

# UNIX Tutorial Website Design Document

By WebJunkies

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## 1. Goals

*Overall Goal:* Create a UNIX tutorial website to enable students to publish and maintain a website using the UNIX command line.

The overall goal of this website is to create an easy to understand and fun to use UNIX tutorial that people of all computer levels can use.

### *Short Term Goals:*

- 1 Get the UNIX tutorial website up and running with easy to understand tutorials and interactive quizzes.
- 2 Define levels for the UNIX tutorials and quizzes.
- 3 Make learning UNIX fun and easy.
- 4 Help people with little or no knowledge understand UNIX.
- 5 Create a UNIX reference for more advanced users.

The major short-term goal for the UNIX tutorial site is to get it up and running with easy to understand tutorials. Goals after that include creating interactive quiz questions that are completed after each tutorial and interactive questions within the tutorials to keep the reader's attention. Our final short-term goal would be to create a reference guide that has a listing of many of the UNIX commands (some that are not even covered in the tutorials). This would be useful for someone that has a lot of UNIX experience but is rusty on certain commands.

### *Long Term Goals:*

1. Add administrator interface to allow updating of content on site.
2. Occasional site maintenance and upgrades

Some of our long-term goals would be to create an administrator interface where new tutorials could be added and maintained. This admin interface would also allow the updating of quiz questions and the addition of new quizzes. Another long-term goal is to keep the website updated with new technologies and content as needed.

## 2. User Experience

### 2.1 Audience Definition

The main audience of the UNIX tutorial site is broken up into 3 groups of people. These are the people we will focus on to create the UNIX tutorial with their needs and goals in mind.

*Typically aged students in introduction to multimedia class*

1. *Needs* - Website should allow student to find what they need fast. The student also cannot be overwhelmed with text or they probably won't use the site. People of this age tend to like visuals and interactivity.
2. *Goals* - After using the site, they should have a great understanding of the basics of UNIX and be able to publish and update a simple website.

*Adult Student in introduction to multimedia class*

1. *Needs* - Website should allow student to find what they need fast. The tutorials should be very easy to understand and not use a lot of technical jargon, as adult students might be scared by technical terms.
2. *Goals* - After using the site, they should have a great understanding of the basics of UNIX and be able to publish and update a simple website.

*Instructor of introduction to multimedia class*

1. *Needs* - Needs to have an easy way to lookup commands and other details that could be used in lectures. A professor should also have an easy way to access and use quizzes from the site.
2. *Goals* - Using the site will benefit his class by providing students with another way to learn the material. The professor can also use it to have a quick way to lookup commands.

### 2.2 Scenarios

*Name: Carla*

*Age: 30*

*Personality: Part time grad student, and full-time design firm employee: has a good attention span, reads a lot, but is not technologically savvy at all.*

Carla is back in school learning web design, as she intends to apply for a new position available within the firm. She needs to learn UNIX to start making professional pages for a portfolio. She searches for a UNIX reference and subsequently ends up investigating the Web Junkies' site. What drew her to the site specifically was the emphasis and availability on the learning aspect of taking tutorials and quizzes. This would be perfect for someone just getting involved with the world of UNIX. Once she got there, she found that the UNIX tutorials were very thorough, but not filled with technical jargon that she couldn't grasp. In addition, key terms that she was not familiar with were hyperlinked and she could easily switch pages for a quick reference.

Carla found that at the end of the tutorials she did well on the quizzes, but got several questions wrong. She was, however, easily able to go over what she had gotten incorrect by clicking on an icon next to the question. She was also easily able to print out quiz results and tutorials.

Carla was very impressed with what she had learned by the end of the tutorials. She had gone from the very basics of an explanation of exactly what purpose UNIX served, to changing permissions and easy navigation and control of her web directory, and felt she had a good base of knowledge off of which to build a site.

Carla was able to build an in-depth website for her portfolio, and was able to retain the knowledge for future projects. What she didn't remember was easily referenced. She got the job, and has since moved out to California's San Fernando Valley....where she makes an absolutely disgusting amount of money.

