

The Wall Project

INTERNET PROGRAMMING

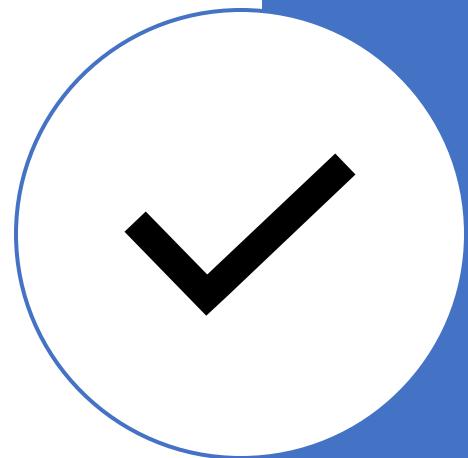
Salil Maharjan

Description and Rationale

- The Wall is an online catalog website for a music store.
- Provides easy access to information about the store products.
- More transparency and reviews.
- A medium to stay connected with the store through membership and newsletters.
- Easy access to contact the store.
- Possibility for store to target their audience and market analysis with the website data.

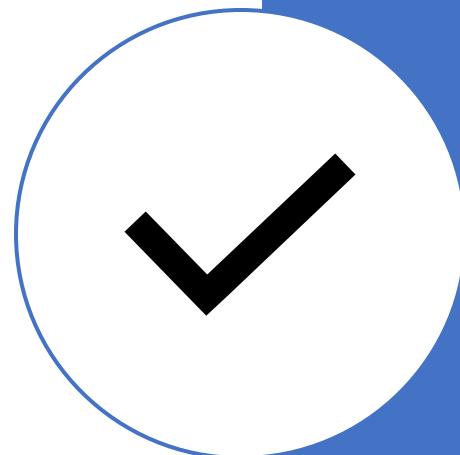
Features

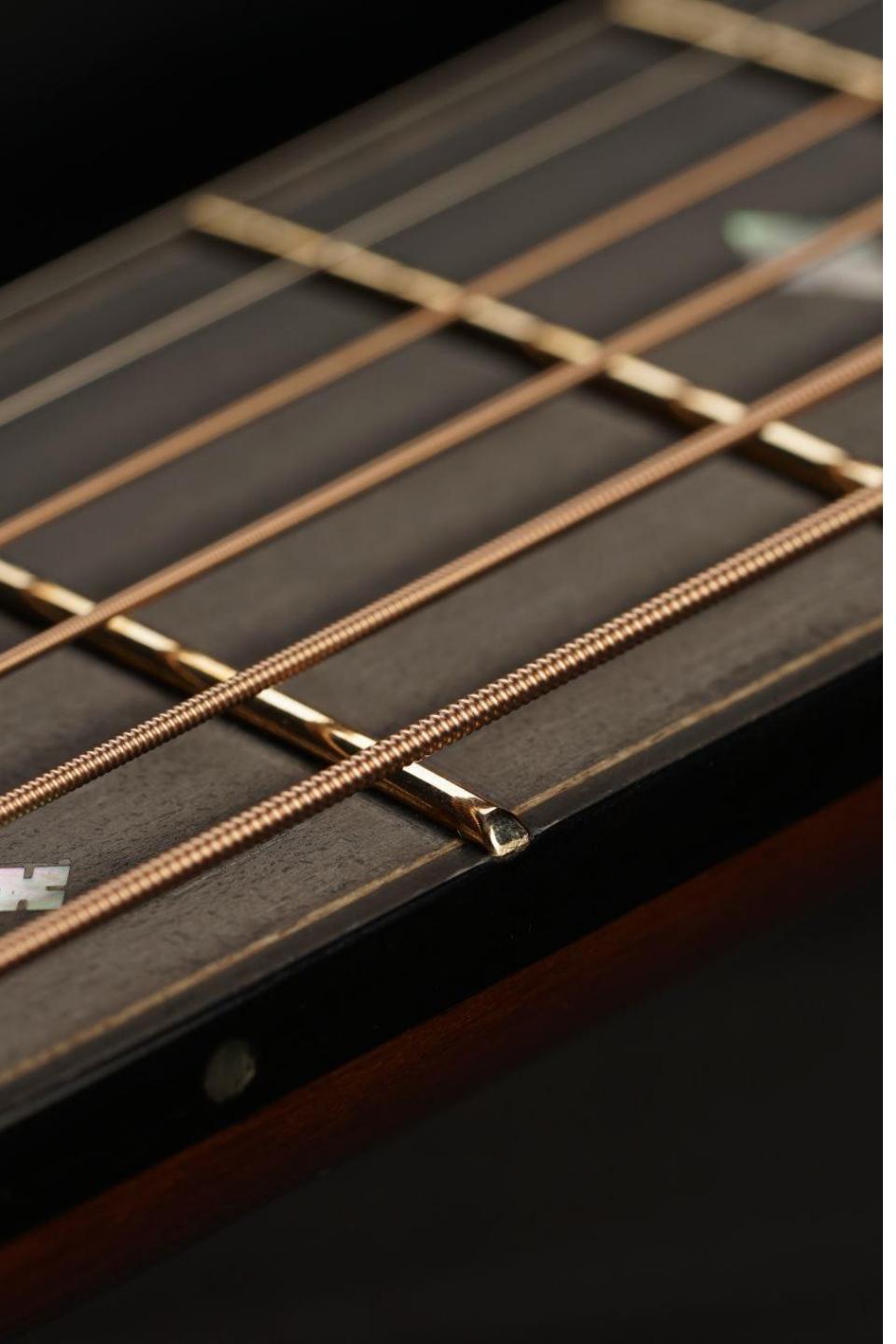
- Maintains a view catalog of all items.
 - A catalog that can be browsed by category (Instrument type) and sub-category (Brand).
- Search feature by product name or brands.
- Admin Panel where admins can:
 - Insert new instruments, delete instruments and to update the price of the instruments. (Image upload supported)
 - Add new brands, delete brands and update brand information.
- Role based security. Only Admins allowed in the admin panel page.
- Login/Logout feature. Special menu option for admins.
- User registration, form field validation for each field.
- User management/categorizing according to their musical needs while registering.
- Newsletter registration with email supported.



