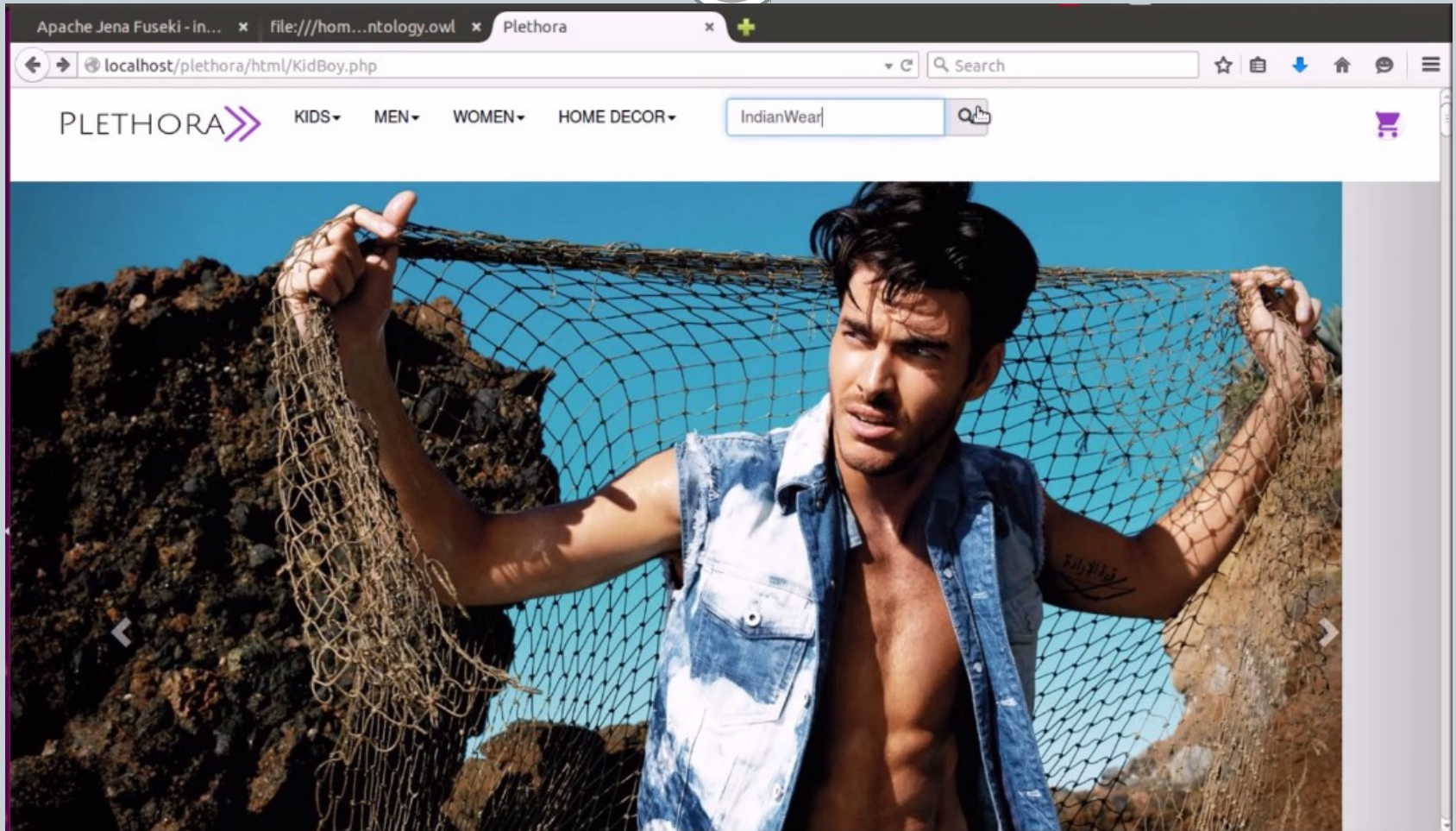


# DEMO PRESENTATION



# SEMANTIC SEARCH



Apache Jena Fuseki - in... x file:///hom...ntology.owl x Plethora x +

localhost/plethora/html/KidBoy.php Search

Comfort and style  
Learn more

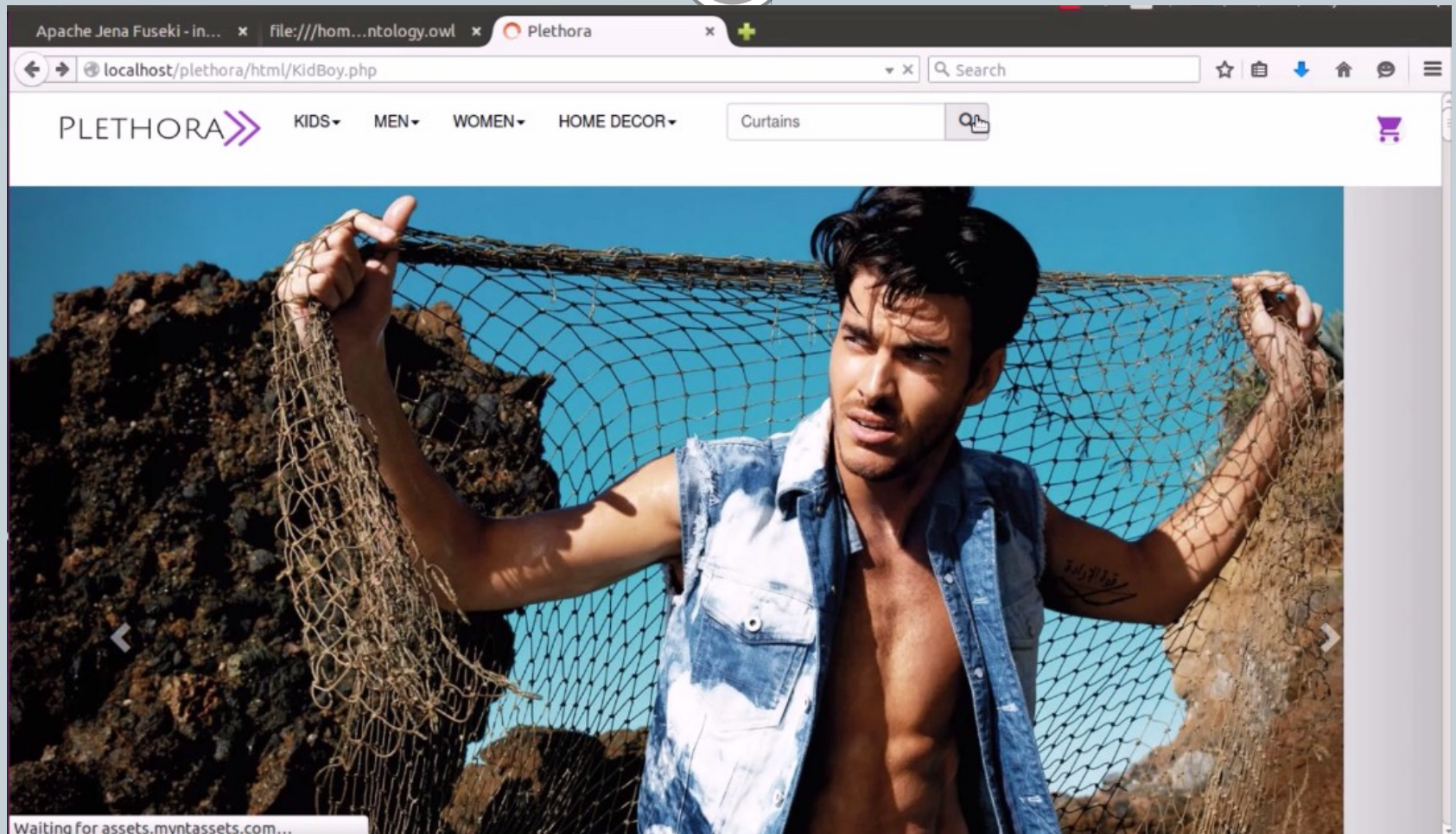
Brands  
Price Range

Product Image	Product Name	Price	Quantity	Rating	Actions
	Pannkh Black Printed Top	Rs. 399	<input type="text"/>	<input type="text"/>	<button>Add to cart</button> <button>Delete</button>
	Miss Chase White & Black Striped Top	Rs. 599	<input type="text"/>	<input type="text"/>	<button>Add to cart</button> <button>Delete</button>
	La Firangi Green Printed Layered A-Line Kurta	Rs. 479	<input type="text"/>	<input type="text"/>	<button>Add to cart</button> <button>Delete</button>

Partial view of additional products at the bottom of the page.




