

CPSC 304: Milestone 4 (Group 14)

WabiTabi: Tourism Planning Application

REPOSITORY

https://github.students.cs.ubc.ca/CPSC304-2023W-T1/project_d8u8l_k2i1b_z1u5s

SQL SCRIPT

https://github.students.cs.ubc.ca/CPSC304-2023W-T1/project_d8u8l_k2i1b_z1u5s/blob/main/src/model/CreatePopulateTables3.sql

Check constraints have been created to ensure data integrity on TextReviews and PhotoReviews such that the given rating cannot be less than 0 or greater than 10. Furthermore, visibility must be either 0 or 1 to indicate public/private photo reviews.

PROJECT DESCRIPTION

Our project centers around a travel and tourism management application, aiming to serve as a cohesive platform that enriches travel planning for its users. Specifically, our application seeks to empower users with information and tools for crafting, sharing, and exploring travel itineraries, attractions, and user-generated content, including reviews and photos. Our database primarily models crucial elements for efficient travel planning and community engagement, such as users, itineraries, photo reviews, text reviews, destinations, and attractions.

By creating a comprehensive platform, WabiTabi has significantly simplified the process of travel planning for its users. Users are able to register themselves, update their details, and remove themselves from the platform. In addition, when clicking on a user profile, you can see the specific text or photo reviews that they posted. The user is also able to view information (such as currency, language, and geography) about destinations that they may want to visit. The "Attractions" tab allows users to view more information about individual attractions and filter them based on the destination of interest. There are also added features to calculate the total number of reviews per attraction and find the attractions with higher-than-average ratings! The "Itineraries" tab allows users to create, update, add to, or filter the user-submitted travel plans. This page has a feature allowing you to see the average stay duration in days for certain itineraries! Finally, the "Admin" tab is for the admin users to securely reset the tables back to initial state in case it is required (this process requires a secret username and password).

FINAL SCHEMA

- No differences between final schema and previous submissions.

Users(userID, email, firstName, lastName)

userID	email	firstName	lastName
dagu	dagu@email.com	David	Guo
kev_mochi	keviz@email.com	Kevin	Zhou
kev_megu	kp@email.com	Kevin	Poon
squishyPancake	pancake@otheremail.com	Sophia	Martin
trustme	trusttrust123@random.com	Olivia	Martin

Locale(countryName, continent, currency)

countryName	continent	currency
Canada	North America	CAD
Japan	Asia	JPY
China	Asia	CNY
United States of America	North America	USD
United Kingdom	Europe	GBP

Languages(codeISO, name, numOfSpeakers, originRegion, usageNotes)

codeISO	name	numOfSpeakers	originRegion	usageNotes
eng	English	604300000	NULL	NULL
jpn	Japanese	125100000	NULL	NULL
kor	Korean	75000000	NULL	NULL
chi	Chinese	1300000000	NULL	NULL
jpk	Kaisai Japanese	125100000	Kaisai region of Japan	Kansai-ben is primarily used in western part of Japan such as Osaka and Kyoto.

Environment(cityName, countryName, climate, **codeISO**)

cityName	countryName	climate	codeISO
Vancouver	Canada	Sunny in the summer with temperature in the range of 20 to 30 degrees Celsius. Rainy during the rest of the year.	eng
Tokyo	Japan	Very hot and humid during the summer.	jpn
Orlando	United States of America	Tropical weather	eng
Osaka	Japan	Hot and humid in the summer. Mild weather for the rest of the year.	jpk
Kyoto	Japan	Similar to Osaka. Hot and humid in the summer and mild weather for the rest of the year.	jpk

Destinations(destID, **cityName**, **countryName**, description)

destID	cityName	countryName	description
1	Kyoto	Japan	It is a historic city with lots of traditional architecture and temples.
2	Tokyo	Japan	Capital of Japan. It is a vibrant metropolis with busy city life.
3	Osaka	Japan	It is a big city in western part of Japan.
4	Vancouver	Canada	A city in the province British Columbia. Known for its integration of nature and city life.
5	Orlando	United States of America	Known for Disney World, Universal Studios and other attractions.