Features...

- Web security through htaccess.
 - Custom Error pages. Default home page.
 - Protected against directory browsing and denial from important files like htaccess.
 - Password protection and SHA Hashing to store password.
- Browsing access to admin panels blocked.
- Clean URLs by using Rewrite Engine.
- Recommender system that pushes featured items depending on what category the user is searching and viewing. Globally incorporated.
- Public rating system available to general public using AJAX.
- More detailed rating and review system only available to members. (Member rating is separate from the public rating system.)
- Contact and email redirection incorporated.





To be done:

- Complete products from all categories. Currently there are Guitars, Basses and Drums.
 - Categories left to be implemented: AMP, Pedals, Accessories...etc.
- Complete link for Job Postings to work at the company. Currently a disabled menu option.
- Possibility to redirect to separate branch pages from the footer. Currently empty references.



To be done...

- Stronger search feature to find instrument based on specifications.
- Stronger recommender using AI.
- Pagination as the products increase.
- HTTPS?
- Process online purchases.



Development Tools



PHPSTORM



cPANEL
(APACHE)



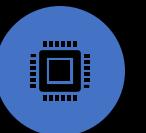
MYSQL



BOOTSTRAP



HTML/CSS



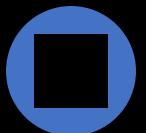
JAVASCRIPT
AND JQUERY



PHP



AJAX



MACOS



Promoting Website

- SEO optimizations.
- Active newsletter for email marketing.
- Host events with musicians.
- Start a blog and social media pages like Facebook, Twitter, Instagram etc.
- Youtube account where product demo videos can be shown.
- Forum activity and active on online directories.
- Make a solid brand signature.
- Paid advertisements.
- Mutual promotions with business in the same market.