*Name: Joe*

*Age: 20*

*Personality: ambitious, aggressive, not into bars or parties like some college kids.*

After taking some general courses at RIT for a quarter, Joe has finally made up his mind to major in Information Technology. Joe is a hard working student who is always thinking ahead, he hopes to start a personal website with some simple coding, nothing flashy but a more professional look, so he could get started applying for an internship this summer. Joe is also very active with the sports; he is an excellent hockey player. Joe spends a lot of time on practice, so he is looking for an easy to understand web tutorial that could best help him to build up his personal website.

Joe was surfing the web and found this amazing site, built by Web Junkies, he tries to take a quiz in the beginner section to see where he stands. He found he made quite a few mistakes so he went through the tutorial that is specific designed for beginners. Web Junkies website provided Joe with a lookup command and also the highlight of the UNIX lesson.

Joe tries to take a quiz again and he found himself doing a wonderful job, so he was anxious to go on the next level. Web junkies website not only provided Joe an easy understand tutorials, also provided Joe a well-explained answer keys helping him to better understand UNIX, Joe was very pleased with Web Junkies website.

*Name: Chad*

*Age: 19*

*Personality: Short attention span, dislikes lots of text, likes interactive things, beginner at UNIX.*

Chad types in the URL to the Web Junkies website to learn about UNIX so that he can upload his website about the Terminator movie for his Intro to Multimedia class. Chad looks over the global navigation bar quickly and easily finds the tutorials section. Since Chad doesn't know anything about UNIX, he finds the beginners tutorial to be very easy to understand and very informative. The small checks throughout the tutorial help him to make sure he truly understands what he is reading, and also gives him a break from reading, keeping his attention.

After reading through each tutorial, Chad takes a quiz to test what he has learned about UNIX. He gets a few of the questions wrong, so he clicks the link next to the question to take him to that part in the tutorial so that he can reread it and understand why he got the question wrong. After Chad has passed every quiz and grasps the concepts taught in the tutorials, he decides to check out what else is on the website by going back up to the global navigation and looking at the drop down menus. He sees a quick reference page of essential UNIX commands that he will need to use in order to get his website up and running, so he clicks on the link and prints out the page.

With the reference sheet as a quick cheat sheet, he telnets into the grace server and begins typing in the commands that will get his website published. After successfully uploading his website and setting permissions for it, he goes back to the Web Junkies website and goes to their about section, where he finds an e-mail link. He writes them a message thanking them for helping him understand UNIX and successfully uploading his Terminator website.

*Name: Amber*

*Age: 20*

*Personality: Discourages easily, feels overwhelmed with too much text, likes visuals to help her understand information more clearly, advanced UNIX user.*

Amber types in the URL for the Web Junkies website to quickly look up a few UNIX commands that she forgot how to use. She goes to the global navigation bar and finds the quick command lookup page. She clicks on that and notices a search bar at the top of the page to search for her command fast. She types in "chmod" in the search field and is brought to a page describing "chmod", how to use it, and even finds a visual example that is very helpful. She then goes back to the search field and types in "pico" and is brought to a page that again describes "pico", how to use it, and a visual example of it being used.

Amber starts thinking about what other commands she has forgot, and wants to refresh her memory to make sure her knowledge of UNIX is up to par. She goes up

to the global navigation bar and clicks on the advanced quiz section of the site. She takes the quiz, and finds out she got a few questions wrong, so she clicks on the link next to the questions that she got wrong to read up on that command to understand why she got the question wrong.

She logs off the website and feels much better about her UNIX knowledge. She was so happy about the website and how easy and useful it was that she opens up telnet and sends her favorite IMM professor an e-mail using the “pine” command to recommend it to her and for her to share it with IMM students.

*Name: Dan*

*Age: 34*

*Personality: A free-form “new-age” professor, Dan likes to gets students involved in their learning. He likes websites that can show him what he wants quickly and pleasantly, but without being too flashy.*

Dan searches the web for a site that he can point students to to learn the basics needed to publish a web page. After checking out the first couple of hits and leaving disappointed, the Web Junkies logo appears in the corner of the next site. Intrigued, he notices that the color scheme fits well, not hurting his eyes or making it difficult to read the screen.