# SEARCH FOR CURTAINS





Apache Jena Fuseki - in... x file:///hom...ntology.owl x Plethora x +

localhost/plethora/html/KidBoy.php Search ☆ ⚙️ ⬇️ 🏠 💬 ☰




**Cortina Kids Multicoloured Single Printed Room Darkening Door Curtain** Rs. 999

Quantity

Rating

[Add to cart](#) [Delete](#)




**S9home by Seasons Brown & Orange Set of 2 Patterned Room Darkening Door Curtains** Rs. 3119

Quantity

Rating

[Add to cart](#) [Delete](#)

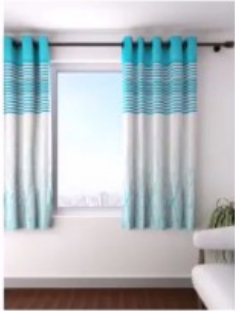


**SWAYAM Cream-Coloured Single Floral Print Door Curtain** Rs. 1119

Quantity

Rating

[Add to cart](#) [Delete](#)




**Cortina Blue Single Patterned Blackout Window Curtain** Rs. 1119

Quantity

Rating

[Add to cart](#) [Delete](#)




**SWAYAM Multicoloured Single Floral Print Door Curtain** Rs. 1119

Quantity

Rating

[Add to cart](#) [Delete](#)



**Cortina Off-White & Brown Single Patterned Blackout Door Curtain** Rs. 879

Quantity

Rating

[Add to cart](#) [Delete](#)

# THE ONTOLOGY for SEMANTIC SEARCH



```
//  
/////////////////////////////////////  
  
-->  
-<!--  
  http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#Accessories-Women  
-->  
-<owl:NamedIndividual rdf:about="http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#Accessories-Women">  
  <rdf:type rdf:resource="http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#category"/>  
  <category_id rdf:datatype="http://www.w3.org/2001/XMLSchema#int">3</category_id>  
  <category_name rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Women-Accessories</category_name>  
</owl:NamedIndividual>  
-<!--  
  http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#Curtains  
-->  
-<owl:NamedIndividual rdf:about="http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#Curtains">  
  <rdf:type rdf:resource="http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#category"/>  
  <category_id rdf:datatype="http://www.w3.org/2001/XMLSchema#int">14</category_id>  
  <category_name rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Curtains</category_name>  
</owl:NamedIndividual>  
-<!--  
  http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#IndianWear  
-->  
-<owl:NamedIndividual rdf:about="http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#IndianWear">  
  <rdf:type rdf:resource="http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#category"/>  
  <category_id rdf:datatype="http://www.w3.org/2001/XMLSchema#int">1</category_id>  
  <category_name rdf:datatype="http://www.w3.org/2001/XMLSchema#string">IndianWear</category_name>  
</owl:NamedIndividual>  
-<!--  
  http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#Mukta  
-->  
-<owl:NamedIndividual rdf:about="http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#Mukta">  
  <rdf:type rdf:resource="http://www.semanticweb.org/mukta/ontologies/2016/10/testontology#Buyer"/>  
  <contact_no rdf:datatype="http://www.w3.org/2001/XMLSchema#string">9920042829</contact_no>  
</owl:NamedIndividual>
```

indian   ^   v   Highlight All   Match Case



# SPARQL to query from RDF



swt.mp4 - VLC media player

Media Playback Audio Video Subtitle Tools View Help

Apache Jena Fuseki - in... file:///hom...ntology.owl x Plethora

localhost:3030/dataset.html?tab=query&ds=/ds

Apache Jena Fuseki dataset manage datasets help Server status: ●

Dataset: /ds

query upload files edit info

### SPARQL query

To try out some SPARQL queries against the selected dataset, enter your query here.

EXAMPLE QUERIES

Selection of triples Selection of classes

PREFIXES

rdf rdts owl xsd

SPARQL ENDPOINT http://localhost:3030/ds/query

CONTENT TYPE (SELECT) JSON

CONTENT TYPE (GRAPH) Turtle

```
1
2
3 SELECT ?subject ?predicate ?object
4 WHERE {
5   ?subject ?predicate ?object
6 }
7 LIMIT 50
```

01:02 -03:28

Windows taskbar: hp, e, Google, Ps, File Explorer, Firefox, S, W, VLC media player, Paint, System tray (15:15, 03-12-2016, ENG, 94% battery)

# PROTÉGÉ for creating ONTOLOGY



The screenshot displays the Protégé ontology editor interface for an ontology named 'testontology' (URL: <http://www.semanticweb.org/mukta/ontologies/2016/10/testontology>). The interface includes a top navigation bar with tabs for 'Active Ontology', 'Entities', 'Individuals by class', and 'DL Query'. A search bar is located in the top right corner.