Price Projection



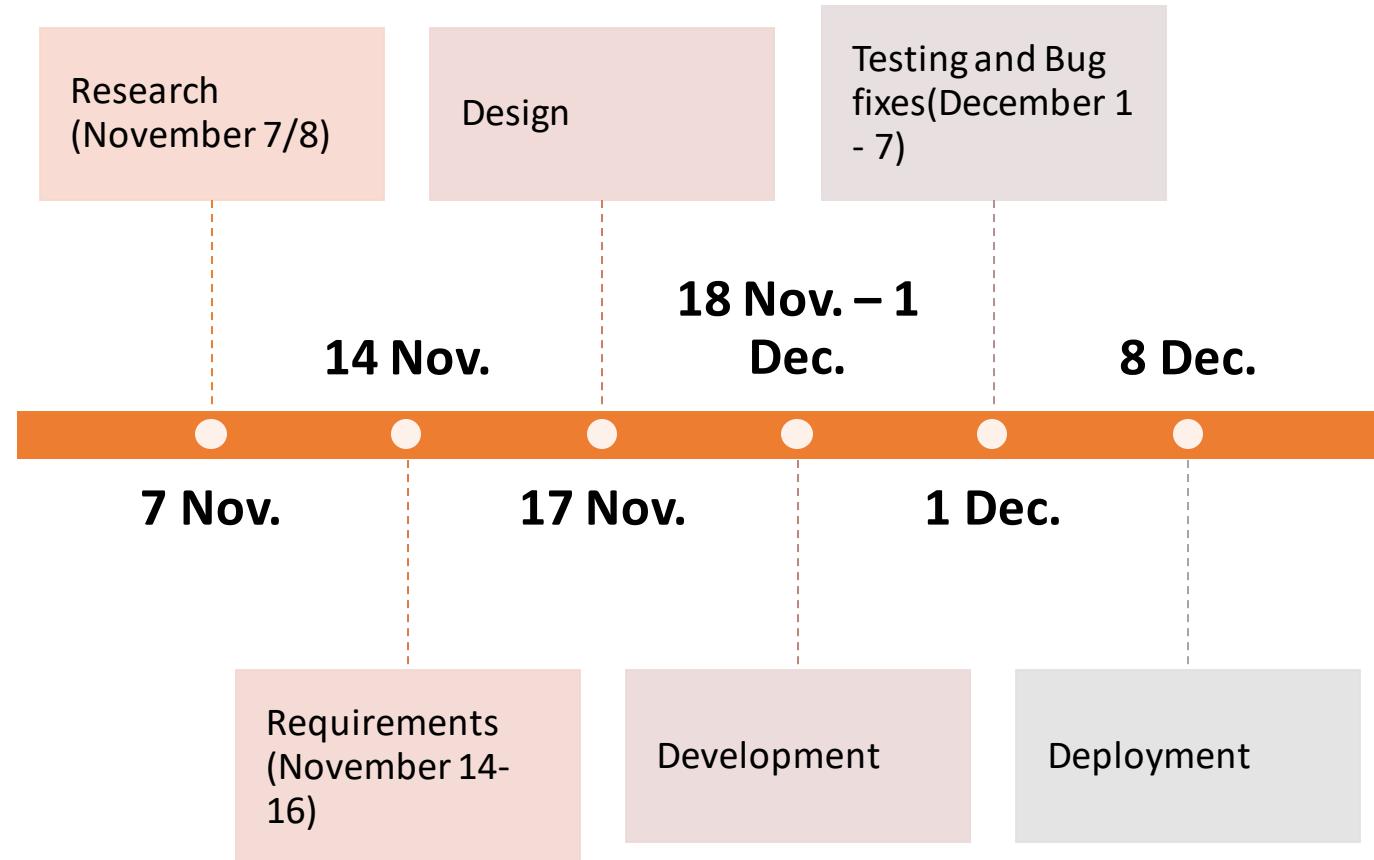
- Moderately Styled, Responsive Design
- SEO (\$500-\$5000/month)
- Simple Database Integration. MySQL (Total Cost of Ownership (TCO) - \$60,000/3yrs)
- Dedicated Hosting (~\$100-\$200)
- Domain Name Registration (~\$15/year)
- E-commerce functionality: Certificates [SSL] (~\$50/year)
- Promotions:
 - PPC (Pay-per-click) advertisements - \$1-\$2 per click
 - Email Marketing (\$100-275/ month)
 - Content Marketing (\$100-\$300 per page) [10-20 pages]