Dan quickly finds the menu and scans it, stopping to check out the tutorials section. He skims them quickly, noting the interactive checkpoints in each as well as the final quizzes for each one. To see how it works, he completes one of the quizzes, purposely entering some wrong information. He is pleased to see the information links next to, not just the wrong answers, but each answer.

Returning to the menu, Dan next notices the reference section. He investigates what kind of information would be available there and is pleased to see a nicely listed set of commands and a search bar. Clicking on a command, he sees the easy-to-read reference guide. “Much nicer than those man pages!” He thinks to himself. Pleased with the site, Dan decides this is the main one he will point his students at in class.



## 2.3 Competitive Analysis Summary

### 2.3.1 Analysis Comparison Points

- Look and Feel
  - Colors
  - Shapes
  - Overall
- Ease of Use
  - Menu Navigation
  - Other Navigation
  - Ease of Locating Information In Content Sections
  - Organization
- Content
  - Appropriate
  - Conforms to Site Claims
  - Ads?
  - Variety of Content
  - Depth of Content
- Technology
  - Javascript
  - Flash

Each of these items has a rating associated with it, on a scale of 1 to 10, where 1 is horrible and 10 is excellent. Each item also has some simple comments about it. The exception is Ads and the Technology section, which do not have ratings, only comments.

For each website analyzed, there will be a screenshot, the above items in a table format, and a short analysis summary. At the end will be an overall summary of what was learned from the analysis.

