Software Design and development CA1 report

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# Requirements Specification

### Case Diagram

Diagram

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Figure Use Case Diagram for Watch Company

### Functional Requirements

1. The user can view all watches in the database.
2. The user can create and add a new watch to the database
3. The user can delete a watch by ID
4. The user can update a watch by ID

# Design

### Sequence Diagrams

A picture containing diagram

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Figure Sequence diagram showing CRUD operations

# Implementation

### Successfully Completed:

1. Create Watch
2. Add Watch to Database
3. View all Watches in Database
4. Delete Watch by ID from Database

### Partially Completed:

1. Update Watches in Database by ID

Could not get update method to work so that the Users can input the data to update the database.

Got it to work so that the program reads the data from WatchTableGateway and then asks the user what ID to update with this data. A picture containing text, screenshot, monitor, silver

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Figure Update code from WatchTableGateway

Text

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Figure Update code from Main

1. Confirmation of delete from database

When deleting from database I got the program to ask the user to confirm yes or no. The ”no” part is working fully but when user inputs “yes” the selected row does get deleted but the systems prints out both “Watch Deleted” and “Watch not deleted”.

Text

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### Attempted but cannot get working:

N/A

### Conclusion

I found the implementation of create and view not to be too challenging. The delete operation I also got working but ran into a small bit of trouble when trying to add some extra functionality that had the user input “yes” or “no” to confirm the delete. The update operation caused me the most trouble. I couldn’t get it to work so that the user could input the updated data to the console and select by ID which to update. The best I could do was to have the user hard code the data into the WatchTableGateway (as shown in figure3) and then allow the user to select by ID (shown in figure 4).