The main workspace is divided into several panels:

- Class hierarchy: :cart**: A tree view showing the hierarchy of classes. The root is 'owl:Thing', which has children ':category', ':Customer', and ':Items'. ':category' has children ':Buyer' and ':Seller'. ':Items' has children ':brand' and ':itemsizes'. The class ':cart' is highlighted in blue.
- Class Annotations**: A panel for adding annotations to the selected class. It shows a list of annotations with a '+' button to add more.
- Description: :cart**: A panel for adding class axioms. It includes buttons for 'Equivalent To', 'SubClass Of', 'General class axioms', 'SubClass Of (Anonymous Ancestor)', 'Instances', 'Target for Key', 'Disjoint With', and 'Disjoint Union Of'.
- Data property hierarchy**: A panel for adding data property axioms. It shows a list of data properties with a '+' button to add more.
- Object property hierarchy**: A panel for adding object property axioms. It shows a list of object properties with a '+' button to add more.

At the bottom of the interface, there is a status bar with the text 'To use the reasoner click Reasoner > Start reasoner' and a checkbox for 'Show Inferences'.

# LOGIN and SIGNUP



localhost / localhost... x Plethora

localhost/plethora/html/login.php

## LOGIN!

\* indicates required field

User Name

root

Password

\*\*\*\*\*

Submit

## SIGN UP

\* indicates required field

First Name \*

First Name

Last Name \*

Last Name

User Name

root

Password

\*\*\*\*\*



# RECOMMENDATION (based on item based collaborative filter)




Plethora x +

localhost/plethora/html/home.php

Search

### Recommendations:




yellowe Blue HandbagRs. 845

Quantity

Rating

Add to cart Delete




Wiki by Men Black BackpackRs. 899

Quantity

Rating

Add to cart Delete





WROGN Brown Biker JacketRs. 2799

Quantity

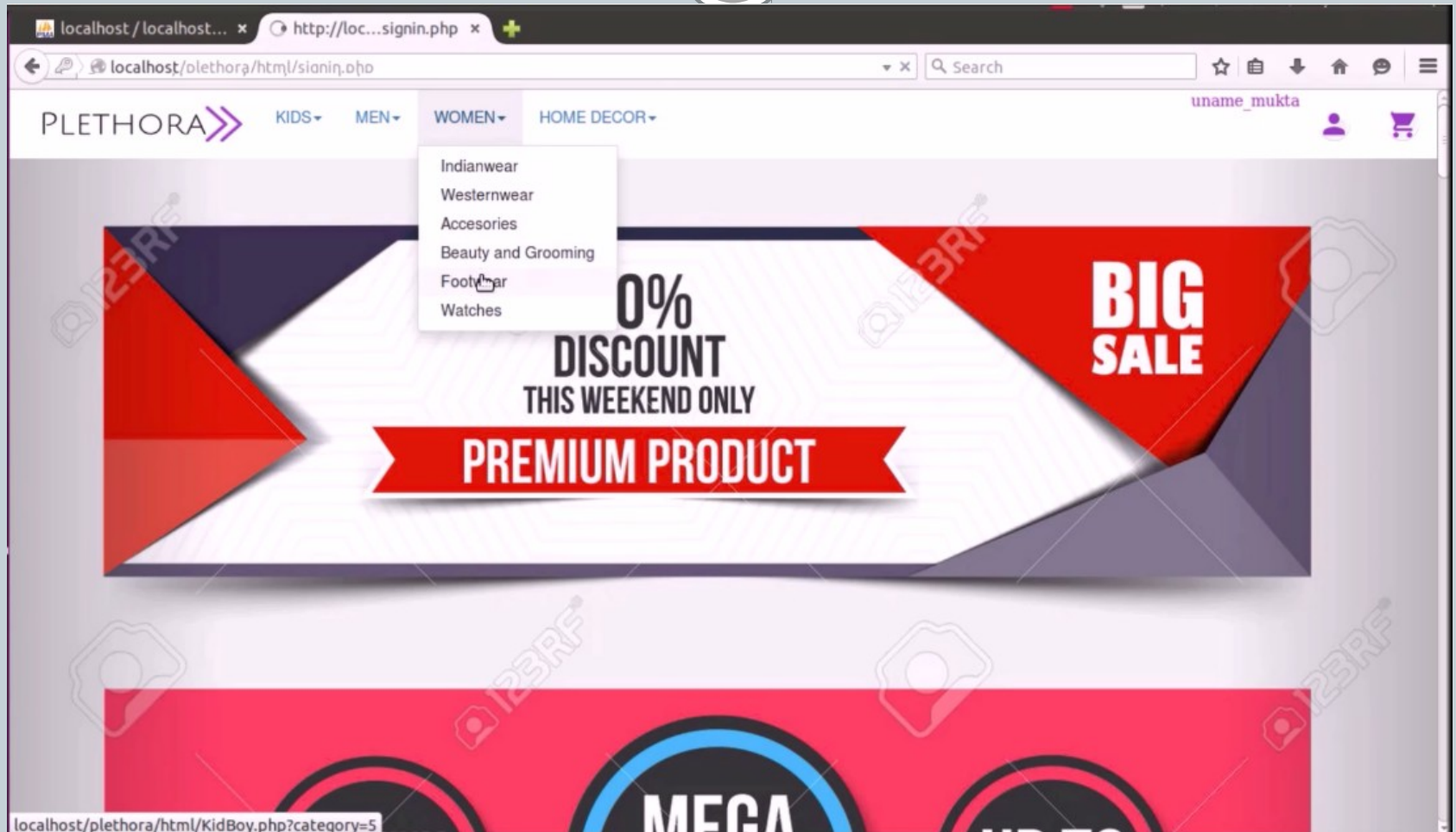
Rating

Add to cart Delete





# WOMEN FOOTWEAR






localhost / localhost... x Plethora nin.php x

localhost/plethora/html/KidBoy.php?category=5 Search

Learn more

Brands

Price Range




Reebok Women Black Stormer Running Shoes Rs. 1799

Quantity

Rating

Add to cart Delete