## 2.3.2 Individual Website Comparisons

### 1) *Little UNIX Programmer's Group (LUPG)*

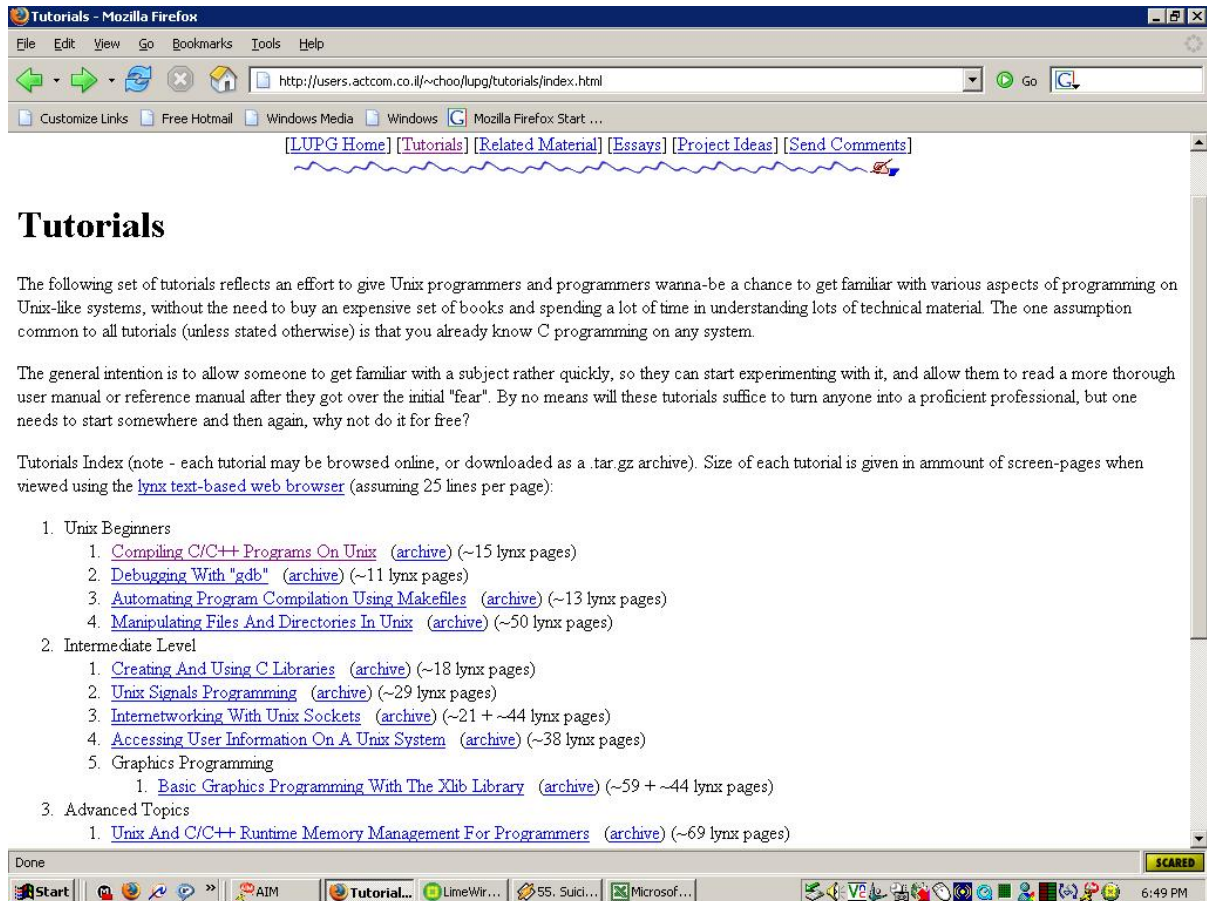


Figure 1: LUPG UNIX Tutorial Site

Competitive Analysis		
<a href="http://users.actcom.co.il/~choo/lupg/tutorials/index.html">http://users.actcom.co.il/~choo/lupg/tutorials/index.html</a>		
Item	Rating	Comments
<i>Look and Feel</i>		
Colors	1	The color scheme is standard. Black text, white background, blue hyperlinks
Shapes	1	There are no shapes, but indentation on the lessons.
Overall	1	There is no consideration given to the design of the page, it is very unappealing.
<i>Ease of Use</i>		
Menu Navigation	6	There are a few links, and they are fairly easy to follow. Although there is an obscure banner at the top.
Other Navigation	1	Besides the links at the top and bottom, there is not much else as far as navigation
Ease of Locating		
Information In Content	7	Each heading is very concise, and you can get to what you need to quickly.
Sections		
Organization	7	information on the front page, as well as sub pages is well organized.
<i>Content</i>		
Appropriate	10	All the content on the site is related to unix in one form or another
Conforms to Site Claims	8	The site claims to give you a good basework for unix, and it does do that.
Ads?	N/A	None
Variety of Content	9	This site covers a variety of topics concerning unix that I was not particularly aware of, like compiling in C.
Depth of Content	8	Each section outlined on the first page has subsections, and a lot of information.
<i>Technology</i>		
Javascript	N/A	No.
Flash	N/A	No.
<i>Overall Rating</i>		
Overall Rating	5	A really ugly site, but very utilitarian. The depth and variety of information found was quite good.

**Table 1: Competitive Analysis for LUPG UNIX Tutorial Website**

### ***Summary:***

Overall this site is pretty boring to look at but the information is organized pretty well. Even though this tutorial covers a different area of UNIX than our tutorial covers this site is a good example on how to write easy to understand tutorials. Their site is simply not a listing of man pages, there was actually effort put into the site. The only thing the site is lacking is looks, but if the content is good the site can do well. With websites, content is king and looks can easily be changed compared to content.

