

## Daily Assignment: Collecting Personal Health Data

### Overview

The primary and only assignment for this mini-course is to collect personal health data daily throughout the duration of the course. This assignment is designed to help you develop skills in data collection, organization, and analysis, which will be critical for the Data Visualization Hackathon. By tracking your health metrics consistently, you will gain hands-on experience in managing real-world data and preparing it for meaningful insights.

### Group Structure

- You will be assigned to a group of 3 or 4 students at the start of the course.
- Data collection for this assignment is an *individual responsibility*. Each group member must collect their own health data daily.
- Collaboration within your group is encouraged for brainstorming ideas on what data to collect, sharing best practices, and discussing challenges or insights. This will also help you prepare for the hackathon, where you may combine your datasets for group analysis.

### Assignment Objectives

- Develop a consistent habit of collecting personal health data daily.
- Understand the importance of data quality, consistency, and organization in health-related studies.
- Prepare a dataset for analysis and visualization during the Data Visualization Hackathon.
- Explore different health metrics and their relevance to personal well-being.

### What Health Data to Collect

- Each student can decide which health metrics to track, as long as they are relevant to personal health and well-being.
- Examples of health data you might consider include:
  - Physical Activity: Steps taken, distance walked/run, exercise duration, calories burned.
  - Sleep: Hours slept, sleep quality (e.g., light vs. deep sleep), bedtime/wake-up time.

- Nutrition: Water intake, calorie intake, meals consumed, macronutrient breakdown (carbs, protein, fats).
- Mental Health: Mood (e.g., happy, stressed, anxious), stress levels (rated on a scale), mindfulness or meditation time.
- Other Metrics: Body weight, body temperature, screen time, or any other meaningful health-related data.

Select **at least 5 metrics** to track daily to ensure a robust dataset. Discuss with your group to get ideas, but choose metrics based on your interests and access to tools.

### **Important Notes:**

- Collect data daily from the start of the course until the final day of the Data Visualization Hackathon.
- Each student must collect their own data; do not rely on group members to collect data for you.
- The instructor will review your progress daily to ensure consistency and provide feedback. Be prepared to show your data notebook or digital records during these check-ins.
- Record your data accurately. If you miss a day, note it in your records with an explanation (e.g., forgot to track, device malfunction). Do not fabricate data, as this will affect your analysis and insights.

### **Tools for Data Collection**

- Each student will receive a physical notebook for recording daily health data. You can log data in any format you prefer and modify your methods as you learn new skills throughout the week.
- You may use digital tools like Microsoft Excel or Google Sheets to log your data.
- If you have a smartwatch, smartphone, or health apps (e.g., Fitbit, Apple Health), you can extract data from them, but ensure you transfer the data to your notebook or other tools for consistency.

### **Expectations and Deliverables**

- On the final day, you will use your complete dataset for the Data Visualization Hackathon, where it will be analyzed and visualized.
- Regularly discuss your data with your group, sharing insights, challenges, or trends to prepare for the hackathon.

### **Tips**

- Select metrics that are relevant and feasible to track daily (e.g., avoid blood pressure if you lack a measuring device).
- Use a daily reminder on your phone to avoid forgetting to track your data.
- Use wearables or apps to automate data collection for metrics like steps or sleep, then record the data in your notebook or spreadsheet.

### **Support and Questions**

If you have questions about what data to collect, how to use the notebook, or how to organize your data, contact the instructor. Email me at [shrihariniramesh@cmail.carleton.ca](mailto:shrihariniramesh@cmail.carleton.ca) or ask during daily check-ins. I'm here to help you succeed and ensure your data is ready for the hackathon.