

Requirements Document for Delivery Driver Payroll Database

Problem Domain Language Rules:

1. **Driver identification** : Every driver is uniquely identified by a driver id and has associated personal details such as name and contact information. A driver has a specific base pay id that links to their base pay rate.
2. **Stop Classification** : Each delivery stop is categorized by its type (residential, commercial) and is linked to a specific route.
3. **Time Tracking** : The time taken for each route by a driver on a specific date is recorded, including total time spent.
4. **Route Difficulty Assessment** : Each route is assessed for difficulty, which is a factor in determining pay rates.
5. **Package Volume Tracking** : The total number of packages delivered to each stop on a specific date is recorded.
6. **Base Pay Determination** : Base pay is determined by a base rate, a package per day threshold, and an extra rate for packages delivered beyond this threshold.
7. **Performance Evaluation** : Drivers' daily performance is evaluated based on the number of stops completed, packages delivered, and time efficiency relative to expectations.
8. **Bonus Allocation** : Bonuses are awarded based on specific criteria, including performance reasons, on a given date and are associated with a driver.

Identified Nouns and Actions:

Nouns:

- Driver (driver_id, name, contact, base Pay_id)
- Stops (Stop_id, Route_id, Stop Type)
- Time Taken (TimeTaken_id, Route_id, Driver_id, Date, Total Time)
- Route Difficulty (Route_id, Difficulty)
- Amount of Packages (Packages_id, Stop_id, Date, Total Packages)
- Base Pay (Base Pay_id, Base Rate, Package Threshold, Extra Rate Per Package)
- Performance (Performance_id, Driver_id, Date, Route_id, Stops Completed, Packages Delivered, Time Efficiency)
- Bonuses (Bonus_id, Driver_id, Date, Reason, Amount)

Verbs:

- Driver:
 - delivers packages

- Assigning base pay and package thresholds to drivers.
- Recording the total time taken per route by drivers.
- Categorizing stops by type (residential, commercial).
- Assessing route difficulty.
- Tracking the number of packages delivered per stop.
- Evaluating drivers' performance based on stops completed, packages delivered, and time efficiency.
- Awarding bonuses based on specific criteria related to performance.