## 2) Surrey

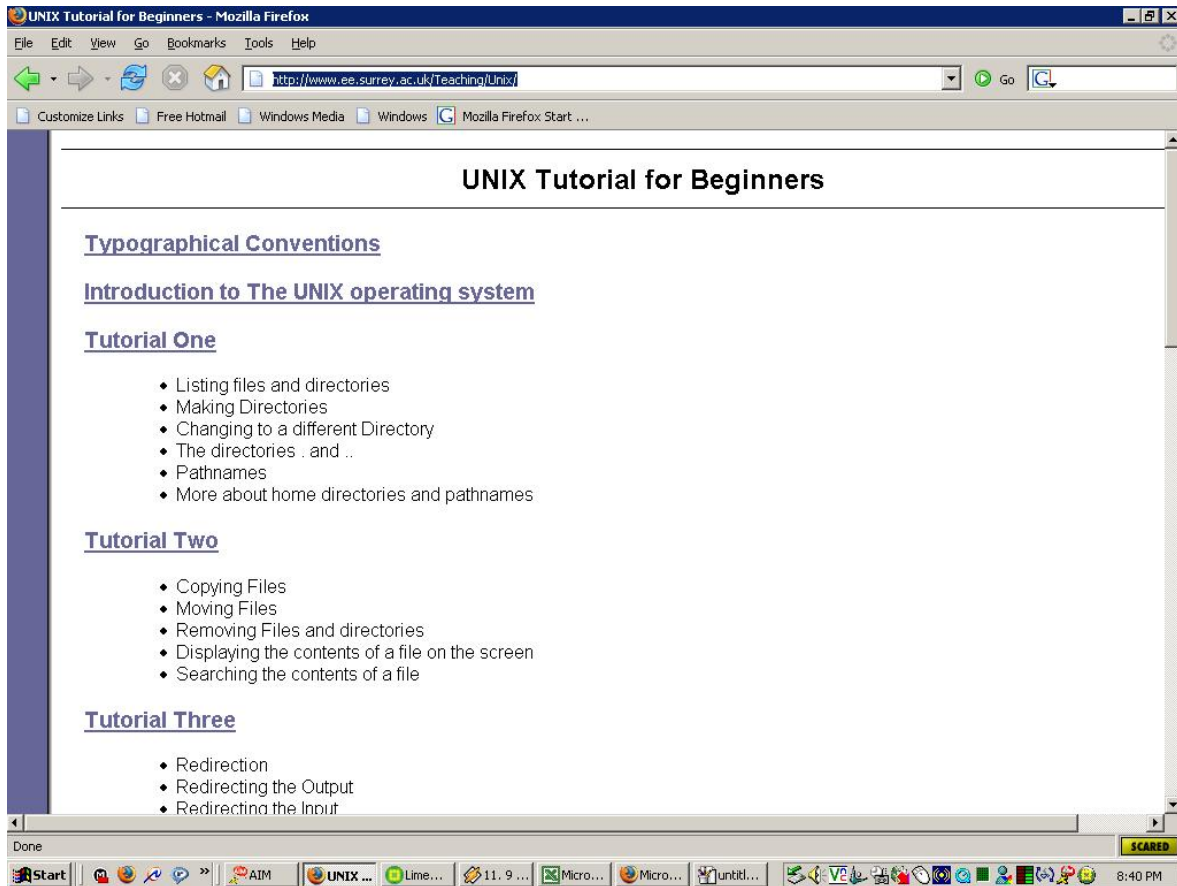


Figure 2: Surrey UNIX Tutorial Website

Competitive Analysis		
<a href="http://www.ee.surrey.ac.uk/Teaching/Unix/">http://www.ee.surrey.ac.uk/Teaching/Unix/</a>		
Item	Rating	Comments
<i>Look and Feel</i>		
Colors	4	Nothing flashy, color scheme is fairly generic.
Shapes	2	Once again, nothing flashy. There is a blue bar running down the left side.
Overall	3	The site is not very visually stimulating, however what there is simple and well executed.
<i>Ease of Use</i>		
Menu Navigation	NA	There is a main page, but no menu to speak of.
Other Navigation	6	There is an easy way to navigate between the different pages and tutorials
Ease of Locating Information In Content	8	Each tutorial has its contents clearly outlined underneath each section
organization	8	generally very well organized, and clearly understandable.
<i>Content</i>		
Appropriate	10	Everything and anything that is on the site has to do with unix. There is even a section on the history.
Conforms to site claims	10	Yes, the site gives a very good groundwork for someone learning unix.
Ads?	N/A	There is one logo visible for creative commons
Variety of Content	8	The subject of UNIX content is covered quite well. There are about 8 tutorials and history and links.
Depth of Content	8	The subject matter within the subsections of the tutorials is discussed extensively.
<i>Technology</i>		
Javascript	N/A	No.
Flash	N/A	Yes.
<i>Overall Rating</i>		
Overall Rating	7	Not much as far as visual is concerned, but the site is clean and concise. The subject matter is covered well and is clearly outlined.

