

## Queries for the Wardrobe App

The 'Wardrobe App' is a user facing application that helps people get recommendations for outfits; it also helps users shop for clothes by linking the vendors and brands. The wealth of user data and preference data makes the program useful for stores and brands too.

-- The utility of our app is that it recommends articles of clothing for an outfit, or pairs different articles of clothing together. The logic of the recommendation AI is not built, but here is a sample of the app recommending shirts to wear with jeans. Our hypothetical AI suggests red t-shirts to wear with jeans, all clothes have a specific size and it has to match the user's size.

```
select c.clothID,c.cloth_type,c.color,b.brand_name
from clothes c, user u, brand b
where c.cloth_type='t-shirt' and c.color='red' and c.top_size=u.bodyShape;
```

	clothID	cloth_type	color	brand_name
▶	114	t-shirt	Red	Aurore
	510	t-shirt	Red	Aurore
	693	t-shirt	Red	Aurore
	378	t-shirt	Red	Aurore
	114	t-shirt	Red	Aurore

-- The user can also browse through certain categories. Here, the user is looking at all the tops that are blue in color(in his size).

```
select c.cloth_type, b.brand_name, c.color, c.top_size
from clothes c join brand b on c.brandID=b.brandID
where c.color='red' and c.top_size='M'
order by b.brand_name;
```

	cloth_type	brand_name	color	top_size
▶	boots	Alwyn	Blue	M
	socks	Chaddie	Blue	M
	tank-top	Dom	Blue	M
	boots	Elwood	Blue	M
	t-shirt	Hayes	Blue	M
	tank-top	Madeleine	Blue	M
	scarf	Niko	Blue	M

-- Here the user is displayed all the top rated(ratings > 4) clothes for winter season.

```

select c.clothID, s.season_name, c.cloth_type as 'type', c.color
from clothes c join ratings r on c.clothID = r.clothID
join season s on s.clothID = c.clothID
where s.season_name = "winter" and r.rating>4 or c.cloth_type='sweater' or
c.cloth_type='jacket' or c.cloth_type='coat' or c.cloth_type='scarf';

```

	clothID	season_name	type	color
▶	1	Fall	jacket	Indigo
	1	Fall	jacket	Indigo
	10	Summer	coat	Maroon
	21	Winter	coat	Purple
	22	Fall	scarf	Goldenrod
	26	Spring	jacket	Blue
	31	Winter	sweater	Puce

-- Number of users with size xs group by gender female. This is useful information for the vendors to see how big the audience for xs clothes for females are.

```

select count(userID), gender
from user
where bodyShape="XS" and gender="F";

```

	count(userID)	gender
▶	54	F

-- Displays average age of people who wear sweatpants. This is important for brands to understand who is buying certain items (for instance sweatpants), so they can make informed design decisions.

```

select round(avg(datediff(curdate(),dob))/365,0) as 'average age', u.gender
from user u join clothes c on c.userID=u.userID
where c.cloth_type="sweatpants"
group by gender
order by gender desc;

```

	average age	gender
▶	36	M
	29	F

-- Displays the list of brands with clothes that have ratings =5 (top rated).

```
select brand_name
from brand b join clothes c on b.clothID=c.clothID
join ratings r on r.clothID=c.clothID
where rating > '4'
order by b.clothID;
```

	brand_name
▶	Tatiana
	Ozzie
	Kameko
	Maria
	Philip

-- Stores that are in a 100km radius of the client (drivable distance).

```
select storeID
from store s
where s.distanceFromClient<100;
```

	storeID
▶	106
	214
	485

-- Our app is doing a giveaway to gift our 999th customer a special prize.

```
select u.userID,u.firstName,u.lastName,u.email
from user u
where u.userID=999;
```

	userID	firstName	lastName	email
▶	999	Gaylor	Bogaert	gbogaertrq@sogou.com

-- Display the number of articles of clothing by season.

```
select s.season_name, count(s.season_name) as 'count'
from season s
group by season_name;
```

	season_name	count
►	Fall	248
	Winter	261
	Spring	236
	Summer	257

-- Display the dresses available.

```
select c.clothID,cloth_type, b.brand_name
from clothes c, brand b
where b.brandID=c.brandID and c.cloth_type='dress';
```

	clothID	cloth_type	brand_name
►	16	dress	Henriette
	43	dress	Pyotr
	60	dress	Giulietta
	62	dress	Cherida
	66	dress	Conni

-- Display the number of users that need parental approval before entering the app. Users that are of age less than 16 years will need parental approval.

```
select u.userID,u.firstName,u.lastName,u.DOB as 'date of birth',u.email
from user u
where datediff(curdate(),dob)/365<16;
```

	userID	firstName	lastName	date of birth	email
	30	Franny	Abden	2013-02-02	fabdent@e-recht24.de
	35	Heather	Shevlin	2014-07-19	hshevliny@admin.ch
	37	Garfield	Perrigo	2011-10-19	gperrigo10@twitpic.com
	44	Arte	Brandli	2018-05-01	abrandli17@studiopress.com
	46	Griffin	Camelia	2006-07-07	gcamelia19@boston.com
	47	Stephie	Girardeau	2006-08-13	sgirardeau1a@diigo.com
	52	Bernelle	Summer	2005-12-08	bernelle16@uconn.edu

## Store Procedure

-- Creates a stored procedure to list all the people in a particular city. This data will be useful for brands to see how many and who are in the city. This can help them push certain clothes and styles to these users. In this example we can see a couple who live in Xinpū, China.

```

CREATE DEFINER=`mm_cp502102team06`@`%` PROCEDURE `peopleInCity`(IN city
char(20))
BEGIN
    SELECT u.firstName,u.lastName,a.city,a.street, a.country
    FROM user u, address a
    WHERE a.city = city;
END

```

	firstName	lastName	city	street	country
▶	Barde	Haacker	Xinpu	9 Barnett Avenue	China
	Puff	Blackater	Xinpu	9 Barnett Avenue	China

The screenshot shows a database management interface with a tab titled 'peopleInCity - Routine'. The 'DDL' section contains the following SQL code:

```

1 CREATE DEFINER=`mm_cp502102team06`@`%` PROCEDURE `peopleInCity`(IN city char(20))
2 BEGIN
3     SELECT u.firstName,u.lastName,a.city,a.street, a.country
4     FROM user u, address a
5     WHERE a.city = city;
6 END

```

Below the code editor, there is a 'Routine' tab and an 'Output' section. At the bottom right, there are 'Apply' and 'Revert' buttons.

## ER Diagram

