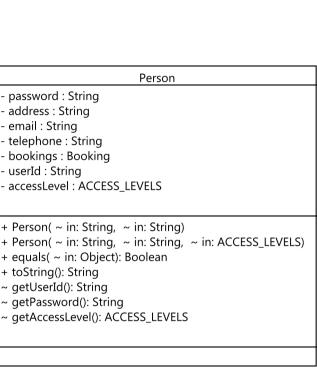
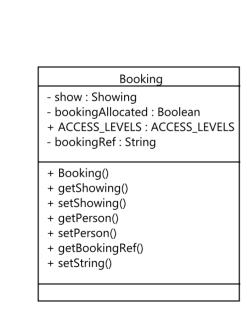
PrimitiveType» Boolean	«PrimitiveType» String	«DataType» ArrayList	«DataType» HashMap	«DataType» Set	«Enumeration» ACCESS_LEVELS
PrimitiveType» Int	«PrimitiveType» Date				MANAGER CUSTOMER NOTHING
PrimitiveType» Real		«DataType» Object	«DataType» Map	Object: BookingSystem	





```
BookingSystem
users : Person [*]
- cinema : Cinema
name : String
bookings : Booking [*]
+ ACCESS_LEVELS : ACCESS_LEVELS
 sc: java.util.Scanner
- loggedPerson : Person
+ EXIT : <Undefined>
+ BookingSystem()
+ BookingSystem()
+ toString()
+ loginScreen()
+ isUserExist()
+ performActions()
+ processUserManagement()
+ processShowUsers()
+ processScreenManagement()
+ processMovieManagement()
+ processAddMovies()
+ processUpdateMovies()
+ processDeleteMovies()
+ processShowMovies()
+ processAddShowing()
+ processShowShowing()
+ processUpdateShowing()
+ processDeleteShowing()
+ processBookingManagement()
+ processShowBooking()
+ processAuthoriseRefunds()
+ processCinemaFacilities()
+ processCinemaPrices()
+ processPaymentsRefundsInfo()
+ processBooking()
+ processAmendPersonalDetails()
+ addManager()
+ addCustomer()
~ run()
```

title : String

- rating : String

- director : String

- synopsis : String - clip : String

+ toString(): String + getTitle(): String + getRating(): String + getDirector(): String + getActors(): String + getSynopsis(): String + getClip(): String + setRating(~ in: String) + setDirector(~ in: String) + setActors(~ in: String) + setSynopsis(~ in: String) + setSynopsis(~ in: String)

+ equals(~ in: Object): Boolean

- actors : String

PreLoad

- save(~ in: BookingSystem

- FILENAME : String

```
Cinema
~ showings : Showing [*]
~ movies : Map [*]
~ screens : Map [*]
+ addMovie( ~ in: String, ~ in: String): Boolear
+ updateMovie( ~ in: String, ~ in: String): Boolear
- addMovie( ~ in: Movie): Boolean
+ removeMovie( ~ in: String): Boolean
+ getAllMovies(): Set
+ getMovie( ~ in: String): Movie
+ getScreen( ~ in: Int): Screen
+ addShowing( \sim in: Screen, \sim in: Movie, \sim in: Date): Boolean
- addShowing( ~ in: Showing): Boolean
+ getShowing( ~ in: Int, ~ in: String, ~ in: Date): Showing
+ removeShowing( ~ in: Showing): Boolean
+ updateShowing( \sim in: Showing, \sim in: Screen, \sim in: Movie, \sim in: Date): Boolean
+ getAllShowings(): ArrayList
```

Movie

+ Movie(~ in: String, + in: String)

FileReader

+ printFile(~ in: String)

java.util.Scanner

Utilities

- FILENAME : String

+ initialise(): Object

+ save(~ in: Object)

«Interface» java.io.Serializable

```
Showing
```

- screen : Screen - movie : Movie - ShowDate : Date
- + Showing(~ in: Screen, ~ in: Movie, ~ in: Date)
- + getScreen(): Screen
- + setScreen(~ in: Screen)
- + getMovie(): Movie
- + setMovie(~ in: Movie)
- + getShowDate(): Date
- + setShowDate(~ in: Date)
- + getScreenNumber(): Int

Screen

- title : String
- rating : String
- screenNumber : Int
- allocated : Boolean
- # seats : HashMap
- # bookings : HashMap
- + Screen(~ in: Int)
- + getScreenNumber(): Int
- + isAllocated(): Boolean
- + book()
- + available()