Sravya Kaniti
Geethika Balasubramanian
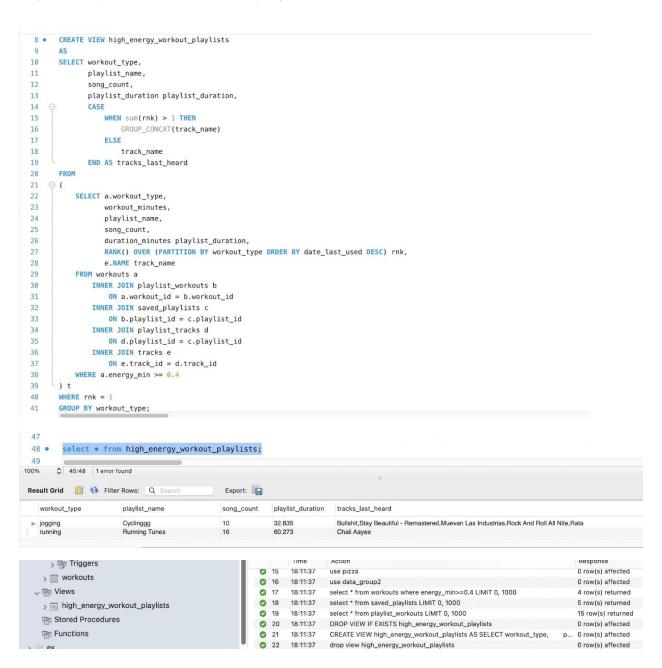Dagim Bantikassegn
Vidhat Bandi

Deliverable 4

View 1:

This is a view that provides a list of all high energy workouts (minimum energy level=0.4) and the corresponding playlists the user has saved. The list also displays the number of songs in each playlist, playlist duration, names of tracks (comma separated) last heard from the playlist.

```sql
 8 •  CREATE VIEW high_energy_workout_playlists
 9    AS
10    SELECT workout_type,
11           playlist_name,
12           song_count,
13           playlist_duration playlist_duration,
14    CASE
15           WHEN sum(rnk) > 1 THEN
16               GROUP_CONCAT(track_name)
17           ELSE
18               track_name
19       END AS tracks_last_heard
20    FROM
21    (
22        SELECT a.workout_type,
23               workout_minutes,
24               playlist_name,
25               song_count,
26               duration_minutes playlist_duration,
27               RANK() OVER (PARTITION BY workout_type ORDER BY date_last_used DESC) rnk,
28               e.NAME track_name
29          FROM workouts a
30            INNER JOIN playlist_workouts b
31              ON a.workout_id = b.workout_id
32            INNER JOIN saved_playlists c
33              ON b.playlist_id = c.playlist_id
34            INNER JOIN playlist_tracks d
35              ON d.playlist_id = c.playlist_id
36            INNER JOIN tracks e
37              ON e.track_id = d.track_id
38        WHERE a.energy_min >= 0.4
39    ) t
40    WHERE rnk = 1
41    GROUP BY workout_type;
```

```sql
47
48 •  select * from high_energy_workout_playlists;
49
```

100%   ◇   45:48   1 error found

Result Grid | 🔍 Filter Rows: Q Search   Export: 📋

workout_type	playlist_name	song_count	playlist_duration	tracks_last_heard
▶ jogging	Cyclinggg	10	32.835	Bullshit,Stay Beautiful - Remastered,Muevan Las Industrias,Rock And Roll All Nite,Rata
running	Running Tunes	16	60.273	Chali Aayee

> 🔲 Triggers
> 📋 workouts
∨ 📋 Views
  > 📋 high_energy_workout_playlists
  📋 Stored Procedures
  📋 Functions
∨ 📋 ex

	Time	Action	Response
✓ 15	18:11:37	use pizza	0 row(s) affected
✓ 16	18:11:37	use data_group2	0 row(s) affected
✓ 17	18:11:37	select * from workouts where energy_min>=0.4 LIMIT 0, 1000	4 row(s) returned
✓ 18	18:11:37	select * from saved_playlists LIMIT 0, 1000	5 row(s) returned
✓ 19	18:11:37	select * from playlist_workouts LIMIT 0, 1000	15 row(s) returned
✓ 20	18:11:37	DROP VIEW IF EXISTS high_energy_workout_playlists	0 row(s) affected
✓ 21	18:11:37	CREATE VIEW high_energy_workout_playlists AS SELECT workout_type, p...	0 row(s) affected
✓ 22	18:11:37	drop view high_energy_workout_playlists	0 row(s) affected

Sravya Kaniti
Geethika Balasubramanian
Dagim Bantikassegn
Vidhat Bandi

View 2:

We created a view for a couch-to-5k schedule with 6 weeks total. Playlists are provided to match the goal time for 5k. Users are able to select the number of weeks they want to spread the goal across as well as desired 5k time.

```
CREATE VIEW
    couch_to_5k
AS
    -- cte to filter song list down to those matching
energy/tempo/danceability
    -- settings for running
    WITH
        run_params
    AS
        (
        SELECT
            tempo_min
            , tempo_max
            , energy_min
            , energy_max
            , danceability_min
            , danceability_max
        FROM
            workouts
        WHERE
            workout_type = 'running'
        )

    -- cte to pull in all tracks matching the above parameters
    , run_tracks
    AS
        (
        SELECT
            ROW_NUMBER() OVER() row_num
            , track_id
            , track_guid
            , name
            , artist
            , duration_ms/1000/60 duration_min
        FROM
            tracks
        INNER JOIN
            run_params
        ON
            tracks.tempo > run_params.tempo_min
            AND tracks.tempo <= run_params.tempo_max
            AND tracks.energy > run_params.energy_min
            AND tracks.energy <= run_params.energy_max
            AND tracks.danceability > run_params.danceability_min
            AND tracks.danceability <= run_params.danceability_max
        WHERE
            tracks.disliked_track = 0
        )

    -- cte to calculate a running total of track length, which will be used
    -- to form playlists
    , playlist_duration
    AS
        (
        SELECT
        row_num
        , name
            , SUM(duration_min) over (order by row_num) AS duration_min
        FROM
            run_tracks
        GROUP BY row_num
        )

    -- cte to show couch to 5k schedule, in practice number of rows and
    -- time_for_5k increments will be costomized to user preferences
    , run_schedule
    AS
        (
        SELECT
            CONCAT('Week ', ROW_NUMBER() OVER()) week_num
            , 60 - (ROW_NUMBER() OVER() - 1) * 5 time_for_5k
        FROM
            run_tracks
        LIMIT 6
        )

    -- creating playlists based on user schedule
    SELECT
        week_num
        , time_for_5k
        , GROUP_CONCAT(name) track_list
        , MAX(duration_min) playlist_length
    FROM
        run_schedule
    LEFT JOIN
        playlist_duration
    ON
        run_schedule.time_for_5k > playlist_duration.duration_min
    WHERE
        duration_min <= time_for_5k
    GROUP BY
        week_num
        , time_for_5k
    ORDER BY
        week_num
        , duration_min desc
```

Data in view:

week_num	time_for_5k	track_list	playlist_length
Week 1	60	SolglasÄ¶gon,Krakkalakkarapp,THANXX,Classical Gas - Live At The Royal Festival Hall, London/1...	59.36226667
Week 2	55	Classical Gas - Live At The Royal Festival Hall, London/1977,Fue Por Mi,Chali Aayee,Magkombo,...	53.04026667
Week 3	50	Fue Por Mi,Krakkalakkarapp,Classical Gas - Live At The Royal Festival Hall, London/1977,Wir tick...	49.51160001
Week 4	45	Classical Gas - Live At The Royal Festival Hall, London/1977,Krakkalakkarapp,Wir ticken,ç¶ã,¬...	43.37200001
Week 5	40	Fue Por Mi,Krakkalakkarapp,VÃ´o das Águias,Erinnerungen - Live in Berlin 2000,Noonday Under...	39.41133334
Week 6	35	Magkombo,Ay Dios,Classical Gas - Live At The Royal Festival Hall, London/1977,Noonday Under...	32.11243334

```
▼ 🗄 data_group2
  ▶ 📁 Tables
  ▼ 📁 Views
    ▶ 🔲 couch_to_5k
    ▶ 🔲 high_energy_workout_playlists
      📁 Stored Procedures
      📁 Functions
```

Sravya Kaniti
Geethika Balasubramanian
Dagim Bantikassegn
Vidhat Bandi

View 3:

This is a view that provides a list of all the tracks of user's favorite artists that are not listened to or saved in the playlist before.

```
130 ●    DROP VIEW IF EXISTS  new_track_suggestions;
131 ●    CREATE VIEW new_track_suggestions
132      AS
133      SELECT track, artist
134      from(SELECT c.name track, a.name artist, b.track_id
135          FROM artists a
136              INNER JOIN track_artists b ON a.artist_id=b.track_id
137              INNER JOIN tracks c ON b.track_id=c.track_id
138          WHERE c.track_id NOT IN(SELECT track_id FROM playlist_tracks)
139          AND date_last_used IS NULL AND disliked_track=0 AND liked_artist=1)t;
```

Result Grid		Filter Rows: Q Search	Export:

track	artist
Air Mata Perkawinan	F. Gadnodia
Cardigan	TKKG Retro-Archiv
EihÃ¤n TÃ¤mÃ¤n Nyt NÃ¤in PitÃ¤nyt Olla	Moira Dela Torre
MÃ¥nen tur och retur, del 23	DEVO
We're Alive - Mono; 2003 Remaster	Marty Robbins
Don't Wanna Live My Life	Wohnout
El Party	Marjatta LeppÃƒÂ¤nen
Hail to the Princess Aurora	Fast Eddie
When I'm Gone	Carpenters
Yo No Me Voy Acostar	Joan Baez
Can't Take My Eyes off You	Jacky Cheung
The Edge of Heaven	Duangjan Suwannee
The Gallis Pole	A.R. Rahman
Kanashiki Kyodai Tachi (From "Saint Sei…	Lobo
ç¾Žã—ã„ã¨	Randy Crawford
Flying Home - Instrumental	Ã¨Ã¯Å±Ã©Ë†Â°Ã§Â®
ÐšÐ°Ð°Ñ‚Ð¾ Ð¿Ñ€ÐµÐ´Ð¸	The Doors
Love Me Instead	Armonia 10
Invention No. 15 in B Minor, BWV 786 -…	Loqiemean
x''x''/xxœx•x''x™x - x'x''x•x¤x¢x''	Chrisye
ä¸€æ°´éš"å¤©æ¶¶	JosÃƒÂ© Alfredo Jim…
Haber Gelmiyor Yardan	Cornelius
Chopin: Nocturne No. 17 in B Major, Op.…	Nationalteatern
Tum Aur Foroib Khoo (Live)	Teresa Teng

	27	20:51:58	select from new_track_suggestions LIMIT 0, 1000	31 row(s) returned	0.028 sec / 0.00018…
✓	28	20:52:31	DROP VIEW IF EXISTS new_track_suggestions	0 row(s) affected	0.031 sec
✓	29	20:52:31	CREATE VIEW new_track_suggestions AS SELECT track, artist from(SELECT c…	0 row(s) affected	0.034 sec