Total Estimate (Low - High): (\$18,000 – \$ 30,000) annually.
[Source: WebFX, SQL.com]

		LOW	HIGH
Number of pages	1 - 10	\$ 1,000	\$ 2,000
Style of design	Moderately stylized	\$ 3,000	\$ 5,000
Copywriting # of pages	None	\$ 0	\$ 0
SEO w/ Placement Guarantee	None	\$ 0	\$ 0
Responsive Design	Yes	\$ 3,000	\$ 3,000
Database Integration	Advanced	\$ 4,000	\$ 10,000
e-Commerce Functionality	Basic	\$ 2,000	\$ 4,000
CMS	None	\$ 0	\$ 0
TOTAL ESTIMATED QUOTE		\$ 13,000	\$ 24,000

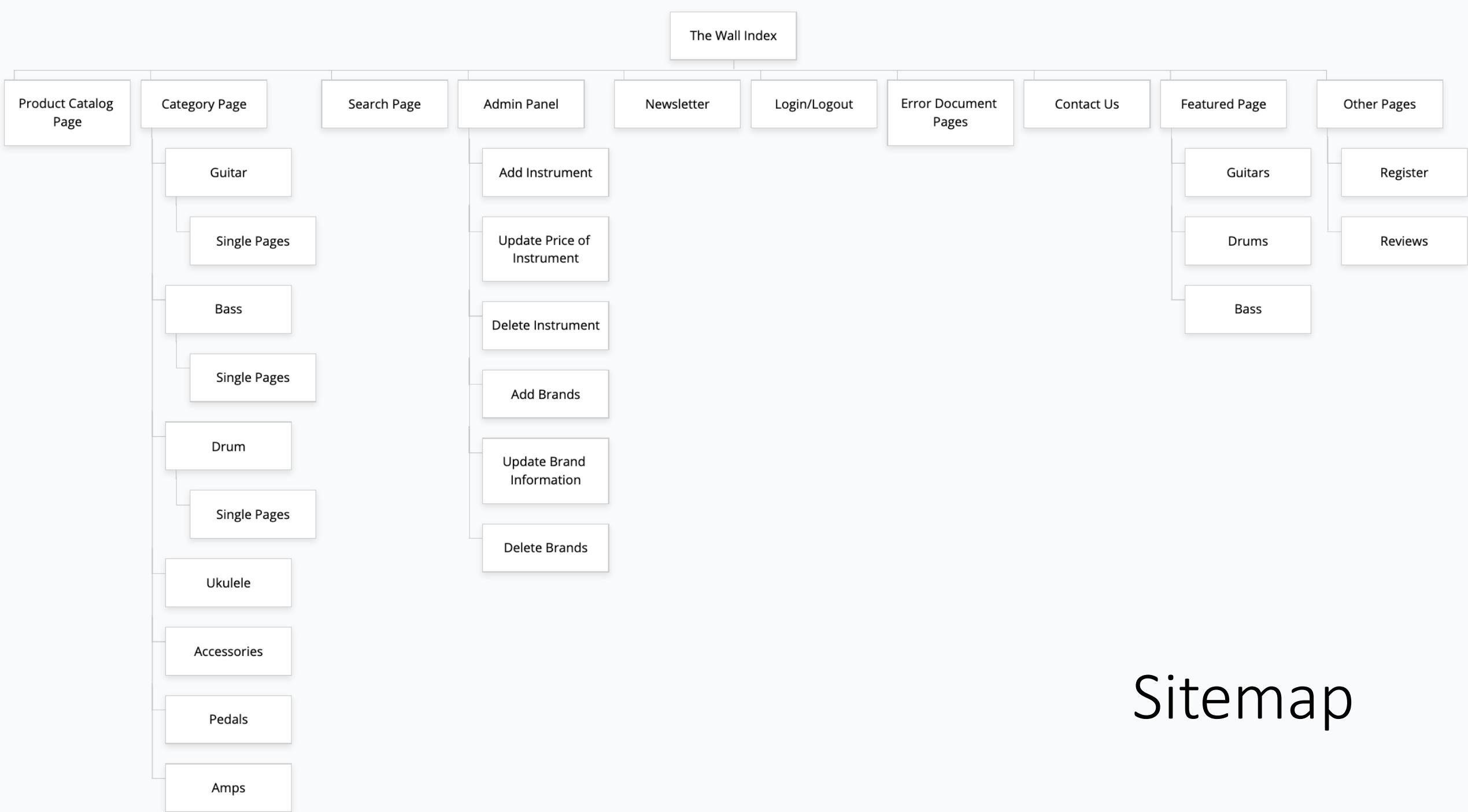
Source:
WebFX

Implementation Schedule



Database ERD

Member	Guitar	Drum	Bass
memberID int(11)	guitarID int(5)	drumID int(5)	bassID int(5)
name varchar(50)	guitarName varchar(50)	drumName varchar(50)	bassName varchar(50)
email varchar(50)	guitarPrice int(10)	drumDescription varchar(100)	bassDescription varchar(100)
branch varchar(60)	guitarDescription varchar(100)	drumPrice int(8)	bassPrice int(8)
guitar char(1)	guitarImage varchar(50)	drumImage varchar(50)	bassImage varchar(50)
bass char(1)	brandID int(5)	brandID int(5)	brandID int(5)
percussion char(1)	guitarSpecs varchar(500)	drumSpecs varchar(500)	bassSpecs varchar(500)
cardnumber char(15)	guitarFeature char(1)	drumFeature char(1)	bassFeature char(1)
zipcode char(10)			
cvv char(3)			
expmonth char(30)			
expyear int(11)			
pw varchar(500)			
Accessory	Ukulele	Pedal	
accessoryID int(5)	ukuleleID int(5)	pedalID int(5)	
accessoryName varchar(50)	ukuleleName varchar(50)	pedalName varchar(50)	
accessoryDescription varchar(100)	ukuleleDescription varchar(100)	pedalDescription varchar(100)	
accessoryPrice int(8)	ukulelePrice int(8)	pedalPrice int(8)	
accessoryImage varchar(50)	ukuleleImage varchar(50)	pedalImage varchar(50)	
brandID int(8)	brandID int(8)	brandID int(8)	
Amp	Review	Rating	Brand
ampID int(5)	reviewID int(5)	ratingID int(5)	brandID int(5)
