



Jennifer Brown
Design

IntroRadio Website

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Project Overview

Objective

The IntroRadio is a contest intended to help unsigned (Indie) Christian Artists reach a wider audience and gain exposure. The IntroRadio would like to utilize the many distribution and community advantages of the Internet and the World Wide Web to reach a target audience of teens and young adults. In addition, the IntroRadio website will seek to act as a marketing tool for the radio program and the contest, as well as a vehicle for bands to connect with an audience.

The website will seek to fulfill the following objectives:

- Provide a multi-faceted, Internet-based distribution method for the IntroRadio Program.
- Develop and foster a community of Christian teens and young adults in order to connect these youths with each other, and emerging music.
- Though eCommerce, provide revenue for the IntroRadio and the bands participating in the site..
- Provide a marketing tool for the program to help it with other distribution models, including traditional radio.
- Provide a vehicle for youths to participate in the IntroRadio contest, and a way to distribute the results of this contest to the audience.

The IntroRadio has settled on the concept of “Listen - Vote - Buy” to promote the show, and would like for the website to reflect this concept in its structure.

In addition to re-designing and rebuilding the current site to appeal to a wider audience and provide additional distribution methods for the program. The site will be transitioned from its current host, Digital Forest, to Jennifer Brown Design’s internal server.

Document Overview

This project document serves as reference for the scope and requirements of the IntroRadio Website. The document, essentially, is the website spelled out in detail on paper.

Project Requirements & Scope

This section of the document will spell out the requirements for the website. This means what the website requires in order to be considered completed. The project scope is more detailed, and will lay out on paper each section of the website. The project scope also sets out the limits for the site. Any changes to the contents of this section will require a rewrite of this document, as well as an adjustment to all timetables and budgets for this project. Essentially, the requirements spell out what is wanted and the scope spells out how it will be delivered.

Deliverables

This section will provide a calendar with deadlines and due dates for the project.

Cost Analysis

This section will detail the budget for the project.

Terms & Agreements

This section is the contract for the site. It ensures that both parties understand the nature of this document and the project to be undertaken.

Project Requirements & Scope

Requirements

This section will spell out the expectations for the IntroRadio website. Essentially this section is “what is expected” for the project. Per our discussions, the expectation is set that Jennifer Brown Design will be providing:

- web hosting, including migration of existing domain DNS from Digital Forest
- web development and design

Hosting

Because IntroRadio.com is a large highly interactive site, it requires robust web hosting. The hosting solution will:

- Have fast enough throughput to handle large multimedia files
- Will require the following technological abilities:
 - The ability to deliver HTML document (HTTP)
 - Ability to upload and place program files on the server
 - Ability for program to be delivered via Podcast and directly from website
 - Ability to store data
 - Ability for dynamic content and administration
 - Secure transaction layer to support eCommerce
- When delivered via the web server the program should start playing in under 3 minutes.

Website

The IntroRadio website will need to appeal to four groups. The first is the target market for the program: Christian teens and young adults, the second group is the musical acts who wish to appear on the program, the third group is potential syndication venues (radio stations), and the final group are the stakeholders for IntroRadio.

User Experience

Each group (user) has several standards that need to be met for the IntroRadio website to be considered “successful.” The site must be easy to navigate, robust and stylistic. There will be several ways for users to navigate around the site, and areas within the site that will appeal to the different audiences for the site. Specifically:

Teens and Young Adults: To appeal to this group, the site must deliver its content (the program) through several means. This group is technologically savvy, and has grown up in a world with on-demand content. In addition this demographic values community, participation, and connections.

To meet the requirements for this group, the program will be delivered:

- via subscription services (RSS/Podcast)
- via the website
- via download
- via radio transmission (outside of the scope of Jennifer Brown Design)

In order to appeal to this group, the IntroRadio site needs to build a sense of community, and give this group a sense that it has a stake in the program. This will be accomplished via the voting mechanism and an IntroRadio community, where the listeners of the program can discuss the bands, the results of voting and the program. Forums are the means by which this demographic keeps in touch. The IntroRadio will need to utilize this to succeed.

Music Acts: To entice musical acts to participate in the program, they need to feel that they will receive a benefit from the site. They need to be able to submit music, and communicate with their listeners. Once approved, musical acts should be allowed to control their profiles. In addition, musical acts need a method to submit their act for consideration online. Finally, acts need a way to connect with listeners. In addition, bands can be enticed by the ability to “make money” via sales on the eCommerce side of the site.

