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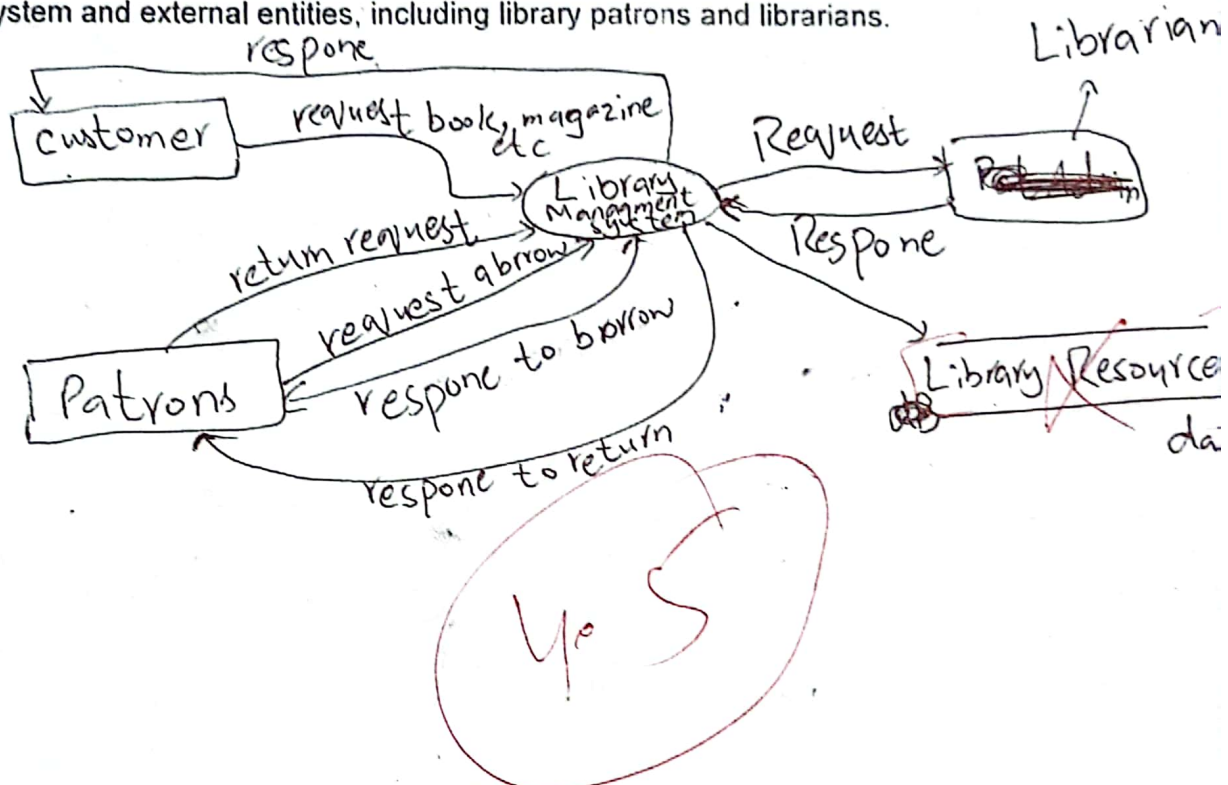
CS-5A

Quiz-1
(V-1)