ampName varchar(50)	reviewtext varchar(250)	guitarID int(5)	brandName varchar(50)
ampDescription varchar(100)	guitarID int(5)	bassID int(5)	brandDescription varchar(200)
ampPrice int(8)	drumID int(5)	drumID int(5)	
ampImage varchar(50)	bassID int(5)	rating int(1)	
brandID int(8)	rating int(1)		
Newsletter	Admin		
newsID int(5)	adminID int(5)		
email varchar(30)	memberID int(5)		



XML SITEMAP

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</urlset>
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[20 pages]

Everything you need - on a single wall !

— This one is pink.

A large, hand-drawn style text "THE WALL" is centered on the page. The letters are written in black ink on a background of light-colored rectangular tiles. The letter "T" has a long horizontal stroke extending to the left, and the "W" and "A" have long vertical strokes.

Become a Member

View All

The Wall



A music store in tribute to Pink Floyd based in Manhattan, New York.

Find the right choice to fit your music style.

Find what you need!

Guitars : Wide brand selections.

Drums : Signature drums available.

Basses : Custom make your own bass!

Amps : Best selections for your sound.

Pedals : Distortions, Reverb, Delay, Phasers...

Ukuleles : All different ranges.

Accessories : Straps, strings, cases...

Featured Guitars

Featured Guitars



Gibson Les Paul Studio

One of the best workhorse electric guitars around



Epiphone Les Paul Standard

Unbelievable value from Epiphone



Fender Stratocaster 1969

David Gilmour's shred.

Featured Drums



Gretsch New Renown

In true Gretsch perfection pairing Northern American Maple with a softer sound.



Pearl RS525SCC706

5-piece from Pearl



Yamaha PHX

PHX Series reveals Yamaha's all-out pursuit of the ultimate in drum craftsmanship and sound.

Don't Miss Out on the Best Offers, Join Now!

