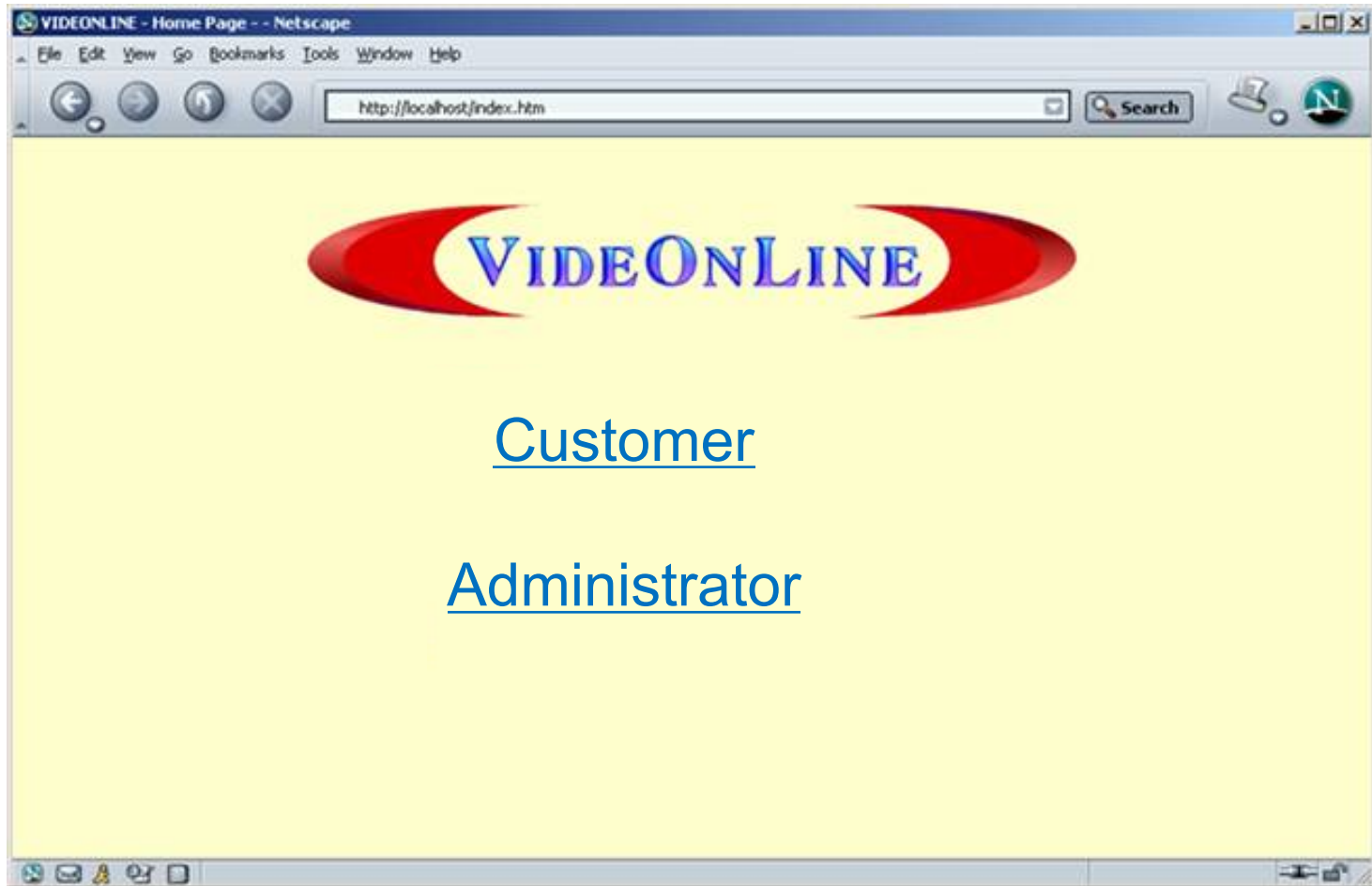