The 6 Dimensions of DATA QUALITY

ACCURACY

How closely the data reflects the **true** **values** or **facts**

COMPLETENESS

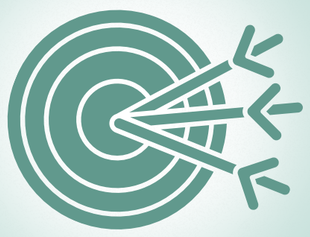
All necessary data is **present** and **accounted** for in a dataset.

TIMELINESS

Reflects how **current** and **up-to-date** the data is

CONSISTENCY

Data is **uniform** across different datasets and systems.



UNIQUENESS

Each data entry is **distinct** and **not** **repeated** in the dataset

VALIDITY

The data is **correct** and **appropriate** for its intended use

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ACCURACY

Accuracy is how closely the data reflects the true values or facts

Ways to Improve Data Accuracy

- Double-check all entries before saving, especially numbers and dates
- Use copy-paste for complex values (like serial numbers) to avoid typing errors
- Report any discrepancies or errors you notice to the appropriate team

Example: It is **in*accurate*** to say there are five trucks in the group below

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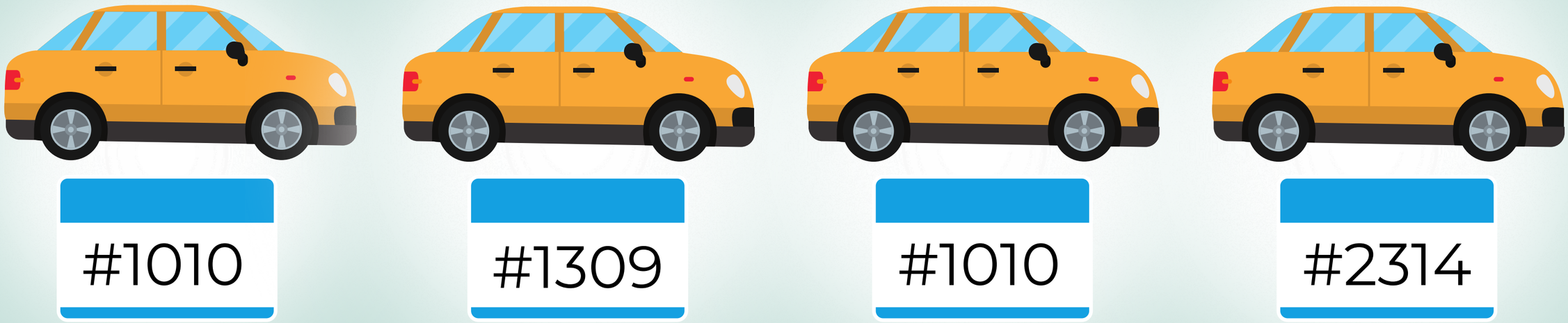
UNIQUENESS

Uniquess means each data entry is distinct and not repeated in the dataset

Ways to Improve Uniqueness

- Always search for existing records before creating new ones
- If you find duplicates, report them to your supervisor
- Use the system's search function with different keywords to ensure the record doesn't already exist

Example: This dataset of trucks doesn’t meet *uniqueness* standards, as truck #1010 is duplicated in the dataset



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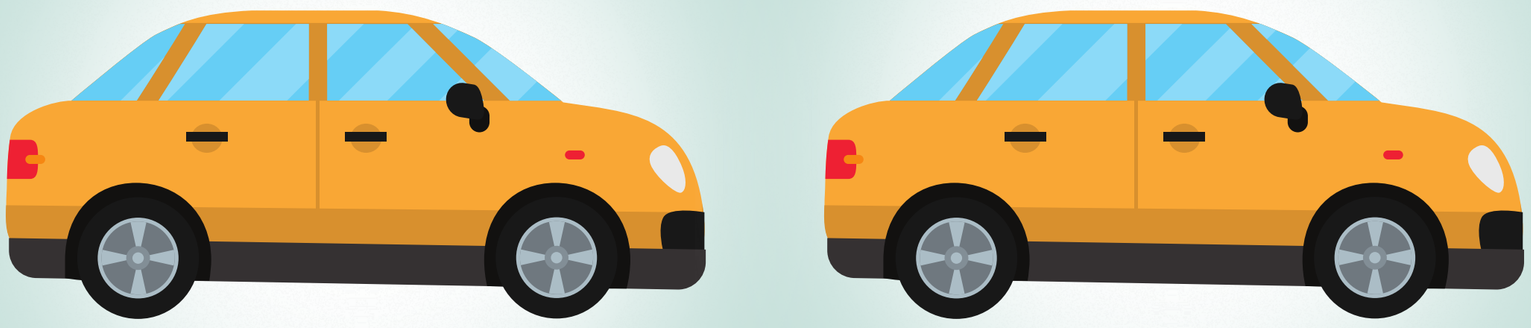
COMPLETENESS