Featured Bass



Ibanez SRH500-DEF Bass

An electro-acoustic from the dragon's private collection



Fender Mustang bass

Short-scale basses have never been more enticing



Sterling By Music Man SUB Ray5

A pocket-friendly StingRay with impressive tones



Fender Geddy Lee Signature Jazz bass

A pocket-friendly version of the Rush front-man's classic axe

Our Promise To You

We only sell genuine top-grade products and offer the best offers in town!

Sign up with your email (We don't spam!)

[The Wall Berlin](#)

[The Wall Athens](#)

[The Wall LA](#)

Stay up-to-date on offers. Join our Newsletter!

Email

Sign up

Everything you need - on a single wall !

— This one is pink.

Become a Member

View All

Registered for newsletter successfully.

OK

E
W
A
L

Products in Store

This is only a catalog view page that can be used for quick browsing. Go "On the Wall" to get specific details on products.



Gretsch New Renown



Pearl RS525SCC706



Yamaha PHX



[Home](#) [On the Wall](#) [Search](#) [About](#) The Wall

Become a part of The Wall



Hurry! Cyber Monday discount ends today.



Personal Information:

Name:

Email:

Your email is safe with us!

Password:

Verify Password:

Your Wall Membership:



Pick your instruments:

 Guitar

added shortly.

Everything you need - on a single wall.
— This one is pink.

[Become a Member](#)

[View All](#)

Limited produc



Home On the Wall Search About

Everything you need - on a single wall.

— This one is pink.

[Become a Member](#)[View All](#)**Personal Information:**

Name:

Email:

Your email is safe with us!

Password:

Verify Password:

Your Wall Membership:

Pick your instruments: Guitar Bass Percussion Become a premium member[Premium Benefits](#)**Premium Benefits for
\$29.99/month**

Get a personalized gift from the family at The Wall every month. Get priority on special purchases and enjoy exclusive discounts. Free monthly servicing and parts replacement.

Payment Information

Card Number:

Zip Code:

CVV:

Expiration Date:

 [Join now!](#)

The Wall



Home On the Wall Search About

Everything you need - on a single wall.

— This one is pink.

[Become a Member](#)[View All](#)

Limited products

The W



Hurry! Cyber Monday discount ends today.

Personal Information:

Name:

Error! Please type a valid name!

Email:

Your email is safe with us!

Password:

Error! Password need to be more than 5 characters long.

Verify Password:

Error! Passwords do not match!

Your Wall Membership:

Pick your instruments: Guitar Bass Percussion Become a premium member[Premium Benefits](#)**Premium Benefits for
\$29.99/month**

Get a personalized gift from the family at The Wall every month. Get priority on special purchases and enjoy exclusive discounts. Free monthly servicing and parts replacement.

Payment Information

Card Number:

Zip Code:

CVV:

verb, Delay, Phasers...

The Wall

Guitars

Basses

Ukuleles

Drums

Pedals

Amps

Everything

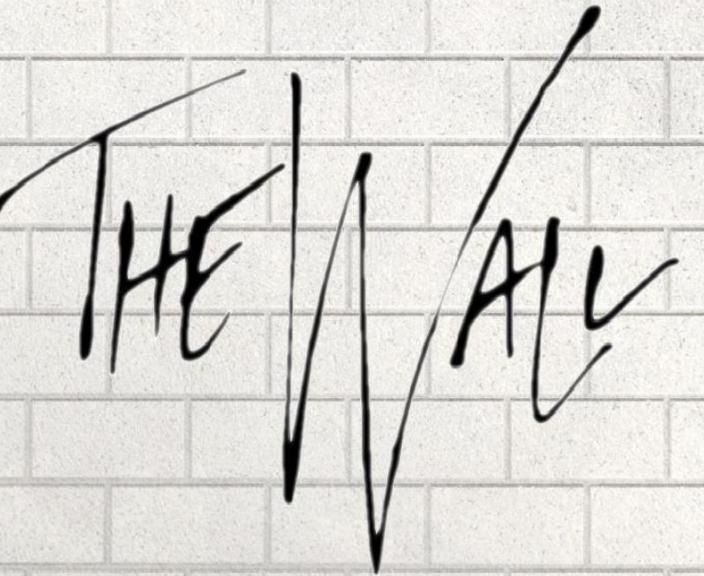
Accessories

a single wall !