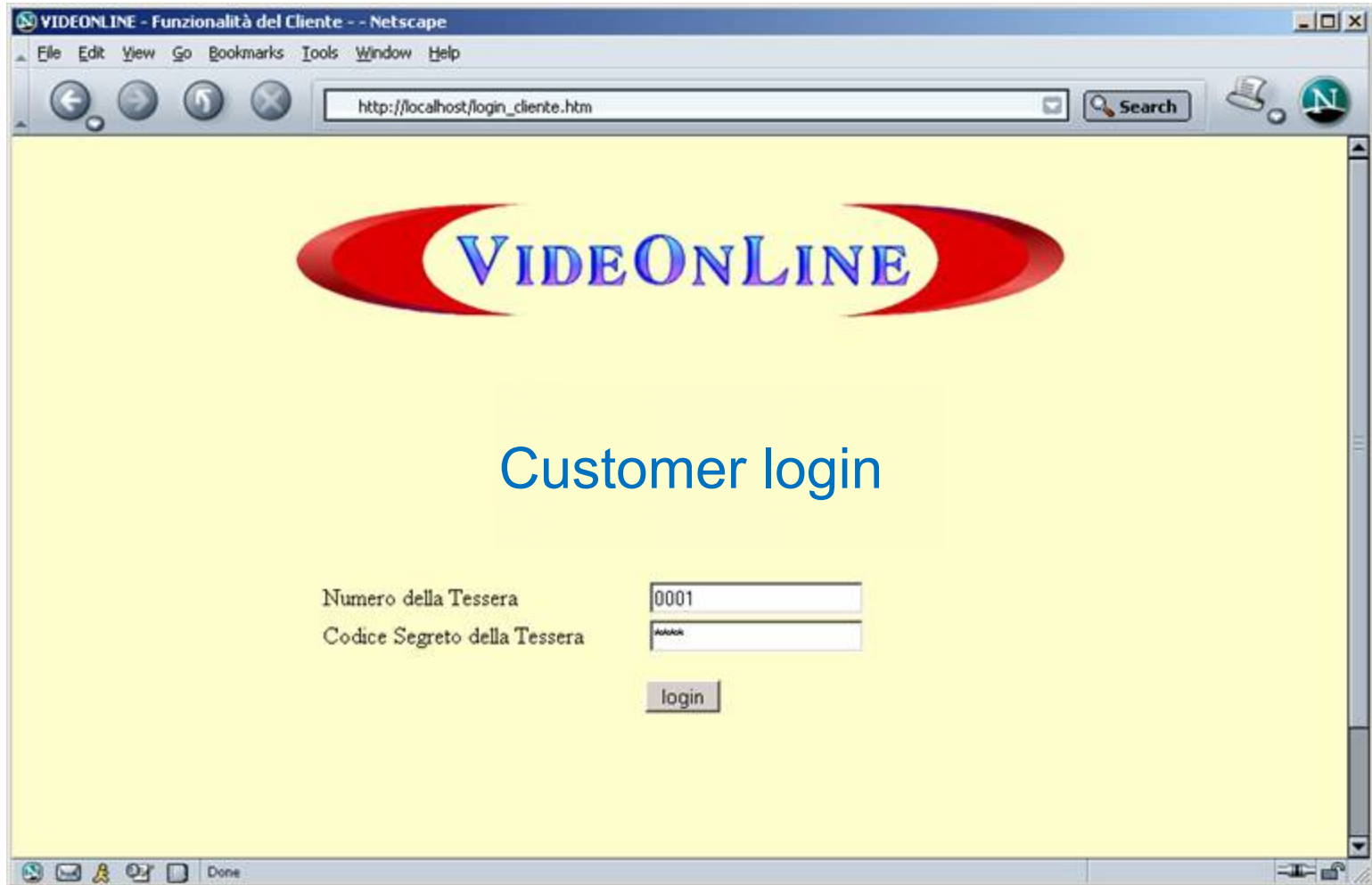# Software Engineering Video on line