Attractions(attractionID, name, description, address, **destID**)

attractionID	name	description	address	destID
1	Kiyomizu-dera	A famous temple in Kyoto.	1 Chome-294 Kiyomizu, Higashiyama Ward, Kyoto, 605-0862, Japan	1
2	Tokyo Skytree	A famous tower in Tokyo	1-chome-1-2 Oshiage, Sumida City, Tokyo 131-0045, Japan	2
3	Stanley Park	A big park in the downtown Vancouver area.	1042 Stanley Park Dr, Vancouver, BC V6G 3E2	4
4	Universal Studios Osaka	A great attraction in Osaka	2 Chome-1-33 Sakurajima, Konohana Ward, Osaka, 554-0031, Japan	3
5	Imperial Palace	This is where the Japanese Royal family lives.	1-1 Chiyoda, Chiyoda City, Tokyo 100-8111, Japan	2

Itineraries(planID, duration, dateCreated, **destID**, **userID**)

planID	duration	dateCreated	destID	userID
1	4	2023-12-01	3	kev_mochi
2	3	2023-01-25	2	kev_mochi
3	7	2023-10-10	5	kev_megu
4	3	2023-03-07	3	kev_megu
5	7	2023-01-09	2	dagu

TextReviews(reviewID, rating, title, publishDate, bodyText, textLanguage, **attractionID**, **userID**)

reviewID	rating	title	publishDate	bodyText	textLanguage	userID	attractionID
1	8	Visiting Tokyo Skytree	01-SEP-23	Es muy lindo! Visitado con mis amigos :)	Spanish	kev_mochi	2
2	10	A Day at Universal Studios Osaka	30-SEP-23	Many different things you can do there! Must visit!	English	kev_megu	4
3	9	Stanley Park on Canada Day	01-JUL-23	There were a lot of people! Go early if you can!	English	trustme	3
4	3	Stanley Park Day Trip	04-OCT-19	The weather was bad. Not a fun day.	English	squishyPancake	3
5	7	Kiyomizu-dera trip	31-MAY-23	This is a famous attraction and so expect there to be a lot of people.	English	dagu	1
6	9	What a Wonderful Sight!	30-MAY-23	Very busy during the day, I suggest going at night!.	English	dagu	2
7	7	Great Place for a Run	23-AUG-22	Great scenery! Watch out for the bike lane.	English	dagu	3
8	3	REALLY EXPENSIVE!!	28-MAY-23	Holy moly, I paid almost \$200 dollars to wait 3 hours in line!	English	dagu	4
9	6	Pretty Good View From Afar	29-MAY-23	No one told me you cannot enter the Imperial Palace... I should have known!	English	dagu	5

PhotoReviews(reviewID, rating, title, publishDate, numOfPhotos, visibility, **attractionID**, **userID**)

reviewID	rating	title	publishDate	numOfPhotos	visibility	userID	attractionID
1	8	Day Trip to Universal Studios Osaka	01-SEP-2	1	1	kev_megu	4
2	10	Visiting Tokyo Skytree	31-AUG-23	1	1	kev_mochi	2

3	10	A day at Kiyomizu-dera	10-MAY-23	1	1	dagu	1
4	6	Stanley Park Day Trip	03-OCT-19	1	1	squishyPancake	3
5	9	Stanley Park with Friends	15-JUL-18	1	1	trustme	3