Syndication Venues: Syndication venues need to see a successful and functioning site. They want promotion, so this will be provided via a listing of syndication venues as an option for listening to the program.

Stakeholders: Like the syndication venues, stakeholders will require a “proof-of-concept” from the site. In addition, stakeholders will need a level of control over site functions. In addition, an eCommerce (storefront) will need to be established to help bring in revenue for the site. Stakeholders will have significant control over static content on the site, and have an avenue to communicate with the different audiences on the site.

Administration Requirements

The IntroRadio website will need to have several administration interfaces to allow for stakeholder control over the contents of the site. Specifically, administrators will need to be able to:

- “Publish” the show to the various delivery methods (RSS/Streaming)
- Make announcements and give information to listeners
- Approve musical acts for inclusion on the website.
- Moderate forums
- View results from the voting/monitor voting mechanism.
- Control content of eCommerce site.

Emergency Management Strategies

Due to cost restraints, the website does not require 100% uptime, however the site is expected to be functional and regularly backed up. The site will be backed up weekly to prevent malicious code, hacking and administrative error. The site will be backed up monthly to a firesafe to protect against natural disasters.

Due to the nature of this hosting, occasional outages are expected (including an outage for approximately 15-20 minutes every week to allow for server backup). The server itself operates off a UPC backup to protect against power outages at the hosting site.

The IntroRadio site will be protected from other sites hosted at Jennifer Brown Design so there is no conflict of software, database or web content. However the site will be sharing its Apache (web server) configuration with all other sites hosted by Jennifer Brown Design.

Project Scope

The project scope, essentially is where the website is built on paper. It will spell out exactly what will be created, and any limitations on that site. This is the section that will spell out expectations on both sides of the table.

Hosting

Jennifer Brown Design has already registered: introradio.com, and will be hosting the new version of the site on its own servers. Part of this project will involve the migration of DNS from Digital Forest to Jennifer Brown Design. IntroRadio will be ending its relationship with Digital Forest after the new site is built. It is the responsibility of IntroRadio to “close down” and end its contract with Digital Forest.

Jennifer Brown Design will inform IntroRadio when the new site is ready for release, at which time the old site at Digital Forest can be shut down. It should not be shut down before this time

Migration of Existing IntroRadio Site

No part of the current IntroRadio site will be migrated with the exception of the existing radio program (MP3) files. Specifically, these are the contents of the folder at ~/Shows/Uploads. How these files will be handed is covered in the "Program" section of this document.

Once these shows are migrated, in the interim period (when there are two sites running simultaneously) administrators at IntroRadio will need to upload the program to both sites (the new and the old) until the old site is shut down. We will try to prevent a long period of this, but it will be necessary to keep the data on both sites in sync during the build.

Hardware

The website will be hosted internally, using Jennifer Brown Design's existing web server. This server is currently a G5/dual 2 Ghz/2.5GB/dual ethernet. This configuration is subject to change. Firewall protection is provided at both the router and server level.

Software

The website will utilize the following software:

- Mac OS X Tiger Server (10.4.7)
- Apache 1.3
- PHP 5
- PostgreSQL/mysql (decision has not be settled yet)
- phpBB
- eCommerce software (has not been decided, still in evaluation stage)
- Flash (for streaming playback)

(please note that this list does not include software used to create content for the site)

Network

The IntroRadio site will run off the current Jennifer Brown Design network. It will operate as a virtual host off the web server, meaning it will share its IP address with several other sites. DNS is also run off the web server to alleviate issues with conflicts. In addition, the website will require the following network/web protocols.