Requirements

- The company VIDEONLINE wants to buy a Web application to manage the rental of its movie media (VHS , DVD, Blue ray, Violet ray...)

- The rental of products is allowed only to registered users that are provided with a prepaid magnetic card

- For each rented media the magnetic card value it is reduced by the amount corresponding to a hourly rate

- The system allow the customer to make reservations of media on the Web through authentication with ID and password and to collect the media within 45 minutes

Prototype

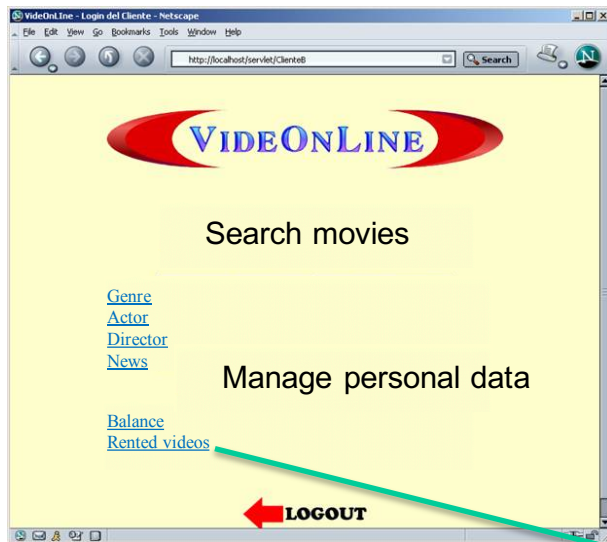# Home page

Login utente

Customer functionalities

Customer status
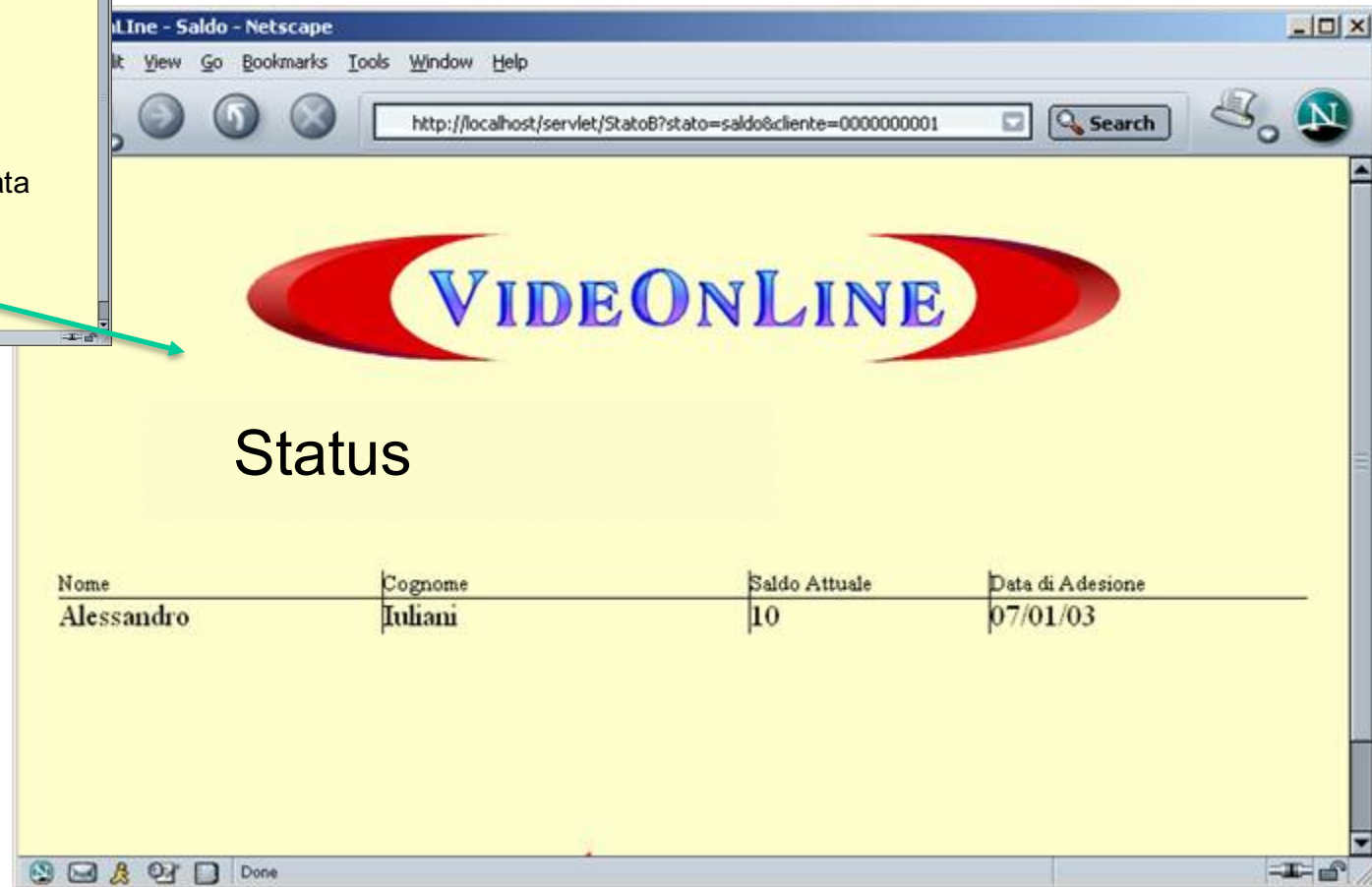
Rented media

Search for genre, actor, or director

Search from genre, actor, or director

News

Movie details

VIDEONLINE

Genre	Director	Title
Commedia	Woody Allen	Io e Annie
Commedia	Mel Brooks	L'ultima follia di Mel Brooks

