**CIS 641 – IC 5 – Class Specifications**

**Team Name:** Ninja Turtles

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1. **A Methos Signature: Class Name: Vehicle**

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| --- | --- | --- | --- |
| Name of Methods | Parameters | Return Type | Description |
| add\_vehicle | make, vehicle\_name, price, year | bool | Adds a vehicle data in to the inventory if all the data is valid. |
| remove\_vehicler | vehicle\_id | bool | Removes a vehicle from the inventory by it’s ID. |
| update\_price | vehicle\_id, new\_price | bool | Updates vehicle new price by using it's id to the new price |
| list\_vehicle | none | list | Will provide all the list of vehicles from the inventory by it’s if he vehicle exists. |

1. **Preconditions:**

Make and Vehicle Name should be unique to each vehicle entry.

Year must be within a specified range (e.g., 2010–2024) to ensure data accuracy.

Price should be a valid positive numeric value.

1. **Postconditions:**

The vehicle record will be stored with all specified attributes, allowing it to be accessed or modified later.

A new vehicle entry will appear in the inventory system if it meets all preconditions.

1. **Invariants:**

The Year attribute must always remain within the 2010-2024 range to maintain project specifications.

Price should always be a positive value and not zero.