- HTTP
- FTP
- SSL

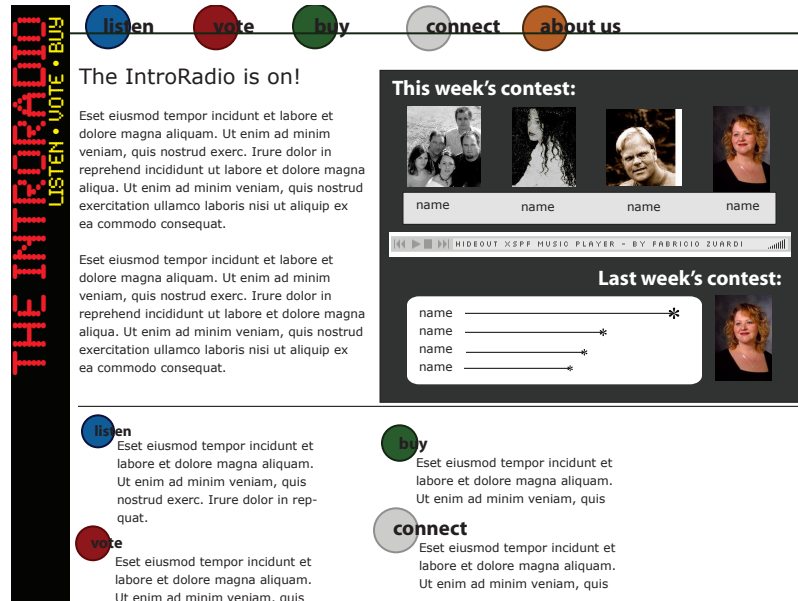
Website: Look and Feel

The requirements have specified that the website have a design that appeals to the youth audience the program hopes to attract. Design decisions for the site have been generated by researching other sites which appeal to the target demographic, we have used both Christian sites that appeal to teens, and secular sites as a guide to what appeals to this age group. We have also researched sites which provide a similar purpose to the IntroRadio to see what they have created. We found the following site's designs to be of interest:

- MTV: <http://www.mtv.com/> (the masters of marketing to young adults)
- MySpace Music: <http://www.myspace.com> (MySpace is the leader in teen community, and the ability to connect young adults to emerging bands).
- WRIR: <http://wrir.org/x/modules/news/> (A radio station that only plays indie artists)
- IndieHeaven: <http://www.indieheaven.com/> (A website dedicated to promoting Indie Christian Music)
- DittyTalk.com: <http://www.dittytalk.com/> (The Christian version of MySpace)

From a design standpoint, the one thing all these successful sites have in common is that they are busy, offer several ways to navigate and they all build a community, and allow the website audience to feel that they are the ones controlling the site.

Based on this research, we've decided on the following design for the new IntroRadio site.



The new design keep the IntroRadio tagline: Listen • Vote • Buy. In addition, users visiting the site get instant updated information on the front page in terms of the current artists in the contest and the previous contest's results. In addition, the people visiting the site will be able to listen to the latest program on the front page of the site.

We have decided to use a Flash-based player for the website playback. Due to the length of the program, the player will open in a separate window, so it can play in the background as the user continues to navigate the site.

Due to the time length of the program, we will not be able to adjust settings to the program plays instantly. The program is too long, and the file sizes are too large to ensure instant playback for all connections. Instead, the player will show a loading progress, so users know how much of the program has been downloaded. The advantage of using a Flash-based player is all users will have the same experience with the program since this will ensure they are using the same player for playback.

User Experience

The term "user," in this case, covers a wide variety of people. The main goal for the user is for each to feel that they are a participant in the IntroRadio. While, underneath it all, the site exists to promote the contest/radio program, the users whether they are the youth listening to the show, the musical artists competing on the show, or radio stations interested in picking up the show, need to feel that it is their site. This will be achieved by allowing this groups to have a stake in creating content that appears on the site. The bands will be able to provide a profile, the listeners will be able to discuss bands and programs, and the radio stations will be able to list their information in the radio station database.

Administration Experience

Administrators on the site are the people involved in making the website and radio program. They will need the ability to use a web-based interface to control dynamic data on the site. In addition, the administrators will have moderator and approval abilities for the forums. The administrators will enter the site through a different entrance page that will direct them to an administration panel, where they can control their end of the content for the site.

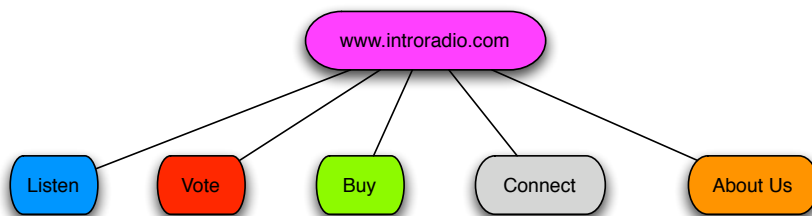
Website: User Structure

The following section will outline in detail the “user” or publicly accessible section of the site. It does not reflect the underlying code that will drive these pages. The section will use sitemaps to show the structure of each area of the website. Then each “user” page within will be explained.

