Assignment 5
Video Store

Due November 30

1. We will create a database for a video store inventory. The video store rents movie DVDs. Each movie has a name, rental price, unique id and a quantity. The store uses sequential integers for unique ids. We need to be able to:

   • Add new movies
   • Remove a movie in the inventory
   • Rent a movie in the inventory
   • Keep track of the movies that are rented
   • Add new copies of existing movies
   • Change the price of a movie
   • Find the price and/or quantity of a movie by either name or id.

Keep all the current data in memory. When changes are made to data write the data to disk. When the program starts read all the data into memory. When renting a movie we need to keep track of the movie, the due date (two weeks from when the movie was rented) and the name of the renter.

2. We need a GUI interface for the video store inventory. The GUI needs to:

   • Show a list of available movies, which includes its name, price, and quantity
   • Show a list of rented movies, which includes its name, renter and date due
   • Select an available movie and rent it
   • Select an rented movie and return it to the available movies
   • Select an available movie and remove it from the inventory

Grading

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
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<tbody>
<tr>
<td>Working Code/Meeting Requirements</td>
<td>30 points</td>
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<tr>
<td>Proper Use of Clojure &amp; Functional con-</td>
<td>20 points</td>
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<td>structs</td>
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<td>Quality of Code</td>
<td>10 points</td>
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Turning in your Assignment
Zip up your **entire** project. That means all the files involved and turn it in on-line.