Data Completeness refers to the extent to which all required data is present and accounted for.

Ways to Improve Data Completeness

- Always fill in all required fields; don’t leave them blank unless instructed.
- Add placeholder values (e.g., "TBD") if you’re unsure but need to flag missing information.
- Follow up on any pending information and update records once available

Example: The dataset of trucks below is *incomplete*, as the third truck is not represented in the dataset



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TIMELINESS

Timeliness means the data is current and up-to-date

Ways to Improve Timeliness

- Enter data as soon as you receive it, don't let it pile up
- Update existing records promptly when you get new information
- Flag any outdated information you notice during your daily work

Example: The trucks below were counted last year, and other trucks have since appeared elsewhere, therefore the data is no longer ***timely***

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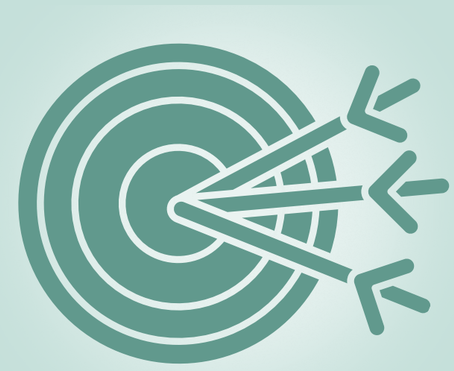
CONSISTENCY

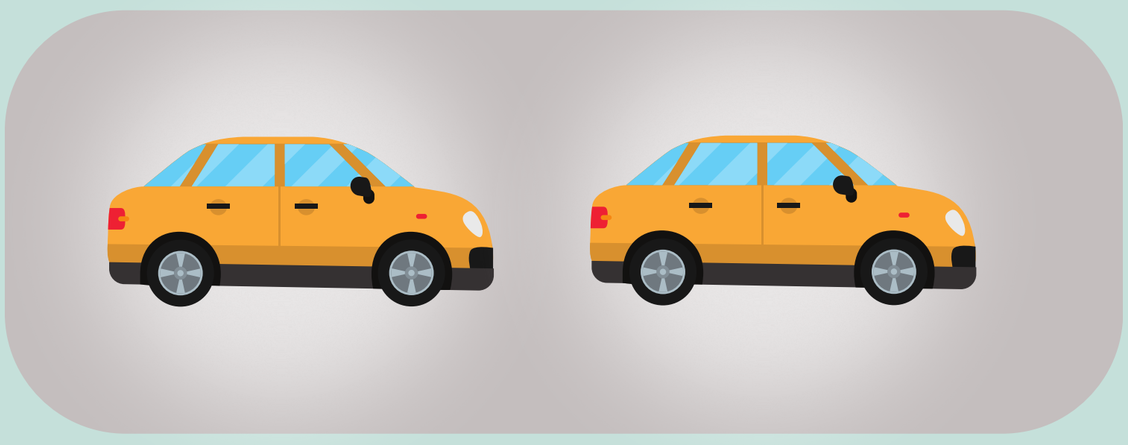
Consistency means data is **uniform** across different datasets and systems.



