

laptop(laptop_id, cpu_id, ram_id, storage_size, battery_life)

- Primary key laptop_id
- Foreign key cpu_id references **cpu**
- Foreign key ram_id references **ram**

This table is named after the entity that it resembles – a laptop. There are too many specifications for a laptop to keep track of everything, so we will only be tracking the simple specs that most users will need to consider, including a CPU benchmark score, RAM benchmark score, storage size, and battery life of each laptop.

We separated the CPU attribute into a separate table because many laptops will have the same processor, so we will avoid redundant data for that column. The cpu_id will be used to reference that table.

We also separated the RAM attribute for a conceptual sake. Most laptops will not have the exact same RAM configuration, but because 3 other attributes were dependent on that configuration, it helps to sort out the data by creating a dedicated table. The ram_id will be used to reference that table.

storage_size represents the capacity of the hard drive in gigabytes. The user usually doesn't need to concern themselves with other details besides this.

battery_life represents the amount of time in hours that a laptop can remain running on a full charge during a battery life test. We will get this information from independent laptop reviews.

cpu(cpu_id, score)

- Primary key cpu_id

This table represents the general effectiveness of laptop CPU's. It will store a score associated with a benchmark test of that CPU, giving a rough idea of how powerful that CPU is.

ram(ram_id, capacity, intel_score, amd_score)

- Primary key ram_id

This table represents the general effectiveness of laptop RAM configurations. It will also store a score of a benchmark test along with the capacity of the RAM in gigabytes. These scores will be divided by the manufacturer of the processor (Intel or AMD), because the different architecture affects the overall performance of the RAM.