LOGOUT

VIDEONLINE

Available movies

Final Fantasy | Visualizza la scheda

LOGOUT
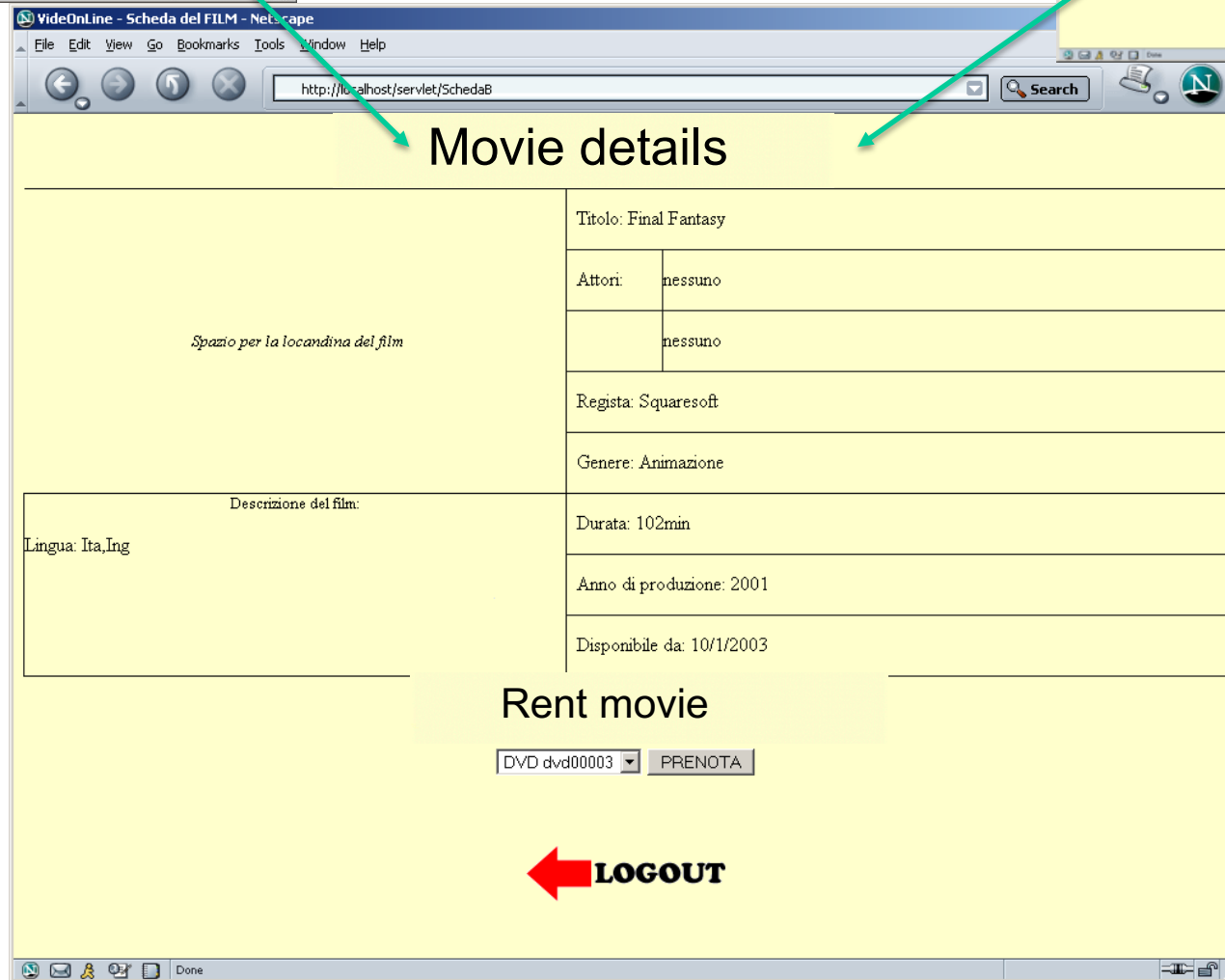
Movie details

Spazio per la locandina del film	Titolo: Final Fantasy	
	Attori:	nessuno
		nessuno
	Regista: Squaresoft	
	Genere: Animazione	
Descrizione del film: Lingua: Ita,Ing	Durata: 102min	
	Anno di produzione: 2001	
	Disponibile da: 10/1/2003	