— This one is pink.

Become a Member

View All

The word "THE" is written in a large, bold, black cursive font. It is positioned above the word "WALL", which is also written in a similar black cursive font. Both words are centered on a light-colored brick wall.

Filter by Brand

Gibson Yamaha Epiphone Fender PRS Ibanez Pearl Gretsch Sterling

Filter

Guitars in Store



PRS Private Custom 24

Top shelf. The best electric guitar for when money is no object.



Gibson ES-335 Satin

The best electric guitar for jazz

Filter by Brand

Gibson Yamaha Epiphone Fender PRS Ibanez Pearl Gretsch Sterling

Filter

Bass in Store



Fender Mustang bass

Short-scale basses have never been more enticing



Yamaha TRBX305

One of the best bass guitars for those on a budget

Filter by Brand

Gibson Yamaha Epiphone Fender PRS Ibanez Pearl Gretsch Sterling

Filter

Drums in Store



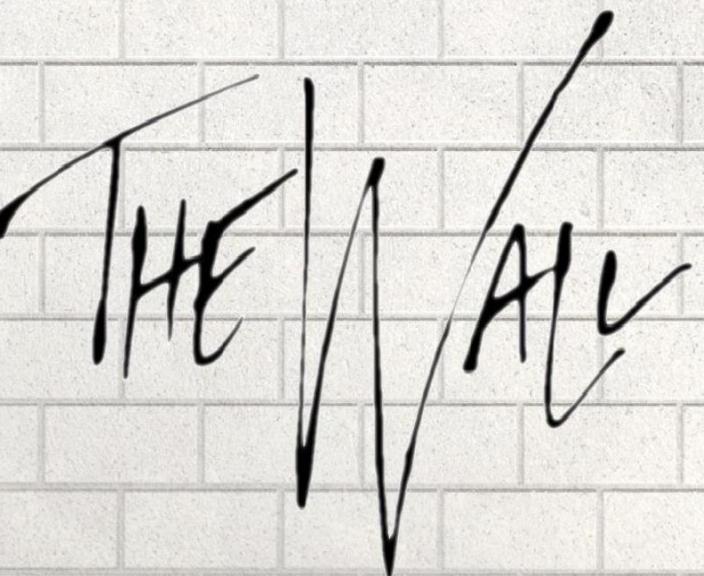
Pearl RS525SCC706



Bord Eaux 7858/6

Everything you need - on a single wall !

— This one is pink.



THE WALL

Limited products: Only distributing Guitars, Basses, and Drums. New items will be added shortly.



Search result for *yama* :



Yamaha TRBX305

One of the best bass guitars for those on a budget



Yamaha PHX

PHX Series reveals Yamaha's all-out pursuit of the ultimate in drum craftsmanship and sound.

Featured Drums

Everything you need - on a single wall !

— This one is pink.

Become a Member

[View All](#)

Email:

Password:

[Login](#)



THE WALL

Limited products: Only distributing Guitars, Basses, and Drums. New items will be added shortly.



PRS Private Custom 24



Top shelf. The best electric guitar for when money is no object.

Price: \$9872

Brand: PRS

Add a Review

You need to be a member to post reviews and rate the product.

Featured Guitars



Gibson ES-335 Satin

The best electric guitar for jazz



Fender Stratocaster 1969



Epiphone Les Paul Standard

Add a Review

Review Product: PRS Private Custom 24



Your thoughts about the product

Add your review here

Add Review

Featured Guitars



Custom order guitar. Specs can be varied according to your wish.

Product Reviews

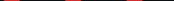
Public Rating on the Product

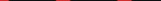
Average of 4.74 from 31 ratings

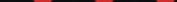
Member rating     

Average rating of 4.20 from 5 members

Member reviews:

 - "*Worth the years not eating*"

 - "*BEST PIECE IN MY COLLECTION!!*"

 - "Love it!"

 - "Saving up for this one now!"