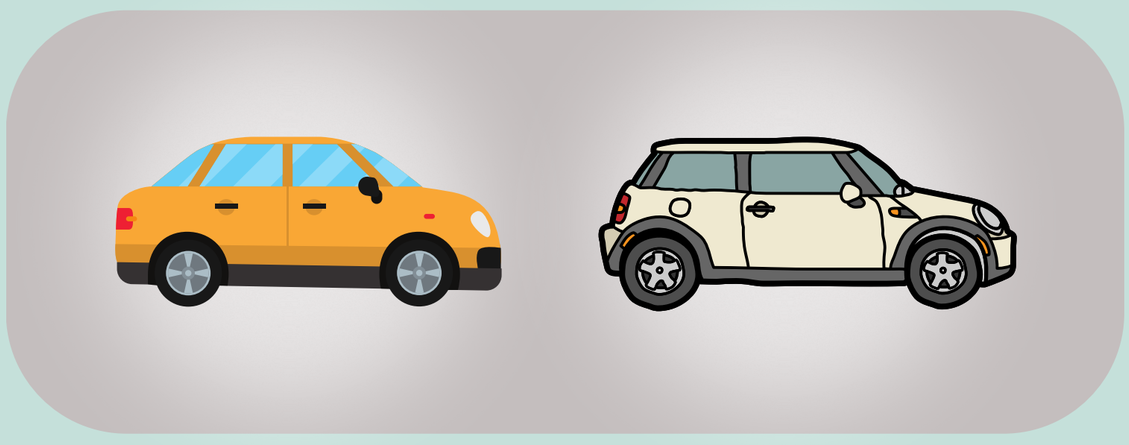
Ways to Improve Consistency

- Use the provided **templates** or formats for data entry (e.g., dates as MM/DD/YYYY)
- Check the **dropdown menus** first instead of creating new options
- Use **consistent language**, codes, or terms as outlined in your team's guidelines.

Example: The number and color of the rubber ducks should be consistent across all systems, but here they don’t match, leading to ***inconsistency.***



System A



System B

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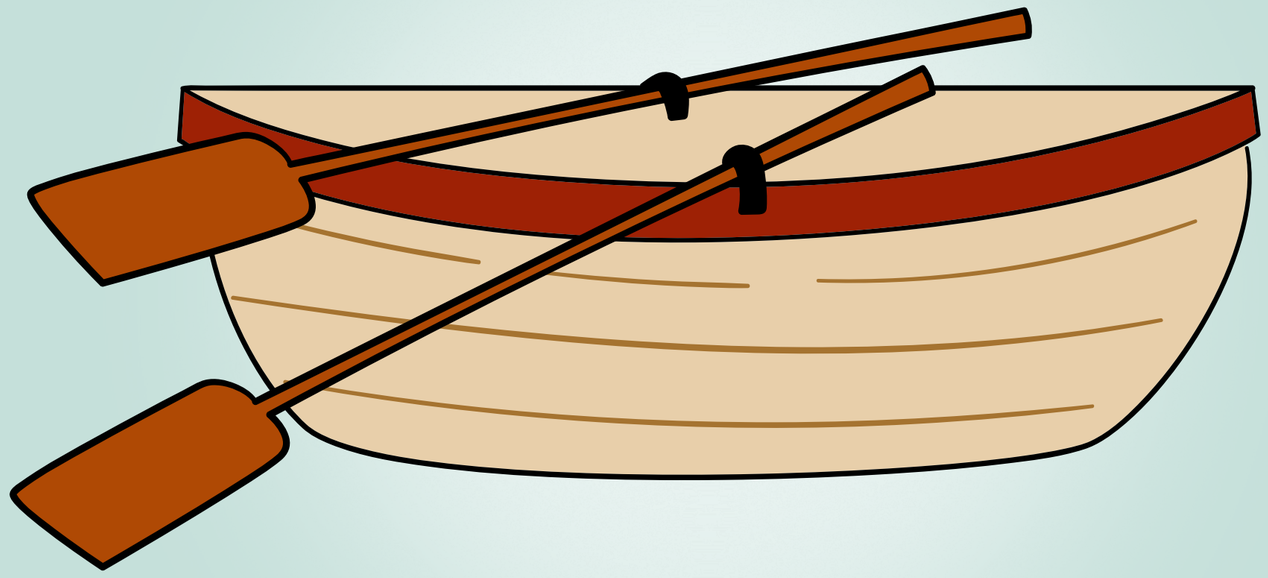
VALIDITY

Validity means the data is **correct** and **appropriate** for its intended use

Ways to Improve Validity

- **Learn** and **follow** your department's data entry standards
- **Pay attention** to error messages - they help you enter data correctly
- Ask for **help** if you're unsure about the correct format or value to enter

Example: The “truck” below is ***invalid***, as it does not meet the rules set for a truck (i.e. wheels, headlights, bumpers, etc.)



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