Rent movie

DVD dvd00003 ▼ | PRENOTA
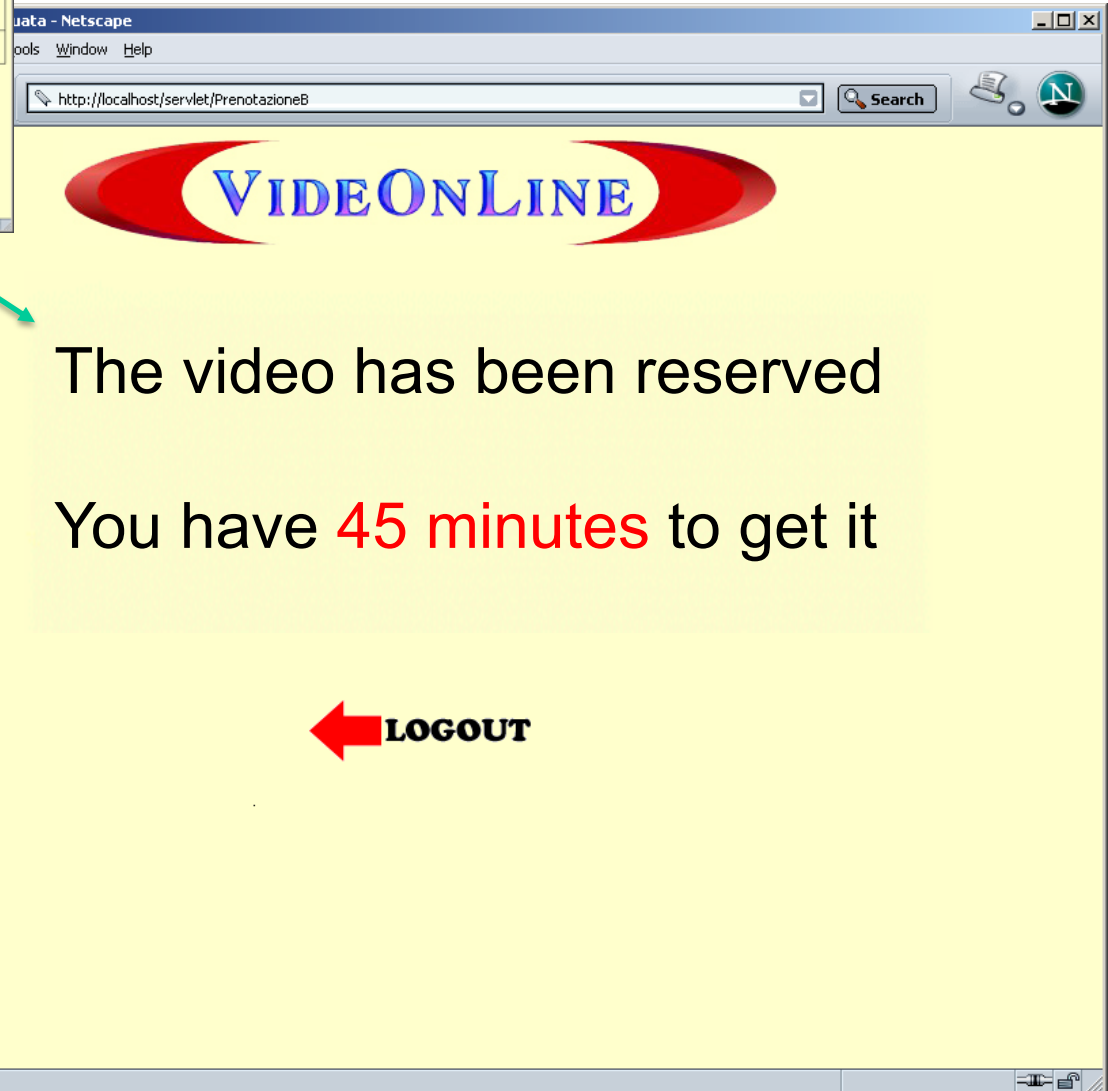
LOGOUT

Booking

Movie details

Titolo:	Final Fantasy
Attori:	nessuno
	nessuno
Regista:	Squaresoft
Genere:	Animazione
Durata:	102min
Anno di produzione:	2001
Disponibile da:	10/1/2003

Spazio per la locandina del film

Descrizione del film:

Lingua: Ita,Ing

Rent movie

DVD dvd00003 ▼ PRENOTA

← **LOGOUT**

---

http://localhost/servlet/PrenotazioneB

VideOnLine

The video has been reserved

You have 45 minutes to get it

← **LOGOUT**

Admin login

Administrator functionalities

Add new customer

Search customer by name

FP

2 ILF

Film

- Code
- Title
- Director
- Actors
- Year
- Duration
- Description
- Genre
- Image

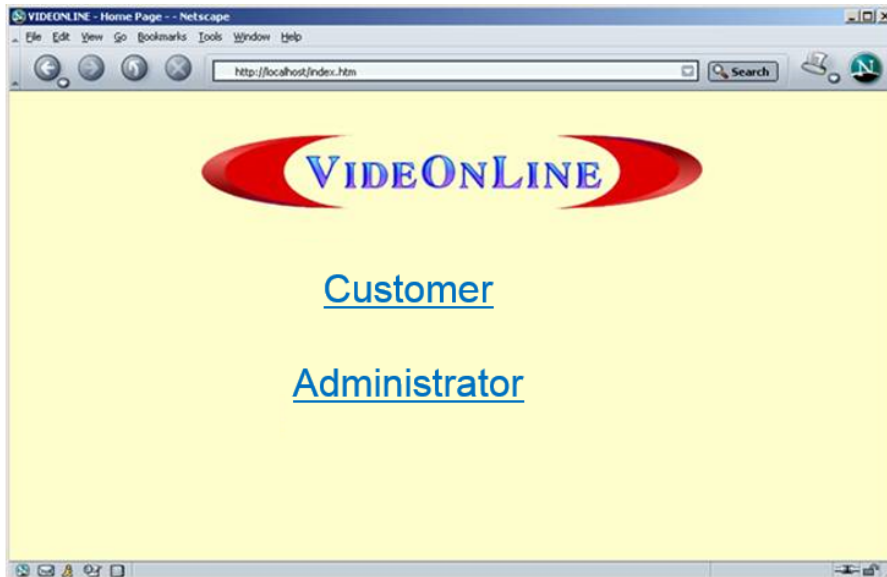- Registration date (for each media)
- Type
- Number of items

12 DET 2 RET: ILF (low)

Customer

- Name
- Surname
- Birth date
- Address
- Phone
- City
- Zip code
- ID document

- Contract number
- Registration date
- Card #
- Code
- Balance
- Rented media
- Booked media