     - "*Too pricey butt worth it!!*"

Admin page

Add a Product

[Add instrument](#)

Update Price of a Product

[Guitars](#) [Basses](#) [Drums](#)

Delete a Product

[Guitars](#) [Basses](#) [Drums](#)

Add a new Brand

Brand Name:

Brand Description:

Upload product image first to add a new instrument:

[Browse...](#) No file selected.

[Upload Image](#) [Add Product](#)

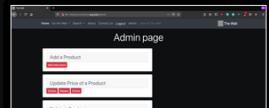
[Go back](#)

[Call The Wall](#)

[Send an Email](#)

[Other Branches](#) ▾

© Salil Maharjan The Wall 2019



Upload product image first to add a new instrument:

[Browse...](#) No file selected.

[Upload Image](#) [Add Product](#)

[Go back](#)

The file test.jpg has been uploaded.

[Call The Wall](#)

[Send an Email](#)

[Other Branches](#) ▾

Add a new product to The Wall ×

Add new product:

Product Name:

Enter Product Name

Product Price:

Enter Product Price

Product Description:

Enter Product Description

Product Image:

img/test.jpg

Brand Name:

Gibson



Product Specifications:

Enter Product Specifications

Feature Product:

YES



Product Category:

Guitar

Call The WallSend an EmailOther Branches ▾

Update Bass Prices



Fender Mustang bass

Current Price: \$821

New Price

Confirm Price



Yamaha TRBX305

Current Price: \$520

New Price

Confirm Price

Update Guitar Prices



PRS Private Custom 24

Current Price: \$9872

Confirm Price

Gibson ES-335 Satin

Current Price: \$9812

Confirm Price

Update Drum Prices



Pearl RS525SCC706

Current Price: 725

New Price

Confirm Price



Pearl EXX725S/C

Current Price: 1510

New Price



Confirm Price



Add a new Brand

Brand Name:

Brand Description:

Add Brand

Delete a Brand

Select Brand to Delete:

Delete Brand

Edit Brand Information

Select Brand to Update:

Delete a Brand

Select Brand to Delete:

Gibson

[Delete Brand](#)

Edit Brand Information

Select Brand to Update:

Gibson

New Brand Name:

New Brand Description:

[Update Brand](#)

1: Project
14 rows
< > Tx: Auto DDL
Tab-se...d (TSV)
smaharj_project.Member
Remote Host

< < > >>
Filter criteria
X

email
branch
guitar
bass
percussion
cardnumber
zipcode
cvv
expmonth
expyear
pw

1	smaharj3@ramapo.edu	wallBerlin	Y	Y	Y	<null>	<null>	<null>	<null>	<null>	d9ec1a8dfeb1ec7fc4b6c25e3bd061...
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11	kay@gmail.com	wallLA	Y	N	N	21309481239	89432	231	10	2020	b7c0ccecf593604919e1c5f54dc7e3...
12	hello@test.com	wallBerlin	Y	N	N	<null>	<null>	<null>	<null>	<null>	3193b30cdb3810ea0c820a9ca2358c...
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14	smith@gmail.com	wallLA	Y	N	N	<null>	<null>	<null>	<null>	<null>	d9ec1a8dfeb1ec7fc4b6c25e3bd061...

Z: Structure
Z: Favorites



Error! That is not on The Wall! Try something else [Go back](#)



Oops.. This side of the wall is only for the Administration. [Go back](#)

Reflection and Evaluation



This project helped me sharpen my web development skills. It made me more familiar with the website development cycle and how each step of Research, Planning, Designing and Developing plays a vital role in the final product.



In the given time frame, this project challenged me to develop a functional enterprise website. I believe I incorporated all the necessary features properly. The website is not extensive in terms of the availability of products, but it can be an easy future addition.



This project also helped me refresh my knowledge about designing and developing a database. Overall, I am satisfied with my final product and I believe the project was very comprehensive and helped exercise all the skills we learned in class.

References

<https://www.webfx.com/internet-marketing/how-much-does-it-cost-to-advertise-online.html>

<https://www.mysql.com/tcosavings/>

<https://makitweb.com/5-star-rating-system-with-jquery-ajax-and-php/>

[Code references are taken from the links shared on Blackboard and projects developed in class lab sessions. Project code was developed independently.]



Thank you!