**Table 2: Competitive Analysis for Surrey UNIX Tutorial Website**

### **Summary:**

This site is very relevant to our UNIX tutorial site and has great content. The one thing it is lacking though is navigation. Once you are into a tutorial there is no global navigation and the only way to get back to the tutorial listings is via the back button at the bottom of the page or the browser's back button. This is a major flaw of the web site. Also the naming of the tutorials is just 1, 2, 3, 4, 5, and 6. This naming convention might be ok for a beginner, but an advanced user would have to read the content first before figuring out what tutorial to start on. (The content summary listing under each tutorial is pretty brief so the naming convention works ok.)

### 3) Washington University

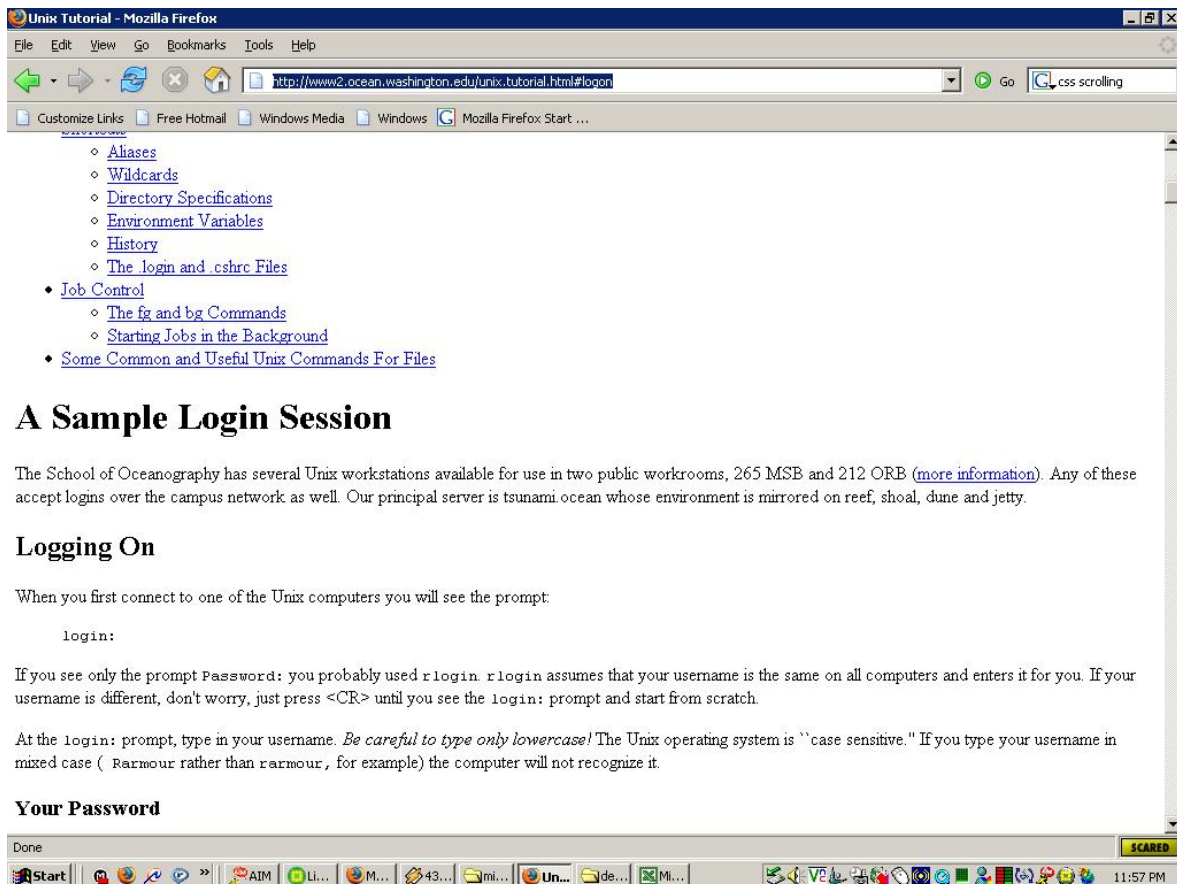


Figure 3: Washington University UNIX Tutorial Website

Competitive Analysis		
<a href="http://www2.ocean.washington.edu/unix.tutorial.html">http://www2.ocean.washington.edu/unix.tutorial.html</a>		
Item	Rating	Comments
<i>Look and Feel</i>		
Colors	1	The color scheme is default. White background, black text, blue links
Shapes	1	There are no shapes to speak of.
Overall	1	No thought has been given to the design
<i>Ease of Use</i>		
Menu Navigation	4	There is not much of a menu, more of an outline.
Other Navigation	N/A	There is no other navigation to speak of. You have to hit the back button to navigate.
Ease of Locating Information In Content Sections	5	Each section has a fairly clear heading, it gets difficult wading through that information once there.
Organization	5	Ther organization is very clean cut, the outline at the top gets you to where you go.
<i>Content</i>		
Appropriate	8	There is nothing else on the site but this unix tutorial
Conforms to Site Claims	9	Yes, because that's all there is.
Ads?	N/A	None.
Variety of Content	9	This tutorial covers a lot of information
Depth of Content	8	Each section it covers is very verbose.
<i>Technology</i>		
Javascript	N/A	No.
Flash	N/A	No.
CSS	N/A	It doesn't do anything fancy. I'm surprised HTML is in it.
<i>Overall Rating</i>		
Overall Rating	4	This is a very ugly site, and is very very very long winded in all that it does cover.

Table 3: Competitive Analysis for Washington Universtiy UNIX Tutorial Website

### Summary:

This site overall is very boring to look at. All the content is on one page and there are links at the top that just link to other parts on the page. The tutorials explain the bare minimum and do it pretty well, but the site is just plain boring to look at. One thing we can take from the site is the use of examples. We can take that idea and instead of just showing an example, we can have a user interact with the page to create an example. This could make the information stick very well for the user.

