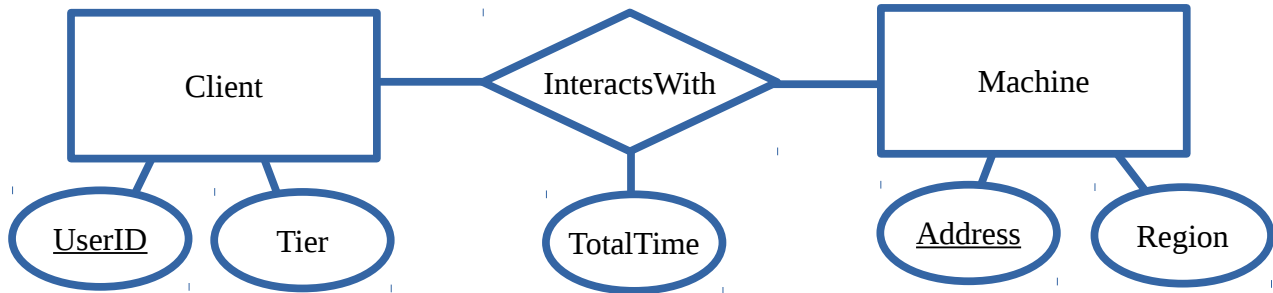


## Section 7 Worksheet

ER → SQL

Coming up with ER diagrams is relatively simple compared to coming up with a representation in SQL. In this part we will try to convert some ER diagrams into SQL CREATE TABLE statements. **For the following ER Diagrams and respective specifications, come up with the appropriate schema and implement it in SQL.** Feel free to abbreviate names to save time and assume attribute types as appropriate.

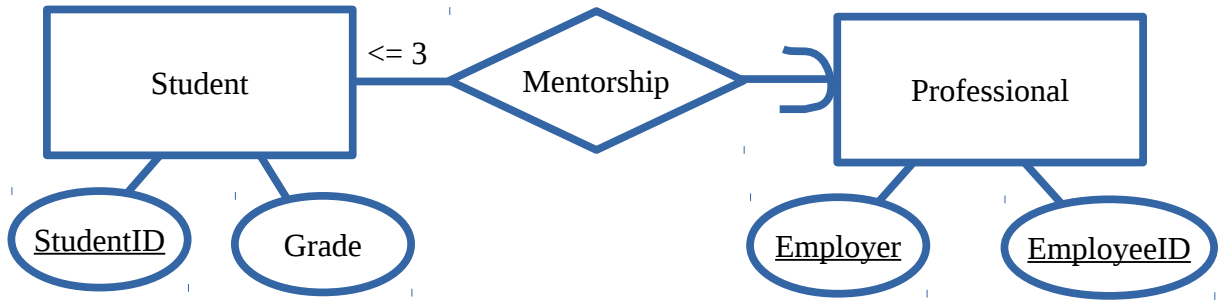


Other Specification:

If a Client is removed, we want to retain the interaction history.

If a Machine is removed, we don't want to retain the interaction history.

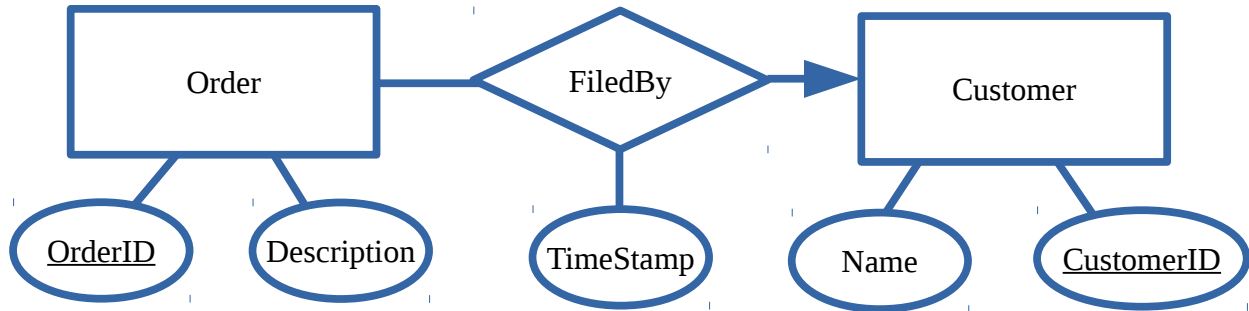
Any updates for a Client or Machine should also update respective interaction records.



Other Specification:

Only Students that are grade 8 or higher are allowed to have mentorships.

Any updates for a Student or Professional should also update respective interaction records.

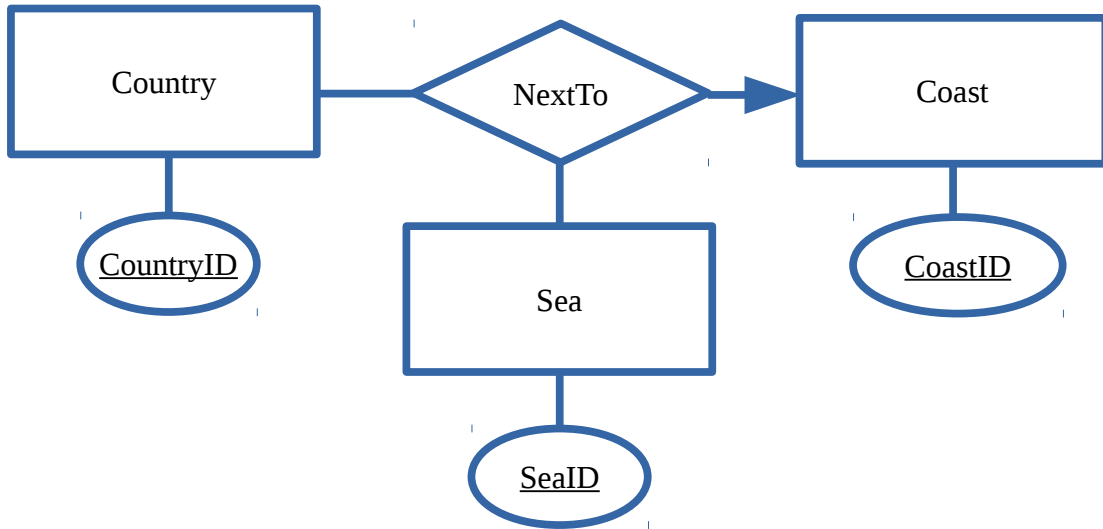


Other Specification:

If a customer is removed we should have all respective orders altered so they are from the default anonymous user with CustomerID 0.

Order descriptions should be sufficiently specific, so we need to make sure the description is at least 25 characters long.

Any updates for an Order or Customer should also update respective interaction records.



Other Specification:

Any updates for an Country, Sea, or Coast should also update respective interaction records.