



Health Survey Dashboard task

MindLift is HealthZen Technologies' flagship application, designed to support mental health and well-being through personalized health surveys, mindfulness exercises, and habit-tracking features. The app provides users with a dynamic platform to monitor their mood, sleep patterns, physical activity, and overall mental health status. By answering periodic health surveys within the app, users can gain insights into their well-being trends and receive tailored recommendations to improve their mental health.

Users answer health surveys while interacting with the app. The business aims to understand whether the app contributes positively to users' health and well-being.

Data Overview:

- Data Source: The data is stored in a table format with the following columns:
 - `userId`: Unique identifier for the user.
 - `surveyId`: Unique identifier for the survey.
 - `surveyCreationTime`: Timestamp indicating when the survey was created.
 - `surveyResult`: A JSON object containing the survey questions and answers.
- Survey Details:
 - There are a couple of different surveys.
 - Each survey contains 2 to 7 questions.
 - The answers are textual or numerical, indicating the extent to which the user agrees with the statement (e.g., "I haven't felt good in the past two weeks"). Possible responses range from "Not agree at all" to "Really agree".

Task Description:

Provide a solution for the business to help understand user well-being. Your solution should include:

- Architecture Description: Outline the architecture you propose.
- Data Transformations: Include any data transformation code and the resulting tables.
- Dashboard/Analysis: Share your analysis and the resulting dashboard.

Feel free to use any tools you prefer for this task.

Important notes:

- In this task the focus is not about the perfect code or the nicest visualization (there is no need to create a full dashboard, a preliminary design is perfectly fine).
- The focus is on understanding the data, the business needs and creating a solution to help the business make better decisions.
- The suggested structure of the solution is organized by order of importance, with most of the investment needed in the initial sections. If time is insufficient, please describe in words how you would approach working on the parts you were unable to reach

Suggested solution structure:

Here is a suggested structure for the solution to help us understand you.

- Describe your approach to understanding the provided dataset.
- Explain how you would preprocess and structure the survey results for analysis.
- Outline a basic data model that supports the efficient querying and visualization of survey results.
- Dashboard Planning:
 - Propose a strategy for creating a dashboard/analysis that can help the business understand if the app is effective in improving users' well-being.
 - Outline the types of visualizations and metrics that would be most informative for this purpose.
- Identify potential challenges in analyzing survey data and creating the dashboard and Suggest solutions or workarounds for these challenges.
- Recommend tools and technologies for implementing the dashboard, considering data volume, refresh rates, and user accessibility.

Good luck!

Raven team