15 DET 2 RET: ILF (low)

Home screen

- 2 navigation links
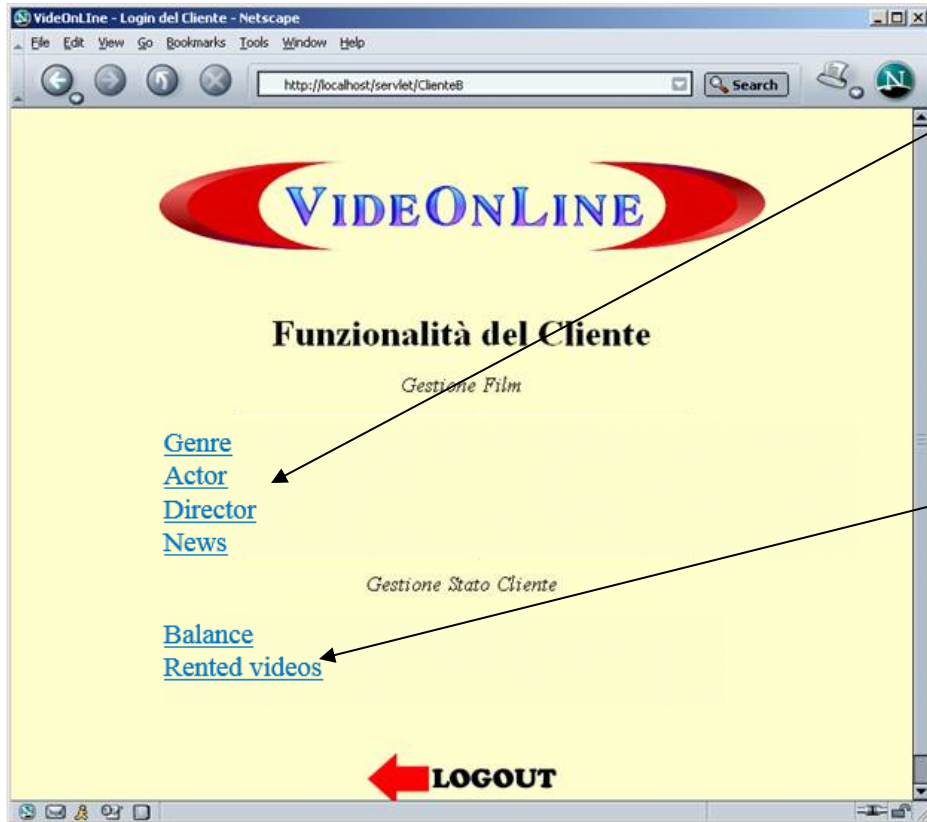- No exchanged data between user and system
- 0 FP

+ 1 EI: Customer login

- User input with primary goal of sending control information
- 1 FTR (customer)
- 2 Det
- 1 EI_1 (low)

+6 EQ: customer functionalities

- 4 links that correspond to 4 EQ with the primary goal of showing data (list of genres, list of actors, list of directors, news) on which start a new query
- 2 links that start 2 EQ with the primary goal of showing data
- 4 $EQ_{1,2,3,4}$ (low: 1 FTR (film) 1 det)
- 2 $EQ_{5,6}$ (low: 2 FTR (customer, film) 1,4 det)

EQ : 1) does not compute new data 2) does not update ILF
3) does not alter the status of the system

+3 EQ: Search for X={genre, actor, director}

(Input side)
1 FTR (film)
1 DET (X)

(Output side)
1 FTR (film)
3 DET : X, director, title
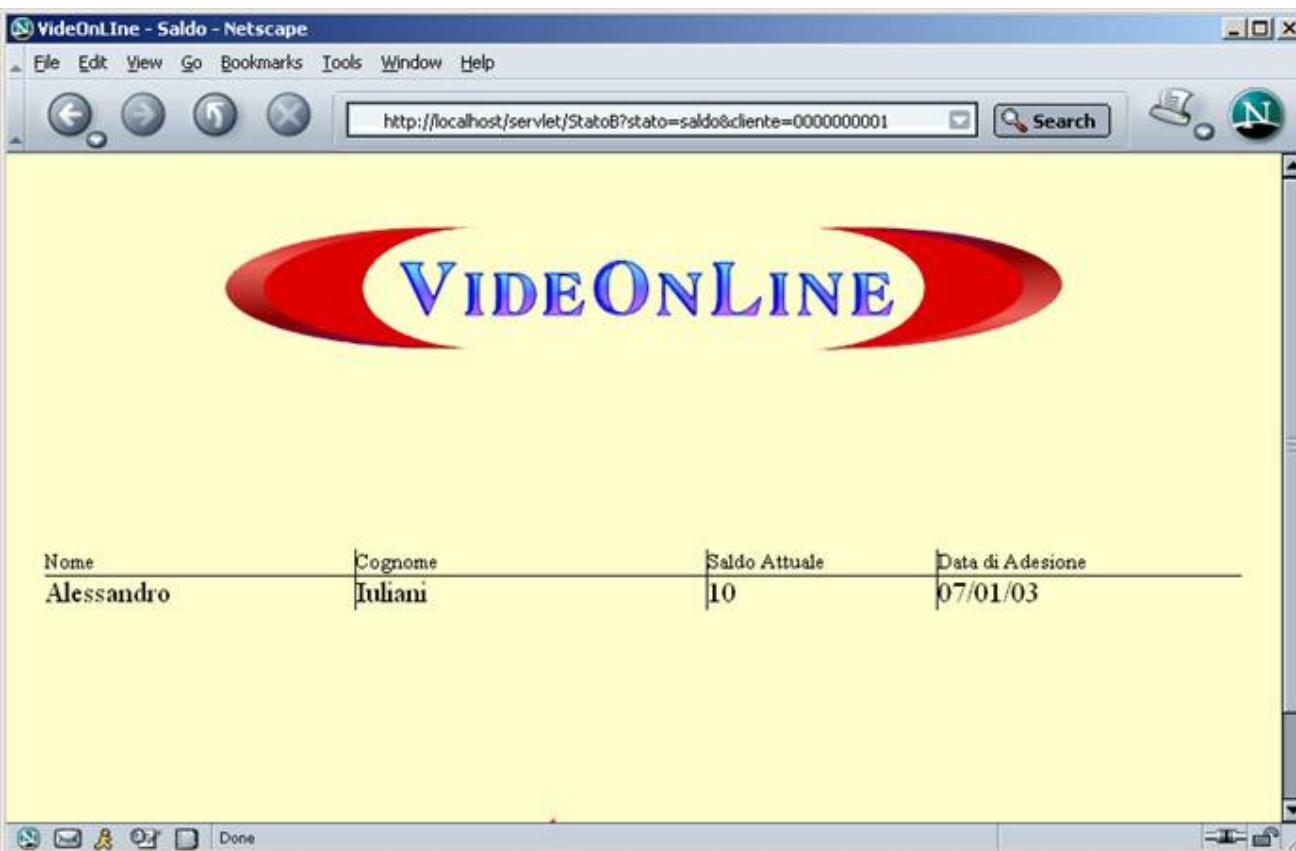