Photos(photoID, caption, photoURL, **attractionID**, **reviewID**)

photoID	caption	photoURL	attractionID	reviewID
1	Beautiful Day at Stanley Park with Emily and Johnny	https://lh3.googleusercontent.com/p/AF1QipM-Epa9xKpiiGJBHvjMrZ7FtprpMONj1k_q4ngL=s1360-w1360-h1020	3	5
2	At the entrance of Tokyo Skytree	https://lh3.googleusercontent.com/p/AF1QipMx2r2o_u3eBI7ZkdQilhZFjJ--PdTqeqnjKrWN=s1360-w1360-h1020	2	2
3	Inside Universal Studios Osaka	https://lh5.googleusercontent.com/p/AF1QipNNdKJzRzJjxwltGsoiFtrx8K5DJ4BdQP07pb5s=s0	4	1
4	At Kiyomizu-dera	https://lh3.googleusercontent.com/p/AF1QipOaqMTtvzlBA62QNVPRYv_KICLreT97nS04eMXy=s1360-w1360-h1020	1	3
5	Rainy Stanley Park	https://lh3.googleusercontent.com/p/AF1QipPZu9FEVz1ILXKrkJtA6flbf-lv36QfswJrmKR=s1360-w1360-h1020	3	4

Include(**attractionID**, **planID**, visitDate)

attractionID	planID	visitDate
2	2	2023-08-27
4	4	2023-07-01

2	5	2023-05-03
4	1	2023-08-25
5	2	2023-08-28

INSERT OPERATION (Itineraries)

INSERT INTO Itineraries
VALUES (:planID, :duration, :dateCreated, :destID, :userID)

File: src/model/view-itineraries.php | Line: 479

Before

All Current Itineraries

Plan ID	Duration (Days)	Destination ID	User ID	Date Created
1	4	3	kev_mochi	2023-12-01
2	3	2	kev_mochi	2023-01-25
3	7	5	kev_megu	2023-10-10
4	3	3	kev_megu	2023-03-07
5	7	2	dagu	2023-01-09

During

Create New Itinerary

User ID:

Email:

Destination:

Duration (Days):

Create Itinerary

After

Plan ID	Duration (Days)	Destination ID	User ID	Date Created
1	4	3	kev_mochi	2023-12-01
2	3	2	kev_mochi	2023-01-25
3	7	5	kev_megu	2023-10-10
4	3	3	kev_megu	2023-03-07
5	7	2	dagu	2023-01-09
6	14	3	dagu	2023-11-29

DELETE OPERATION (Users)

DELETE FROM Users

WHERE email="" . \$email . "" AND userID="" . \$userID . ""

File: src/model/view-users.php | Line: 334

Before

Currently registered Users

User ID	First Name	Last Name
dagu	David	Guo
kev_mochi	Kevin	Zhou
kev_megu	Kevin	Poon
squishyPancake	Sophia	Martin
trustme	Olivia	Martin

During

Remove User

The values are case sensitive and if you enter in the wrong case, the update statement will not do anything.

User ID:

Email:

After

Currently registered Users

User ID	First Name	Last Name
kev_mochi	Kevin	Zhou
kev_megu	Kevin	Poon
squishyPancake	Sophia	Martin
trustme	Olivia	Martin

UPDATE OPERATION (Itineraries)

UPDATE Itineraries

SET destID=" . \$input_newDestID . " , duration=" . \$input_newDuration . "

WHERE planID=" . \$planID . ""

File: src/model/view-itineraries.php | Line: 404

Before

Plan ID	Duration (Days)	Destination ID	User ID	Date Created
1	4	3	kev_mochi	2023-12-01
2	3	2	kev_mochi	2023-01-25
3	7	5	kev_megu	2023-10-10
4	3	3	kev_megu	2023-03-07
5	7	2	dagu	2023-01-09
6	14	3	dagu	2023-11-29

During

Update Your Itinerary

Plan ID:

New Destination:

New Duration (Days):

Email:

After

All Current Itineraries

Plan ID	Duration (Days)	Destination ID	User ID	Date Created
1	100	1	kev_mochi	2023-12-01
2	3	2	kev_mochi	2023-01-25
3	7	5	kev_megu	2023-10-10
4	3	3	kev_megu	2023-03-07
5	7	2	dagu	2023-01-09
6	14	3	dagu	2023-11-29