“Home” section

Purpose: The purpose of the “home” section is to introduce visitors to the concept of the site, and begin syphoning the four areas of the audience off to the various areas to participate in the website. To entice users to enter on the front page, the front page will contain dynamic content including information about the current program, the results of the previous program, and a link to the community to discuss both.

Structure:

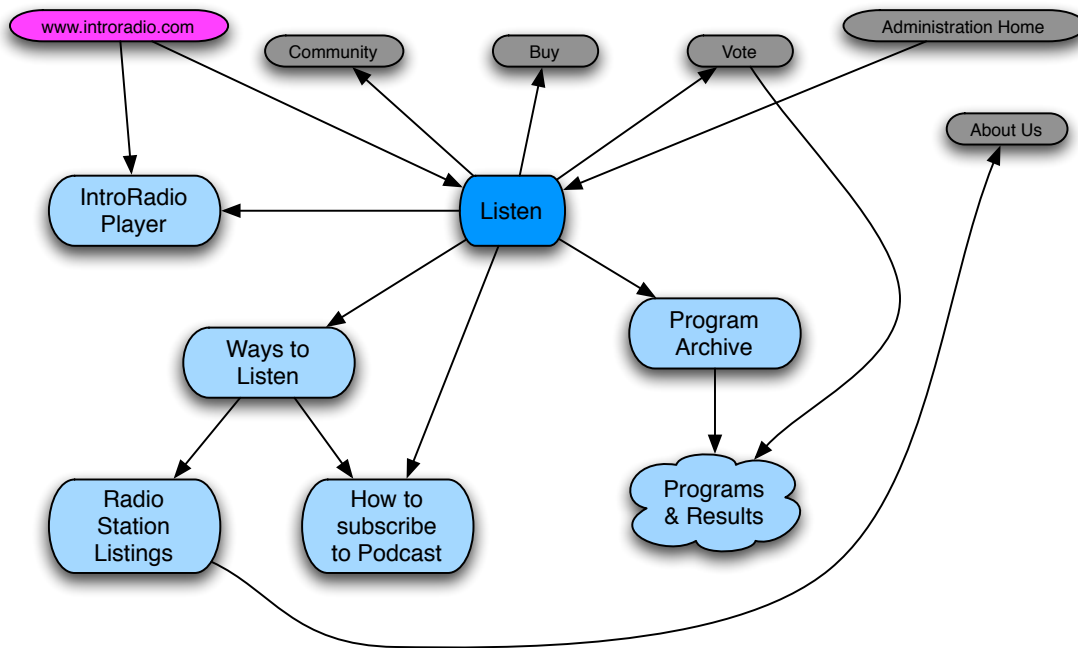


The home section is the entrance to the IntroRadio site. The design has been explained in the Look and Feel section.

“Listen” section

Purpose: The Listen section is intended to showcase the radio program. If the site serves its purpose, this section will not be used frequently by visitors, except those who are not familiar with the program. It will serve as an introduction to the program and a database of past programs, so listeners can look back at the show, and it will serve as a showcase for potential syndicators.

Structure:



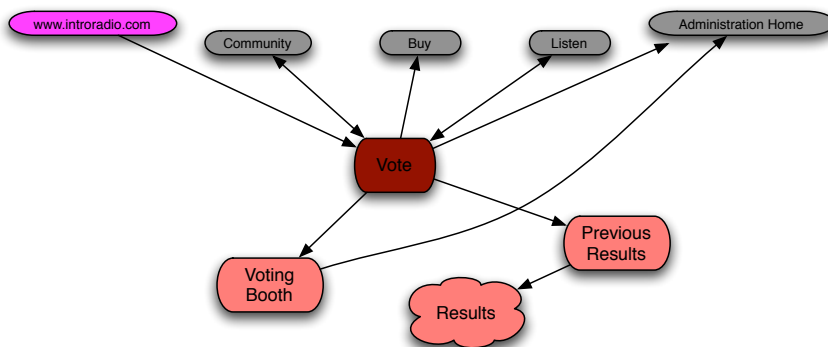
- **Listen Home:** Will list information pertaining to the most current program. Users will click on a link to launch the IntroRadio player to listen the show, they will also be prompted to discuss the show in the community, vote for the show, and visit information about the bands in the buy section.
- **IntroRadio Player:** Flash-based pop-up window, will be used throughout the site as the way to listen on the website. Past programs will link to it also. It will be database driven with the show the user chooses being pulled via a show number stored in a database.
- **Ways to Listen:** This section will cover the other means to listen to the program, including radio station and podcast information. It will link to radio station listings, and how tos.
- **Radio Station Listings:** This section will display the radio stations that are carrying the show. The content of this section will be dynamically pulled from a database maintained by the administrator. The page will also feature a link to the "About Us" section where viewers can send a request to have the IntroRadio picked up by a local station in their area.
- **How To:** This will be a step-by-step guide to subscribing to the IntroRadio podcast. Will utilize movies and text and cover how to subscribe to the podcast via iTunes on Windows XP and Mac OS X.