#### 4) Webmonkey



Figure 4: Webmonkey UNIX Tutorial Website



Competitive Analysis		
<a href="http://webmonkey.wired.com/webmonkey/reference/unix_guide/">http://webmonkey.wired.com/webmonkey/reference/unix_guide/</a>		
Item	Rating	Comments
<i>Look and Feel</i>		
Colors	7	The color scheme is well laid out, many complementary colors, making it appealing to look at.
Shapes	7	The site is buffered on all sides with one form or another, so the main content feels nested.
Overall	7	The webmonkey site is large and powerful. Considerable time and effort has been put into the design.
<i>Ease of Use</i>		
Menu Navigation	8	There are general menus at the top, as well as sub menus along the side, all within easy reach.
Other Navigation	6	There is a lycos search bar and a general search bar located at the top, as well as breadcrumbs.
Ease of Locating Information In Content Sections	7	All the information they have for UNIX is located in plain sight.
Organization	8	The site is very well laid out, and everything is neat and easy to access
<i>Content</i>		
Appropriate	5	The UNIX reference is there, plus a bunch of other bells and whistles alongside that.
Conforms to Site Claims	6	Yes, webmonkey fulfills most of its claims....some more than others.
Ads?	N/A	There are numerous ads.
Variety of Content	4	This reference really JUST covers the basics. There are some commands and their descriptions
Depth of Content	6	What there is, each command has a separate page with a fairly in depth description.
<i>Technology</i>		
Javascript	N/A	It is used, I can't identify where, though.
Flash	N/A	No.
CSS	6	CSS was used extensively to make the layout.
<i>Overall Rating</i>		
Overall Rating	7	The webmonkey site is quite concise. Although it lacks in content, it is easy to follow and easy on the eye.

**Table 4: Competitive Analysis for Webmonkey UNIX Tutorial Website**

### **Summary:**

The webmonkey site is pretty nice to look at. The one thing we do not like about it are the popup ads, this often distracts the user from the web page. Basically this section of their site was a command listings page. The page did not have much depth, but it did explain the commands it contained very well. They also used examples to explain some of the commands. Overall webmonkey does a great job of making information easy to understand, concise, and easy to look at. Those are the things we can take from webmonkey.