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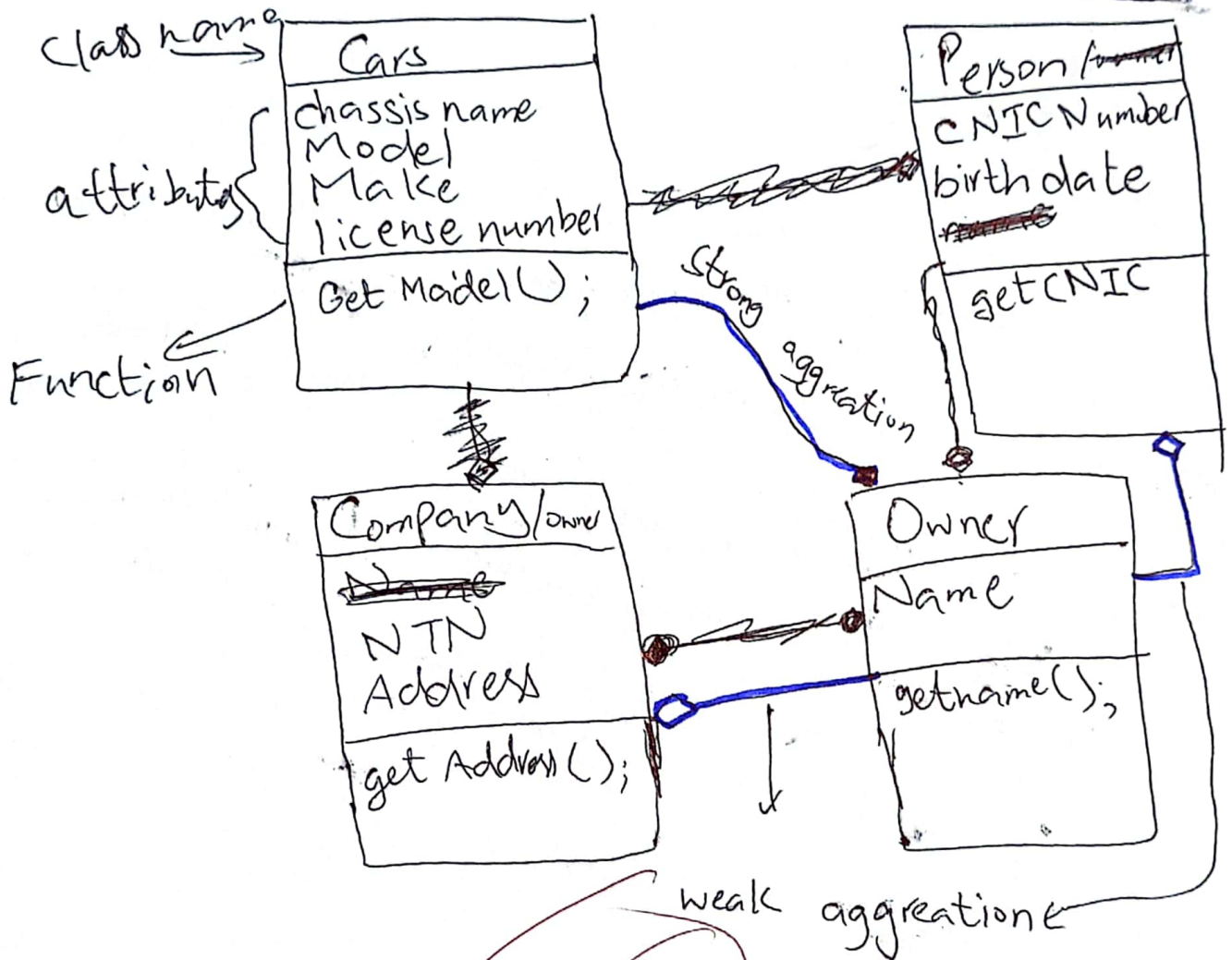
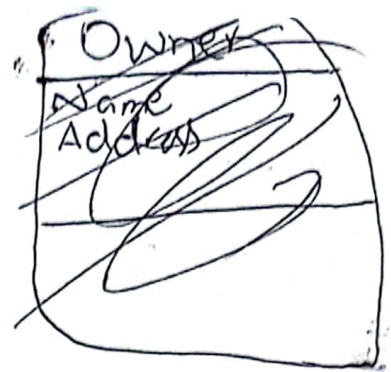
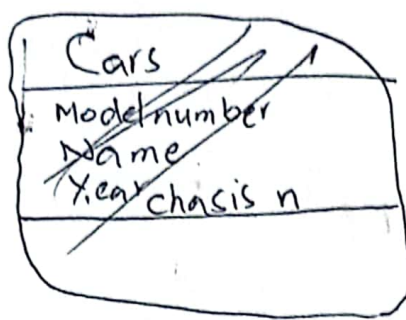
Q1. Consider a Library Management System. This system is responsible for managing library resources such as books, magazines, and DVDs, as well as handling borrowing and returning activities by library patrons. (5 marks)

Your task is to design a **Level-0 DFD** that illustrates the primary interactions between the system and external entities, including library patrons and librarians.



Q2. Consider a car ownership system. Each car has an owner. Every owner can own multiple cars. An owner could be a person or a company. A person can work for multiple companies and a company can hire multiple persons. Each owner has a name and each car has a chassis number, model, make, and license number. Every person has a CNIC number and birth date and every company has an NTN. Design a class diagram for this system. (5 marks)

Note: Mention the attributes, cardinalities, and relations (association / aggregation / composition) with correct UML syntax.



4.5