- **Program Archive:** This page will hold all the archived programs with a link to the voting results for those programs. Listeners will be able to search existing programs to pull up ones they want to listen to. That program will be pulled up dynamically in the *Programs & Results* page (dynamically generated).

“Vote” section

Purpose: The vote section is where listeners can vote for their choice for the current program. It will also allow listeners to view results from previous shows.

Structure:

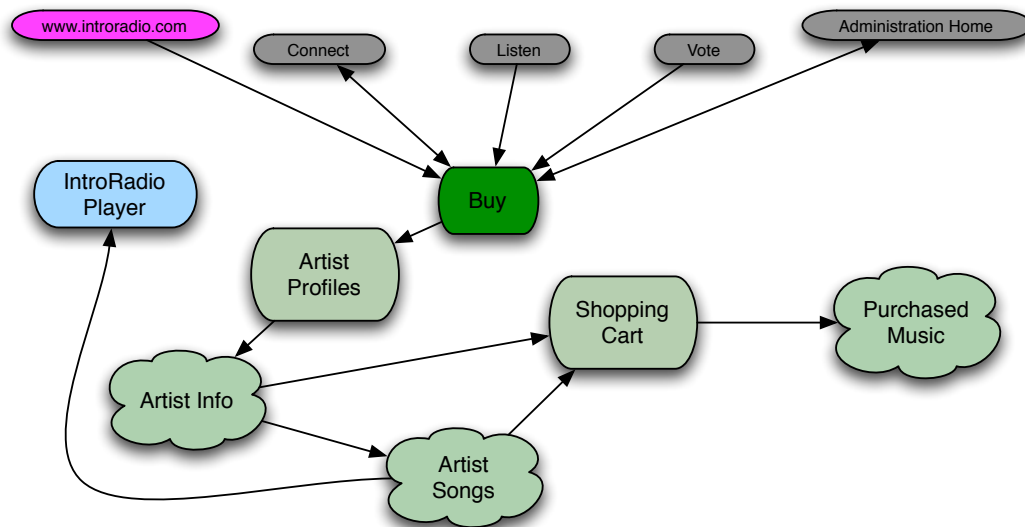


- **Vote:** The main entrance page for the voting section. This page will show the current contestants, and the results of the previous week. Users will be encouraged to discuss results in the community and will be directed to the listen section if they have not already heard the program (happened on the voting section out of curiosity). It will also give people just finding out about the program a chance to look at past results.
- **Voting Booth:** This is the page where listeners will vote. It will collect information about the listener. Voting information will be held in a database file. Voting will tally automatically in a database.
- **Previous Results:** This is an area where users will be able to look through past results of the voting, from here they can discuss these results or listen to the program.

“Buy” section

Purpose: The buy section allows users to the site to learn about the bands featured on the show, and support these bands by purchasing songs from them.

Structure:

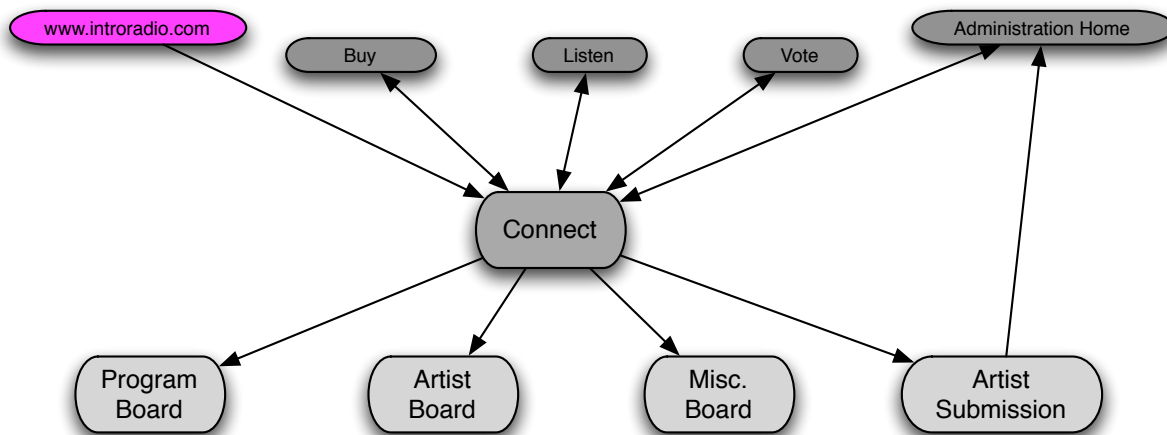


- **Buy Home:** This page will introduce the concept of the store, spell out its purpose, and give the users options to search through the artists featured on the site.
- **Artist Profiles:** This will be the page showing the results of a user's search for artist. From here users can choose which band pages they want to see.
- **Artist Info & Songs:** This page will be dynamically generated off a database template, each artist's page will be similar in structure, but will contain information that the artist has created and the administration has approved. If someone wants to listen to an artist's song, they click a button to pull up the IntroRadio player. If they want to purchase the song they click "buy" and the song is added to their shopping cart.
- **Shopping Cart:** Handles all the eCommerce functions of the site. Will store selections of songs from users, and handle credit card processing. Once the item has been purchased the buyer will be directed to a page to download the songs. The shopping cart application will report to the administration page.

"Connect" section

Purpose: The purpose of the connect section is to entice the youth and young adult audience to be interested in the program. Here they will feel that they have control over the program. They will be able to interact, connect and discuss programs, artists and the results of voting. The section will be moderated by the site administrators.

Structure:

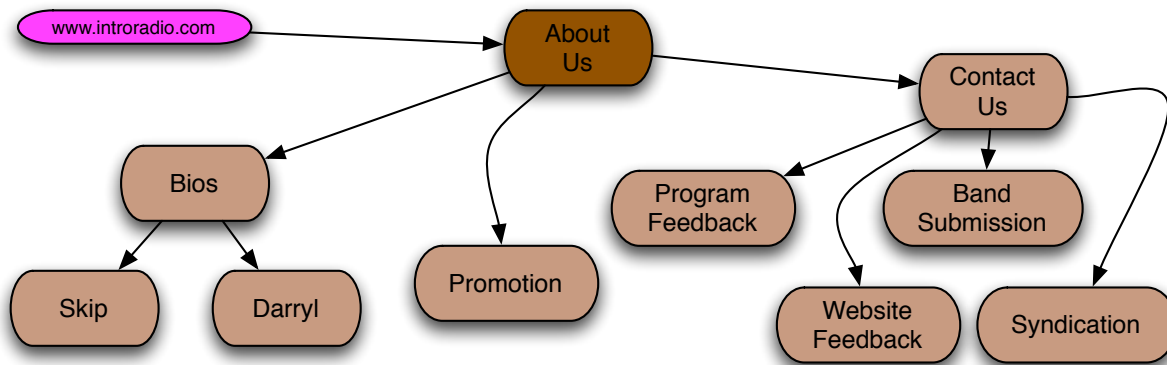


- **Connect Home:** The entrance page for the forums, this section will allow users to choose what discussions they want to participate in. Users who are not registered will be able to create an account to participate in the boards. Artists will be directed to create a special “artist” account to have their music considered for inclusion on the site.
- **Program Board:** Handles and discussions about the radio program and the voting results.
- **Artist Board:** Allows users to talk with bands and discuss the artists on the show.
- **Misc. Board:** This will be an open forum where people can discuss any topic they like, such as their Christian Faith and other topics that are relevant to the purpose of the site. This is where the community will be built.
- **Artist Submission:** This will be a special “hidden” forum where artists can submit music for consideration. The only people able to view the content of the forum will be the site administrators. From the artist submissions, the site administrators can choose what artists to include in the site.

“About Us” section

Purpose: Give anyone who is interested, some background information about the IntroRadio, and provide a way for the groups visiting the site to contact us. There will also be a section for sponsorship/promotion.

