Company Z is a company that imports videos from many countries. Company Z is now planning to expand its business by opening video rental chain stores. Mr. G is an IT manager of the company, and is appointed to create a project for a video rental system development. He explained an overview of software requirements and business conditions of this system to his software development team, and asked the team to design and develop the system. The following description shows the information provided by Mr. G concerning the video rental services.

* The media that stores deal in are DVDs, BDs (Blu-ray Discs), and CDs.
* The rental charge is determined by the medium type. For example, BD rentals are more expensive than DVD rentals.
* The stores do video rental business only. They do not sell any products, magazines, foods or drinks.
* Each customer has to subscribe for a membership before he/she can rent any items in the store.
* A customer can log in to the application for searching the videos and other information. After finishing the search, he/she logs out the application.
* A customer can rent videos at the cashier counter, where the operation is performed by the clerk or the customer can do the self-rent using the self-rent system at the cashier counter.
* A clerk also can log in to the application for searching the videos and other information. After finishing the search, he/she logs out the application.
* The rental period is 7 days.
* A customer must return the rented videos at the cashier counter.
* On completion of a rental, a customer will receive a transaction receipt that contains the details of the rented videos including the date of return and the rental charge.
* In case of late return, the customer has to pay the fine for each item. The fine is determined by the rental charge and the number of days that exceeds the due date.
* All transactions of the rental charges and fines can be paid by cash or credit card.  A clerk will manage the information on videos in the system.
* An administrator will maintain the system. Also, he/she will manage all user accounts and customer memberships.