3 $EQ_{7,8,9}$ low

+ 1 EQ: Movie details

- EQ (shared by $EQ_{7..9}$, so it must be considered only once)
- 9 DET
  - 1 input : title
  - 9 output
- 1 FTR (film)
- 1 EQ_{10} (low)

+ 1 EQ Balance

- 1 FTR (customer)
- 4 DET
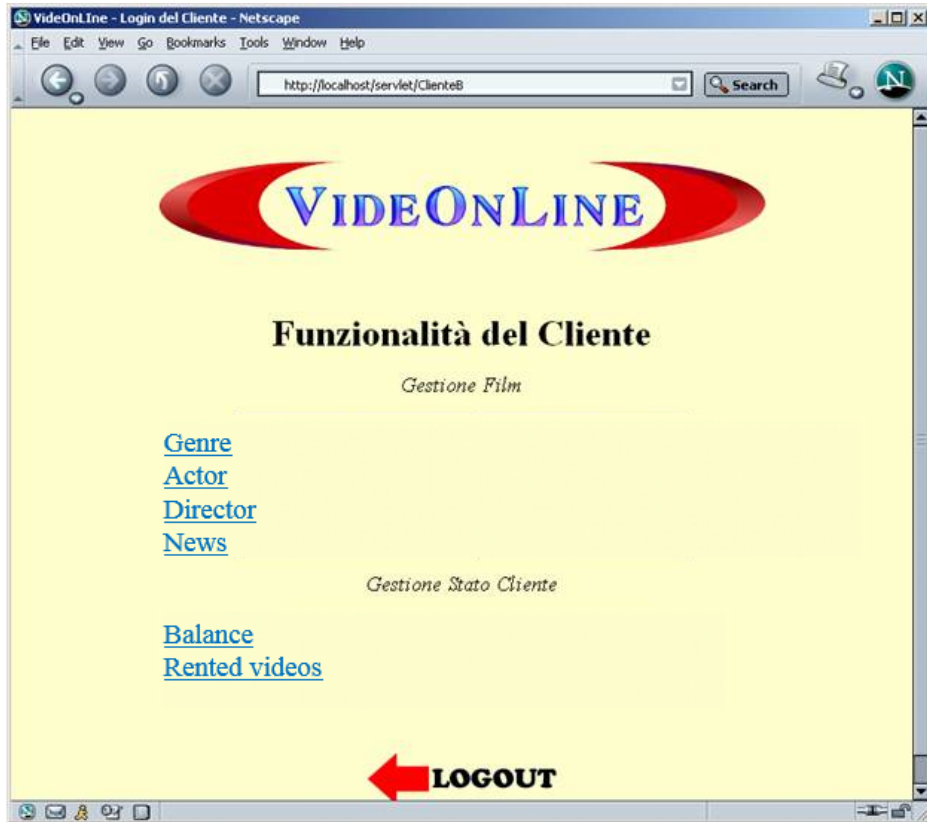- 1 EQ_{11} (low)

+ 1 EQ Rented movies

- 2 FTR (customer+ film)
- 4 DET
- 1 EQ_{12} low

+ 1 EI Booking

- EI with the main goal of updating 2 ILF (customer and film)
- 1 DET(media)
- 2 FTR (film and customer)
- EI_2 low

Tot customer functionalities

- 6 EQ from the main page
- 3 EQ (genre, actor, director)
- 1 shared EQ for movie details
- 1 EQ balance
- 1 EQ rented movies
- 1 EI for booking
- 1 EI login

EI: Administrator login

- User input with primary goal of sending control information
- 0 ILF
  - Id and password wired in the code...
- 2 Det
- 1 EI$_3$ (low)

