),
Outfit_ID varchar(32)
) ;

insert into User values
( 'LP' , '08/20/2022' , 'A000000123' ),
( 'RK' , '08/22/2022' , 'A000000139' ),
( 'JD' , '08/25/2022' , 'A000000783' )
;

mysql> select * from User ;
+-----+-----+-----+
| Username | Day | Outfit_ID |
+-----+-----+-----+
| LP | 08/20/2022 | A000000123 |
| RK | 08/22/2022 | A000000139 |
| JD | 08/25/2022 | A000000783 |
+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

create table Garment (
Garment_Type varchar(64),
Color varchar(32),
Weather_Condition varchar(16),
Event varchar(64),
Image_File varchar(128),
Outfit_ID varchar(32)
) ;

insert into Garment values
( 'T-Shirts + Tanks' , 'Black' , 'Cool' , 'Work' , '<IMG_0293813628.JPG>' , 'A000000123' ),
( 'Blouses' , 'Black' , 'Cool' , 'School' , '<IMG_0293813628.HEIC>' , 'A000000234' ),
( 'Jeans' , 'Brown' , 'Warm' , 'Concert' , '<IMG_0293811628.JPG>' , 'A000000498' ) ,
( 'Pants' , 'Clear' , 'Cool and Warm' , 'Wedding' , '<IMG_1293813628.JPG>' , 'A000000234' ) ,
( 'Shorts' , 'Green' , 'Warm' , 'Professional Networking Event' , '<IMG_0293813625.JPG>' , 'A000000424' ) ,
( 'Skirts' , 'Gray' , 'Cool' , 'Indoor Party' , '<IMG_5293813628.JPG>' , 'A000000344' ) ,
( 'Activewear' , 'Multi-colored' , 'Cool' , 'Gym' , '<IMG_0553813628.TIFF>' , 'A000000234' ) ,
( 'Hoodies' , 'Navy' , 'Gym' , '<IMG_0293813338.JPG>' , 'A000000432' ) ,
( 'Jackets + Coats' , 'Orange' , 'Cool' , 'Casual Day Out' , '<IMG_1113833628.JPG>' , 'A000000289' ) ,
( 'Loungewear' , 'Pink' , 'Cool and Warm' , 'WFH' , '<IMG_0864813628.PNG>' , 'A000000432' ) ,
( 'Sweaters + Pullovers' , 'Purple' , 'Cool and Warm' , 'Date Night' , '<IMG_2223813628.JPG>' , 'A000000554' ) ,
( 'Cardigans + Blazers' , 'Red' , 'Cool and Warm' , 'Work' , '<IMG_0293819008.JPG>' , 'A000000432' ) ,
( 'Skirts' , 'White' , 'Cool and Warm' , 'School' , '<IMG_4093813628.JPG>' , 'A000000234' ) ,
( 'Dresses' , 'Yellow' , 'Warm' , 'Wedding' , '<IMG_7777813628.JPG>' , 'A000000432' ) ,
( 'Pants' , 'Green' , 'Warm' , 'Work' , '<IMG_0293813685.HEIC>' , 'A000000124' ) ,
( 'Skirts' , 'Black' , 'Cool' , 'School' , '<IMG_5293893628.JPG>' , 'A000000394' ) ,
( 'Sweaters + Pullovers' , 'Black' , 'School' , 'Cool and Warm' , '<IMG_0923813628.JPG>' , 'A000000354' ) ,
( 'Skirts' , 'White' , 'Cool and Warm' , 'Outdoor Party' , '<IMG_4093343628.PNG>' , 'A000000234' ) ,
( 'Dresses' , 'Blue' , 'Warm' , 'Outdoor Party' , '<IMG_7077813628.GIF>' , 'A000000452' )

mysql> select * from Garment ;
+-----+-----+-----+-----+-----+-----+
| Garment_Type | Color | Weather_Condition | Event | Image_File | Outfit_ID |
+-----+-----+-----+-----+-----+-----+
| T-Shirts + Tanks | Black | Cool | Work | <IMG_0293813628.JPG> | A000000123 |
| Blouses | Black | Cool | School | <IMG_0293813628.HEIC> | A000000234 |
| Jeans | Brown | Warm | Concert | <IMG_0293811628.JPG> | A000000498 |
| Pants | Clear | Cool and Warm | Wedding | <IMG_1293813628.JPG> | A000000234 |
| Shorts | Green | Warm | Professional Networking Event | <IMG_0293813625.JPG> | A000000424 |
| Skirts | Gray | Cool | Indoor Party | <IMG_5293813628.JPG> | A000000344 |
| Activewear | Multi-colored | Cool | Gym | <IMG_0553813628.TIFF> | A000000234 |
| Hoodies | Navy | Gym | <IMG_0293813338.JPG> | A000000432 |
| Jackets + Coats | Orange | Cool | Casual Day Out | <IMG_1113833628.JPG> | A000000289 |
| Loungewear | Pink | Cool and Warm | WFH | <IMG_0864813628.PNG> | A000000432 |
| Sweaters + Pullovers | Purple | Cool and Warm | Date Night | <IMG_2223813628.JPG> | A000000554 |
| Cardigans + Blazers | Red | Cool and Warm | Work | <IMG_0293819008.JPG> | A000000432 |
| Skirts | White | Cool and Warm | School | <IMG_4093813628.JPG> | A000000234 |
| Dresses | Yellow | Warm | Wedding | <IMG_7777813628.JPG> | A000000432 |
| Pants | Green | Warm | Work | <IMG_0293813685.HEIC> | A000000124 |
| Skirts | Black | Cool | School | <IMG_5293893628.JPG> | A000000394 |
| Sweaters + Pullovers | Black | School | Cool and Warm | <IMG_0923813628.PNG> | A000000354 |
| Skirts | White | Cool and Warm | Outdoor Party | <IMG_4093343628.PNG> | A000000234 |
| Dresses | Blue | Warm | Outdoor Party | <IMG_7077813628.GIF> | A000000452 |
+-----+-----+-----+-----+-----+-----+
19 rows in set (0.00 sec)

```

What outfit should I wear on August 20th?