Adidas Women Navy Blue EZAR 3.0 W Running Shoes Rs. 2579

Quantity

Rating

Add to cart Delete





Adidas NEO Women Navy Coneo QT Sneakers Rs. 1979


Quantity

Rating

Add to cart Delete







# SEARCH BY PRICE



localhost / localhost... x Plethora nin.php x

localhost/plethora/html/KidBoy.php?category=5

Search

Learn more

Brands

Price Range

12319

GO!

Product Name	Price (Rs.)	Quantity	Rating	Actions
Reebok Women Black Stormer Running Shoes	1799	<input type="text"/>	<input type="text"/>	<button>Add to cart</button> <button>Delete</button>
Adidas Women Navy Blue EZAR 3.0 W Running Shoes	2579	<input type="text"/>	<input type="text"/>	<button>Add to cart</button> <button>Delete</button>
Adidas NEO Women Navy Coneo QT Sneakers	1979	<input type="text"/>	<input type="text"/>	<button>Add to cart</button> <button>Delete</button>



# SEARCH BY BRAND



localhost / localhost... x Plethora nin.php x +

localhost/plethora/html/KidBoy.php?category=5 Search

LEVI'S  
Comfort and style  
Learn more

**Brands**

Add list of brands

- ☐ Reebok
- ☐ Adidas
- ☐ Adidas NEO
- ☐ FILA
- ☐ HRX by Hrithik Roshan
- ☐ Nike
- ☐ Crocs
- ☐ Kook N Keech
- ☐ Shoetopia
- ☐ GNIST
- ☐ FOREVER
- 21
- ☐ ASICS

**Reebok Women Black Stormer Running Shoes** Rs. 1799

Quantity:  Rating:

Add to cart Delete

**Adidas NEO Women Navy Coneo QT Sneakers** Rs. 1979

Quantity:  Rating:

Add to cart Delete

**FILA Women Navy Elvey Lite Running Shoes** Rs. 1889

Quantity:  Rating:

Add to cart Delete

localhost/plethora/html/KidBoy.php?category=5#collapseOne

# ADD ITEMS TO CART




localhost / localhost... x Plethora nin.php x +

localhost/plethora/html/KidBoy.php?category=1 Search


Comfort and style  
Learn more

Brands  
Price Range




Pannkh Black Printed TopRs. 399

Quantity: 1  
Rating: 4  
Add to cart Delete




Miss Chase White & Black Striped TopRs. 599


Quantity: 1  
Rating: 4  
Add to cart Delete




La Firangi Green Printed Layered A-Line KurtaRs. 479

Quantity: 1  
Rating: 4  
Add to cart Delete







# CHECKOUT





localhost / localhost... x Plethora nin.php x +

localhost/plethora/html/checkout.php Search ☆ 📁 ⬇️ 🏠 💬 ☰

PLETHORA >> Go back to Home!