SELECTION OPERATION (Itineraries)

SELECT *

FROM Itineraries

WHERE planID=" . \$planID . " " . \$dropdown1 . " duration=" . \$duration . " " . \$dropdown2 . " destID=" . \$destID . " " . \$dropdown3 . " userID=" . \$userID . " " . \$dropdown4 . " dateCreated=" . \$dateCreated . ""

File: src/model/view-itineraries.php | Line: 599

Before

Plan ID	Duration (Days)	Destination ID	User ID	Date Created
1	4	3	kev_mochi	2023-12-01
2	3	2	kev_mochi	2023-01-25
3	7	5	kev_megu	2023-10-10
4	3	3	kev_megu	2023-03-07
5	7	2	dagu	2023-01-09

During

Filter Itineraries

Plan ID:

AND ▾

Duration (Days):

AND ▾

Destination ID:

AND ▾

User ID:

AND ▾

Date Created:

Select

After

Plan ID	Duration (Days)	Destination ID	User ID	Date Created
1	4	3	kev_mochi	2023-12-01

PROJECTION OPERATION (Home)

```
SELECT column_name
FROM user_tab_columns
WHERE table_name = ' . $table . '
```

File: src/model/view-home.php | Line: 85

Before

Projection Query Demo

Select a table to view:

During

Projection Query Demo

Select a table to view:

You have selected table: USERS

Select an attribute to view:

After

Projection Query Demo

Select a table to view:

You have selected table: USERS

Select an attribute to view:

You have selected attribute: USERID

dagu
kev_megu
kev_mochi
squishyPancake
trustme

JOIN OPERATION (Attractions)

```
SELECT Attractions.*, Destinations.cityName, Destinations.countryName
FROM Attractions
JOIN Destinations ON Attractions.destID = Destinations.destID
```

File: src/model/view-attractions.php | Line: 209

Before

Our Current Attractions!

Attraction ID	Name	Description	Destination ID	Destination City	Destination Country
1	Kiyomizu-dera	A famous temple in Kyoto.	1	Kyoto	Japan
2	Tokyo Skytree	A famous tower in Tokyo	2	Tokyo	Japan
5	Imperial Palace	This is where the Japanese Royal family lives.	2	Tokyo	Japan
4	Universal Studios Osaka	A great attraction in Osaka	3	Osaka	Japan
3	Stanley Park	A big park in the downtown Vancouver area.	4	Vancouver	Canada

During

Filter Attractions by Destination ID or Name

Destination ID or City:

After

Attraction ID	Name	Description	Destination ID	Destination City	Destination Country
2	Tokyo Skytree	A famous tower in Tokyo	2	Tokyo	Japan
5	Imperial Palace	This is where the Japanese Royal family lives.	2	Tokyo	Japan

AGGREGATION WITH GROUP BY (Attractions)

```
SELECT A.attractionID, A.name, A.description, A.address, SUM(CR.numberOfReview) AS
totalNumberOfReviews
FROM (SELECT TR.attractionID, COUNT(*) AS numberOfReview
      FROM TextReviews TR GROUP BY TR.attractionID
      UNION ALL
```

```

SELECT PR.attractionID, COUNT(*) AS numberOfReview
FROM PhotoReviews PR GROUP BY PR.attractionID) CR, Attractions A
WHERE A.attractionID = CR.attractionID
GROUP BY A.attractionID, A.name, A.description, A.address

```

File: src/model/view-attractions.php | Line: 326

Before

Calculate Total Number of Reviews of Each Attraction

Note: Attractions without reviews will not be shown.

During

Calculate Total Number of Reviews of Each Attraction

Note: Attractions without reviews will not be shown.

After

Calculate Total Number of Reviews of Each Attraction

Note: Attractions without reviews will not be shown.