```
mysql> select * from User where Username = 'LP' and Day = '08/20/2022' ;
+-----+-----+-----+
| Username | Day      | Outfit_ID |
+-----+-----+-----+
| LP       | 08/20/2022 | A000000123 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

What warm climate pieces of clothing do I have? What cold climate pieces of clothing do I have?

```
mysql> select * from Garment where Weather_Condition = 'Warm' ;
+-----+-----+-----+-----+-----+-----+
| Garment_Type | Color | Weather_Condition | Event           | Image_File        | Outfit_ID |
+-----+-----+-----+-----+-----+-----+
| Jeans       | Brown | Warm          | Concert         | <IMG_0293811628.JPG> | A000000498 |
| Shorts      | Green | Warm          | Professional Networking Event | <IMG_0293813625.JPG> | A000000424 |
| Dresses     | Yellow | Warm          | Wedding         | <IMG_777813628.JPG> | A000000432 |
| Pants       | Green | Warm          | Work            | <IMG_0293813685.HEIC> | A000000124 |
| Dresses     | Blue   | Warm          | Outdoor Party   | <IMG_7077813628.GIF> | A000000452 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from Garment where Weather_Condition = 'Cool' ;
+-----+-----+-----+-----+-----+-----+
| Garment_Type | Color | Weather_Condition | Event           | Image_File        | Outfit_ID |
+-----+-----+-----+-----+-----+-----+
| T-Shirts + Tanks | Black | Cool          | Work            | <IMG_0293813628.jpeg> | A000000123 |
| Blouses      | Black | Cool          | School          | <IMG_0293813628.HEIC> | A000000234 |
| Skirts       | Gray   | Cool          | Indoor Party    | <IMG_5293813628.JPG> | A000000344 |
| Activewear   | Multi-colored | Cool          | Gym             | <IMG_0553813628.TIFF> | A000000234 |
| Hoodies      | Navy   | Cool          | Gym             | <IMG_0293813338.JPG> | A000000432 |
| Jackets + Coats | Orange | Cool          | Casual Day Out | <IMG_1113833628.JPG> | A000000289 |
| Skirts       | Black | Cool          | School          | <IMG_5293893628.JPG> | A000000394 |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```



How many garments do I own?



```
mysql> select Garment_Type , count(*) from Garment group by Garment_Type ;  
+-----+-----+  
| Garment_Type | count(*) |  
+-----+-----+  
| T-Shirts + Tanks | 1 |  
| Blouses | 1 |  
| Jeans | 1 |  
| Pants | 2 |  
| Shorts | 1 |  
| Skirts | 4 |  
| Activewear | 1 |  
| Hoodies | 1 |  
| Jackets + Coats | 1 |  
| Loungewear | 1 |  
| Sweaters + Pullovers | 2 |  
| Cardigans + Blazers | 1 |  
| Dresses | 2 |  
+-----+-----+  
13 rows in set (0.00 sec)
```



What clothing do I have for a wedding event? And what about a work event?

```
mysql> select * from Garment where Event = 'Wedding' ;
+-----+-----+-----+-----+-----+-----+
| Garment_Type | Color | Weather_Condition | Event | Image_File      | Outfit_ID |
+-----+-----+-----+-----+-----+-----+
| Pants       | Clear | Cool and Warm    | Wedding | <IMG_1293813628.JPG> | A000000234 |
| Dresses     | Yellow | Warm           | Wedding | <IMG_7777813628.JPG> | A000000432 |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from Garment where Event = 'Work' ;
+-----+-----+-----+-----+-----+-----+
| Garment_Type      | Color | Weather_Condition | Event | Image_File      | Outfit_ID |
+-----+-----+-----+-----+-----+-----+
| T-Shirts + Tanks | Black | Cool          | Work  | <IMG_0293813628.jpeg> | A000000123 |
| Cardigans + Blazers | Red   | Cool and Warm | Work  | <IMG_0293819008.JPG> | A000000432 |
| Pants             | Green | Warm          | Work  | <IMG_0293813685.HEIC> | A000000124 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```



How many black pieces of clothing do I own?

```
mysql> select count(*) from Garment where Color = 'Black' ;
+-----+
| count(*) |
+-----+
|      4   |
+-----+
1 row in set (0.00 sec)
```

Future implementation:

- The ability to list out multiple complete outfit choices, tops, bottoms, and jackets.
- Ability to view how often the user wears a particular garment--allowing the user to create new outfits or shop for clothing pieces that pairs well to the clothing they do not wear often.