Administrator functionalities

- 3 Navigation links that trigger 3 $EI_{4,5,6,7}$
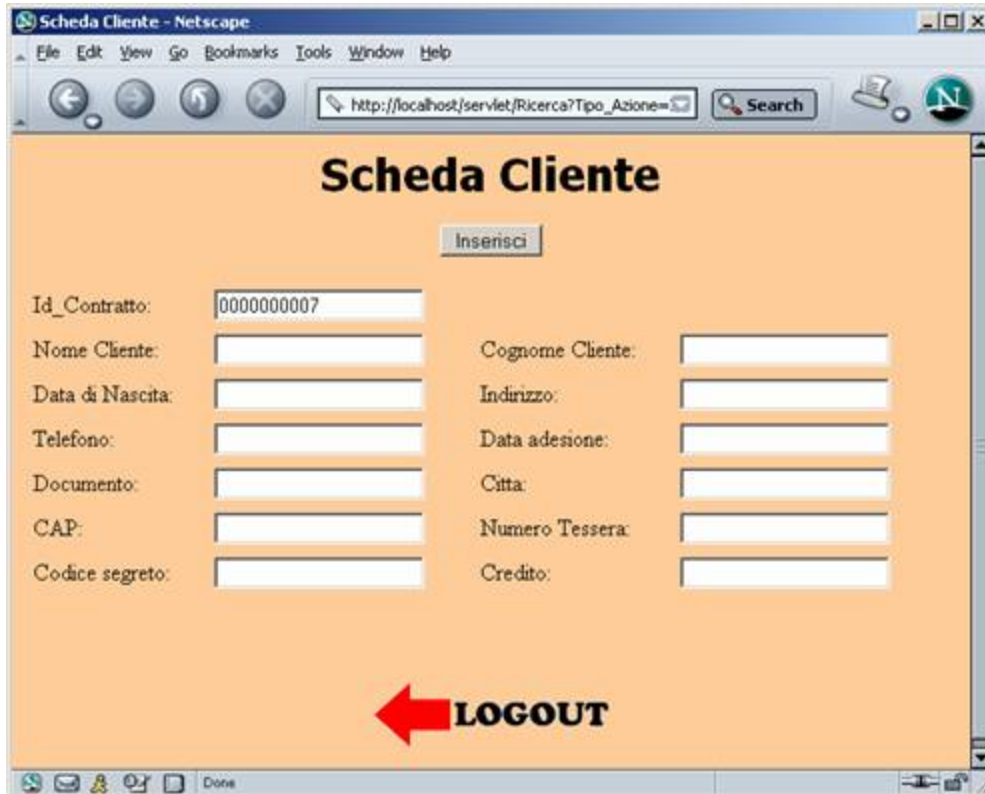- No exchanged data
- 0 FP

- 4 Navigation links that corresponds to 4 EQ

$EQ_{13,14,15,16}$ low: 1FTR 1det

EI: Add customer

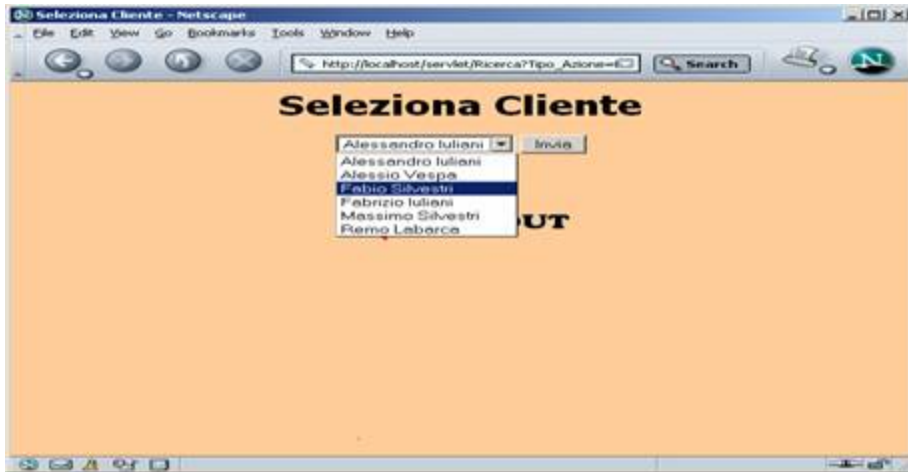- 1 FTR (cliente)
- 13 DET
- 1 EI_4 (low)

EI: Add movie

- Not shown in the mock-up
- 1 FTR (film)
- 8 DET

- 1 EI_5 (low)

EI: Add media

- Not shown in the mock-up
- 1 FTR (film)
- 4 DET

- 1 EI$_6$ (low)

EQ : Search customer by name

- 1 DET
- 1 FTR (customer)
- 1 EQ_{13} (low)

2 EQ: Search movie by code or title

- Not shown in the mock-up
- 1 FTR (film)
- 1 DET
- 2 EQ$_{14,15}$ (low)

EQ: Search media (by code)

- Not shown in the mock-up
- 1 FTR (film)
- 1 DET

- 1 EQ$_{16}$ (low)

EQ$_{10}$: Movie details

- Already computed

The bill

- 2 ILF (low)   14
- 6 EI (low)   18
- 16 EQ (low)   48

             80 UFP