# Analysis Classes

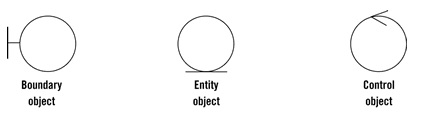
Class analysis is to define all the objects of the project which are used to design the whole system which is Movie Rental Machine here.

* Here the **Movie Rental Machine** will be the ***main part (control object)*** which will represent the boundary objects.
* ***Boundary objects*** are those which interface with system actors. According to the use case diagram these are the boundary objects
* **Operator panel:** The operator (actor) will interact with the operator panel for verification and to manage the inventory.
* **Card Reader:** Customer will swipe his credit card to start the session to start using the machine.
* **Zip Code Reader**: To enter the zip code to pass the second level of verification, customers need a keyboard.
* **Movie menu display:** Customers will select the required option from the display.
* **Movie return slot:** Customers need a slot to deposit the movie they have rented before.
* **Movie** **rent slot**: Customers will collect the movie from this dispenser.
* **Printer**: After completing the operation, customers need the payment receipt.
* **Network Connection**: To establish a connection between the center server and the machine.
* ***Entity objects*** are those objects that represent system data.
* **Log**: Here the system will store all the transactions that will take place both locally and remotely. So log will be entity object here.
* **Card detail**: As the system will hold the card details of customer for movie rent so this will also come under the entity object.
* ***Controller objects*** are those objects which can communicate with both boundary and entity objects that is they can interact with both of them and they are responsible to manage all the elements of the system which means they contain the logical part.
* **Session**: As the customer will insert his card and verify his zip code then only the machine will start a session for that particular customer. As the session object is glued between customer and movie menu display so it will come under controller object.
* **Movie Transaction**: As the transaction goes on between the movie display and then log is created so this generalization will come under this section.

The communication between these objects will be as shown in the table below

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Entity** | **Boundary** | **Controller** |
| **Entity** |  |  |  |
| **Boundary** |  |  |  |
| **Controller** |  |  |  |

The representation of the boundary, entity and control object is



The diagram showing the interaction of all the objects based on above class analysis