Structure:

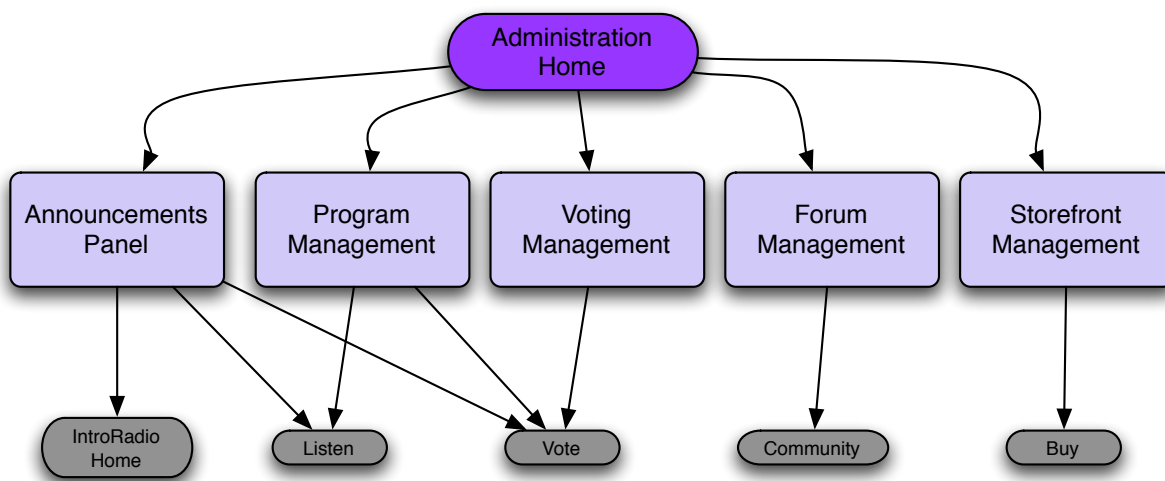


- **About Us Home:** This page will outline the mission of the program and website, and direct users to other areas where they can learn more, or contact the people making the program.
- **Bios:** This section will have bios of the people involved in the program.
 - *Skip Brown:* Skip's Bio
 - *Darryl Hurd:* Darryl's Bio
- **Promotion:** This section will contain information about sponsors of the program, and information about becoming a sponsor. For instance a link to Jennifer Brown Design and Awakened Group could be found here.
- **Contact Us:** Will give information about how to get in touch with us. Will contain snail mail info, phone and Internet information.
 - *Program Feedback:* Will be an area where listeners can provide feedback to Darryl & Skip about the program. Will give snail mail and have an e-mail form people can use.
 - *Technical/Website Feedback:* An area for reporting technical issues with the site, and for contacting Jennifer Brown Design with feedback on the site
 - *Band Submission:* Directs (via links) artists to the band submission forum section. (essentially, this is to ensure that bands who think they will find this information here will be able to submit music)
 - *Syndication Requests:* An area where listeners or radio stations can submit inquiries about obtaining the program.

Administration section

Purpose: The administration area will control all the dynamic content on the site. This will be accomplished through a series of “panels” which the administrators will access to perform functions such as posting programs, monitoring voting, approving new member requests, and forum moderation. Those are just examples.

Structure:



Website: Data Construction/Storage

Because the website requires a large amount of dynamic content, data construction is going to be vital to the success of the site. The databases for the site must be scalable--able to handle the lightweight needs of the current site, but also robust enough to handle a busy community-based site.

Excluded from this section:

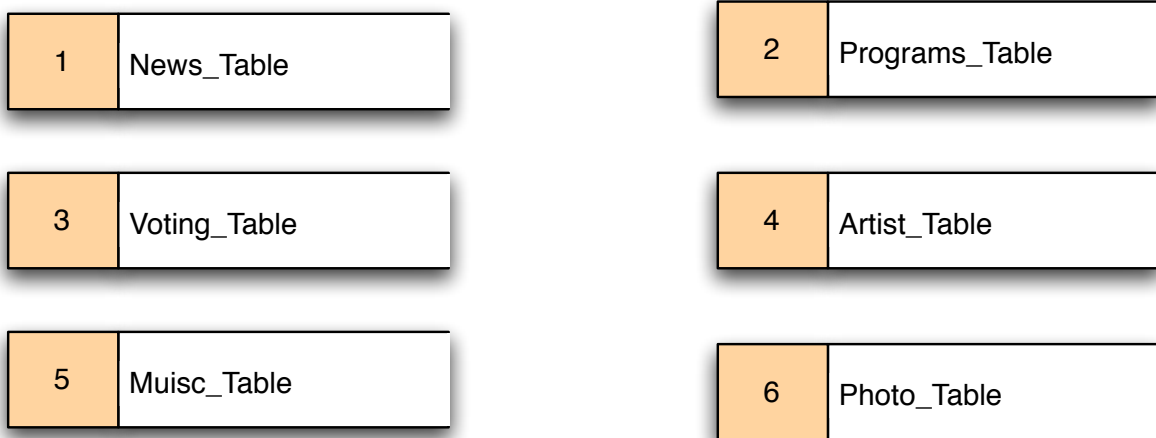
The following database structures are not being listed here because they will be dependent on the software packages used to drive the front-end:

- Storefront/eCommerce (solution TBD)
- Forums (will use phpBB's structure)
- Podcast (will be depending on Podcasting package) Most likely unnecessary for this build.

IntroRadio Database: High Level

The rest of the website will be interconnected with a relational database. Below is a high level picture of the data structure for the site:

IntroRadio Table Structure



Each of these tables will be interrelated. This is a high level view of the table structure and does not represent relationships, and the fields that will make up these tables. In addition, dependent tables may need to be created for data integrity. Please note that due to time restraints, there will only be a minimum of normalization on these tables. This means a high possibility of duplicate information in the tables.

News Table: The news_table will store announcements appearing on the front page and commentary about each program and the results of voting.

Field	Purpose
News_ID	Unique ID
Current	Tracks if entry is the current one to be displayed
program_id	Links news and announcement to the program it belongs with
announcements	data appearing on the front page of the site.

Program Table: This table will store information about the programs to be displayed in the program section

Field	Purpose
Program_ID	Unique ID
Program_No	The program number (i.e. Program #001)
Program Description	Description of the contents of the table (will be displayed on program page)
Program Date	date program is to air
artist_1	link to artist_1 info in the artist database
song_1	link to song_1 in the database
artist_2	link to artist_2 info in the artist database
song_2	link to song_2 in the database
artist_3	link to artist_3 info in the artist database
song_3	link to song_3 in the database
artist_4	link to artist_4 info in the artist database
song_4	link to song_4 in the database
Program_File	will link to the program file's location on the server.

Voting Table: The voting table will contain information about the votes for a particular program. The voting will update live on the site, but will only show percentages. Through the administration control panel the administrators will be able to see the actual number of votes cast per program.

Field	Purpose
Vote_ID	Unique ID
Program_ID	Links to program this vote record is to match to
Slot_1_Vote	actual number of votes for #1
Slot_1 Percent	Percentage of slot 1 to total
Slot_2_Vote	actual number of votes for #2
Slot_2 Percent	Percentage of slot 2 to total
Slot_3_Vote	actual number of votes for #3
Slot_3 Percent	Percentage of slot 3 to total

Field	Purpose
Slot_4_Vote	actual number of votes for #4
Slot_4 Percent	Percentage of slot 4 to total
Total Votes	global total of votes
Winner_ID	band ID of winner

It was requested with the original requirements for the site that demographic information be captured by the voters. Instead of capturing this information via the voting mechanism, it will be captured during the registration for the forums. We think this will more accurately represent the listenership of the program.

Artist Table: This table will store information about the artists.

Field	Purpose
Artist_ID	Unique ID
Artist Name	Act's Name
Location	Act's Location
Mailing Address	Mailing Address
E-Mail	Act's e-mail
Account Name	login account for artist to change page
Account Password	Password for this account
Description	Description of Act
Programs	Programs the act has appeared on
Voteing	Rating of acts in voting
song_id	link to song database
photo id	link to photo database
website	artist's website
forum	link to forum page for the artist

Music Table: A dependent table of the artist table — will contain the music for each artist... will be one of the drivers for the storefront.

Photo Table: will be a dependent table of the artist table directing to related photos of the band.

During the build of the site we will need content for these tables to be provided by the IntroRadio. It would be a good idea now to start soliciting bands that want to participate in testing the site's functionality. Within a few weeks of approval we will need bands who are willing to donate music for storefront testing and willing to test out the ability to create a profile on the site.

We are willing to develop this with our own data, but since there will not be a development environment, it is likely that test information may make it into the final release of the site, which would be detrimental to the project, so it's a better idea to see if we can start getting this information together.