Attraction ID	Name	Address	Description	Total Number of Reviews
1	Kiyomizu-dera	A famous temple in Kyoto.	1 Chome-294 Kiyomizu, Higashiyama Ward, Kyoto, 605-0862, Japan	2
2	Tokyo Skytree	A famous tower in Tokyo	1-chome-1-2 Oshiage, Sumida City, Tokyo 131-0045, Japan	3
4	Universal Studios Osaka	A great attraction in Osaka	2 Chome-1-33 Sakurajima, Konohana Ward, Osaka, 554-0031, Japan	3
5	Imperial Palace	This is where the Japanese Royal family lives.	1-1 Chiyoda, Chiyoda City, Tokyo 100-8111, Japan	1
3	Stanley Park	A big park in the downtown Vancouver area.	1042 Stanley Park Dr, Vancouver, BC V6G 3E2	5

AGGREGATION WITH HAVING (Itineraries)

```
SELECT destID, AVG(duration)
FROM Itineraries
WHERE duration <= " . $maxDuration . "
GROUP BY destID
HAVING COUNT(*) >= " . $minCount . "
```

File: src/model/view-itineraries.php | Line: 622

Before

Find Average Duration Per Destination

Minimum Number of Itineraries In Destination:

Maximum Duration:

During

Find Average Duration Per Destination

Minimum Number of Itineraries In Destination:

Maximum Duration:

After

Find Average Duration Per Destination

Minimum Number of Itineraries In Destination:

Maximum Duration:

Destination ID Average Duration (Days)

2	3
3	3.5

NESTED AGGREGATION WITH GROUP BY (Attractions)

```
SELECT A.destID, A.attractionID, A.name, A.address, A.description, AVG(CR.rating) AS averageRating
FROM (SELECT TR.attractionID, TR.rating
      FROM TextReviews TR
      UNION ALL
      SELECT PR.attractionID, PR.rating
      FROM PhotoReviews PR) CR, Attractions A
WHERE A.attractionID = CR.attractionID
GROUP BY A.destID, A.attractionID, A.name, A.address, A.description
HAVING MIN(CR.rating) >= (SELECT AVG(CR2.rating)
                        FROM (SELECT TR2.attractionID, TR2.rating
                              FROM TextReviews TR2
                              UNION ALL
                              SELECT PR2.attractionID, PR2.rating
                              FROM PhotoReviews PR2) CR2)
```

File: src/model/view-attractions.php | Line: 368

Before

Calculate Average Rating of Attractions Whose Lowest Rating is At Least the Overall Average Rating of All Attractions

Calculate

During

Calculate Average Rating of Attractions Whose Lowest Rating is At Least the Overall Average Rating of All Attractions

Calculate

After

Calculate Average Rating of Attractions Whose Lowest Rating is At Least the Overall Average Rating of All Attractions

Calculate

Destination ID	Attraction ID	Name	Address	Description	Average Review Rating
2	2		Tokyo Skytree 1-chome-1-2 Oshiage, Sumida City, Tokyo	131-0045, Japan A famous tower in Tokyo	9

DIVISION OPERATION (Users)

```
SELECT DISTINCT U.userID, U.email, U.firstName, U.lastName
FROM Users U
WHERE NOT EXISTS (
  SELECT A.attractionID
  FROM Attractions A
  WHERE NOT EXISTS (
    SELECT *
    FROM TextReviews TR
    WHERE TR.attractionID = A.attractionID
    AND TR.userID = U.userID))
```

File: src/model/view-users.php | Line: 399

Before

★ Find MVP WabiTabi Users ★

Find users who have written a text review of every single attraction on WabiTabi! We are very thankful for their contributions!

During

Find and Display MVP Users

After

★ Find MVP WabiTabi Users ★

Find users who have written a text review of every single attraction on WabiTabi! We are very thankful for their contributions!

Find and Display MVP Users

User ID First Name Last Name

[dagu](#) David Guo