## Checkout

Image	Title	Price	Quantity	Total
	Miss Chase White & Black Striped Top	599	1	599
	W Women Green & Yellow Printed Straight Kurta	1499	1	1499

# SHIPPING DETAILS

A screenshot of a web browser window displaying a shipping details form. The browser's address bar shows the URL 'localhost/plethora/html/checkout.php'. The form is titled 'SHIPPING DETAILS!' and includes a legend indicating that an asterisk (\*) denotes a required field. The form contains input fields for 'User Name', 'Password', 'Street Address', 'City', 'State/Province', and 'Postal Code', each followed by a 'Submit' button. The 'User Name' field is currently active, with the text 'User Name' visible inside. The 'Password' field is masked with dots. The 'Street Address', 'City', 'State/Province', and 'Postal Code' fields are empty. The 'Submit' button is a blue rectangle with white text. The footer of the page reads '© Company 2016'.

localhost / localhost... x Plethora nin.php x +

localhost/plethora/html/checkout.php

## SHIPPING DETAILS!

\* indicates required field

**User Name**

**Password**

**Street Address \***

**City \***

**State/Province \***

**Postal Code \***

Submit

© Company 2016



# The MySQL database (where orders get placed, login/signup information is stored)



The screenshot shows the phpMyAdmin web interface for a MySQL database named 'plethora'. The left sidebar displays a tree view of databases, with 'plethora' selected. The main panel shows the 'Structure' tab for the 'plethora' database, listing 11 tables. The 'Customer' table is highlighted. Below the table list, there are options to 'Check All' and a dropdown for 'With selected:'. At the bottom, there is a 'Create table' section with a 'Name' field and a 'Number of columns' dropdown set to 4.

Table	Action	Rows	Type	Collation	Size	Overhead
Brand	Browse Structure Search Insert Empty Drop	253	InnoDB	latin1_swedish_ci	16 KiB	-
Buyer	Browse Structure Search Insert Empty Drop	25	InnoDB	latin1_swedish_ci	32 KiB	-
Cart	Browse Structure Search Insert Empty Drop	35	InnoDB	latin1_swedish_ci	32 KiB	-
Category	Browse Structure Search Insert Empty Drop	18	InnoDB	latin1_swedish_ci	16 KiB	-
Customer	Browse Structure Search Insert Empty Drop	976	InnoDB	latin1_swedish_ci	96 KiB	-
Item	Browse Structure Search Insert Empty Drop	1,682	InnoDB	latin1_swedish_ci	656 KiB	-
Itemsize	Browse Structure Search Insert Empty Drop	188	InnoDB	latin1_swedish_ci	16 KiB	-
Login	Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	32 KiB	-
PlaceOrder	Browse Structure Search Insert Empty Drop	36	InnoDB	latin1_swedish_ci	16 KiB	-
Seller	Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	32 KiB	-
tempCart	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 KiB	-
<b>11 tables</b>	<b>Sum</b>	<b>3,221</b>		<b>latin1_swedish_ci</b>	<b>960 KiB</b>	<b>0 B</b>

Check All With selected:   
Print view Data Dictionary   
Create table   
Name: Number of columns: 4   
Go

# The recommendation dataset (gets updated after every order placed)



```
File Edit View Search Tools Documents Help
Open Save Undo
u.data x
99967 788 556 2 880871128
99968 897 369 4 879993713
99969 936 287 4 886832419
99970 936 766 3 886832597
99971 449 120 1 879959573
99972 661 762 2 876037121
99973 721 874 3 877137447
99974 821 151 4 874792889
99975 764 596 3 876243046
99976 537 443 3 886031752
99977 618 628 2 891308019
99978 487 291 3 883445079
99979 113 975 5 875936424
99980 943 391 2 888640291
99981 864 685 4 888891900
99982 750 323 3 879445877
99983 279 64 1 875308510
99984 646 750 3 888528902
99985 654 370 2 887863914
99986 617 582 4 883789294
99987 913 690 3 880824288
99988 660 229 2 891406212
99989 421 498 4 892241344
99990 495 1091 4 888637503
99991 806 421 4 882388897
99992 676 538 4 892685437
99993 721 262 3 877137285
99994 913 209 2 881367150
99995 378 78 3 880056976
99996 880 476 3 880175444
99997 716 204 5 879795543
99998 276 1090 1 874795795
99999 13 225 2 882399156
100000 12 203 3 879959583
100001 100 7 1 9
Plain Text Tab Width: 3 Ln 100000, Col 22 INS
```



- This project is developed by me and my two classmates: Mukta and Divija. This was a part of our Web Technology and Application course project work.