

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

«DataType» Object	«DataType» Map	Object: BookingSystem

java.util.Scanner	«Interface» java.io.Serializable

PreLoad	Utilities	FileReader
- FILENAME : String	- FILENAME : String	
+ main() - save( ~ in: BookingSystem)	+ initialise(): Object + save( ~ in: Object)	+ printFile( ~ in: String)

Person
- password : String - address : String - email : String - telephone : String - bookings : Booking - userId : String - accessLevel : ACCESS_LEVELS
+ Person( ~ in: String, ~ in: String) + Person( ~ in: String, ~ in: String, ~ in: ACCESS_LEVELS) + equals( ~ in: Object): Boolean + toString(): String ~ getUserId(): String ~ getPassword(): String ~ getAccessLevel(): ACCESS_LEVELS

Booking
- show : Showing - bookingAllocated : Boolean + ACCESS_LEVELS : ACCESS_LEVELS - bookingRef : String
+ Booking() + getShowing() + setShowing() + getPerson() + setPerson() + getBookingRef() + setString()

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()

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

Movie
- title : String - rating : String - director : String - actors : String - synopsis : String - clip : String
+ Movie( ~ in: String, ~ in: String, ~ in: String, ~ in: String, ~ in: String, + in: String) + equals( ~ in: Object): Boolean + 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)

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()