Problem Statement

The DVD shop has a catalog that contains information such as title, genre, description, rating, country, location of all DVDs in the shop. All customer information and DVD check in and check out information are kept on the paper. Due to increasing the amount of DVDs and customers, the DVD shop needs to create an electronic system to check-in and checkout of DVDs.

The new system will have a web based application to allow employees to check in and checkout DVDs. All the DVDs in the shop are organized under a genre such as Romance, Comedy, Thriller, Anime etc. to enable customers find DVDs that are pertaining to a genre which they are interested in.

All DVDs in the shop have a unique id. The new system must allow registered employees to register new customers and DVDs.

The system will run on a server hosted by the shop or hosted in a cloud service. Employees and customers will be able to gain access into and use the system through a web-browser interface. However, only employees are able to check in and check out DVDs.

The system should also maintain information about customers' name, address and phone number. A customer can check-out books for a maximum of 7 days. If the customer returns a book later than 7 days, then he/she has to pay an overdue fee of 25 cents per day. No customer will be able to check out a DVD if they have another overdued DVD.