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**Topic 36 - Adding a New Dictionary to a List of Dictionaries**

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**What**

You can add a new dictionary to the end of a list of dictionaries in Python using the append() function. This is helpful when you want to expand a dataset, like adding a new customer profile to an existing customer list.

**Why**

This method keeps data organized in a single list, enabling efficient management and easy access to each entry, which is particularly useful for large datasets. Instead of creating separate variables or lists for each new entry, appending a new dictionary ensures that all data stays together in one manageable list.

**How**

To add a new customer to the customers list:

1. **Identify the new customer’s ID** by getting the length of the list, which provides the next index for the new customer dictionary.

python

Copy code

new\_customer\_id = len(customers)

1. **Prepare the customer information** in variables:

python

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new\_first\_name = "Maria"

new\_last\_name = "Garcia"

new\_address = "1234 Elm St."

1. **Create a new dictionary** with the customer’s ID and other information:

python

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new\_customer = {

"customer id": new\_customer\_id,

"first name": new\_first\_name,

"last name": new\_last\_name,

"address": new\_address,

}

1. **Append the new dictionary** to the list:

python

Copy code

customers.append(new\_customer)

**Example:** If the customers list initially had 3 dictionaries, the new customer ID would be 3 (the list length). After appending, this dictionary is stored at index 3.

**Summary**

Appending a new dictionary to a list of dictionaries in Python involves setting a unique ID, creating the dictionary, and adding it to the list using append(). This approach allows you to keep data unified and accessible in one structured list.

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