### **2.3.3 Competitive Analysis Summary**

Many of the sites analyzed had one major flaw; a very bland and boring website design. Even though they all had pretty good content, all of them except web monkey were pretty boring to look at. Some of them did not even have global navigation. Now we realize that UNIX is non graphical and sometimes boring, but that does not mean the web site teaching UNIX has to be boring. Based our analysis, we believe our website will have great content and by easy to navigate, fun to be at, and a pleasure to look at.

### **3. Site Content**

Our site is designed to teach a student UNIX so they can create and maintain a website. They will learn how to move around a UNIX directory using `cd` and list files using `ls`. Students will learn `chmod` for changing permissions of files. They will also learn to edit files on a UNIX system using popular editors such as `vi` and `pico`. By the end of the tutorial they will be very competent in using the basics of UNIX. Quizzes at the end of each tutorial and interactive questions during them will check to see if the student is grasping the concepts being taught. Users will also have access to a command lookup page to find commands fast and easily.

#### **3.1 Content Grouping and Labeling**

- *Home* - Introduce site by telling user the purpose of the site
- *Tutorials* - Contains UNIX tutorials that the user can read though. The tutorials are split up based on user's knowledge of UNIX. Each tutorial has interactive questions while reading the content and also a quiz at the end to check for understanding.
- *Quizzes* - Quizzes will be given at the end of each tutorial but can also be accessed at any time (for more advanced users). They will tell the user the questions they got wrong and give them links to go back to the tutorial to find out why they missed the question. There will be multiple choice and practical type questions.
- *Command Lookup* - A way for a user to quickly lookup UNIX commands.
- *About Us* - A page about our team with our pictures, background information, and roles in making the site.
- *Contact Us* - A page where a user can contact us asking a questions or send a comment about the site.
- *Site Map* - This will be a page that will show the structure of our site in an easy to understand manner.

#### **3.2 Functional Elements**

- Tutorial quizzes (10-20 questions after each tutorial).
- Interactive questions in the middle of tutorials (while user reads tutorials).
- Contact form where user of web site can contact us to ask questions, provide feedback...excreta.
- Dynamically generated site map (based on directory structure of website).

#### **3.3 Functional Requirements**

- User must have a JavaScript enabled browser.
- User must have an Internet connection.

## **4. Site Structure**

The site structure is relatively simple. The two main sections of large content include the Tutorials and the Quizzes. The tutorials are broken down into 4 separate lessons that will teach the user how to use UNIX. The last tutorial ties everything together and will help the user meet their goals of publishing their website to a web server.

The Quizzes section corresponds to the UNIX tutorials. Each tutorial has one quiz associated with it, but the quizzes can be taken before or after reading the tutorials (or even without reading the tutorials). The quizzes are structured this way for experienced users who just want to see if they understand everything in the tutorial without actually reading it. The quizzes will be linked from the end of the tutorials, as well as from the main menu.

The command lookup section is its own separate page that will provide an alphabetical listing of various UNIX commands that are covered in the tutorial and some that are not. This will be useful for users that want to lookup commands quickly. It will mostly consist of man pages or quick descriptions of the functions.

The About Us page and Contact Us page are simple to understand and will be small pages that will build a sense of trust for our site and allow users to provide feedback.

## 4.1 Site Structure Listing

- Home
- Tutorials
  - Getting Started With Unix
    - What is Unix?
    - Opening The Terminal
    - Basic Commands
    - Absolute vs. Relative Paths
  - Permissions and More
    - What are permissions?
    - Using chmod
    - Creating files with touch
    - Changing password with passwd
  - Editing Files using pico and vi
    - Using Pico
      - Opening pico
      - Using the editor
      - Saving files
    - Using VI
      - Opening VI
      - Using the editor
      - Saving files
  - Publish your website!
    - Upload files using command line FTP
    - Upload files using FTP/SCP application
    - Connecting to server using ssh or telnet
    - Differences between ssh and telnet
    - Permissions and the web server
- Quizzes
  - Quiz on Getting Started With Unix
  - Quiz on Permissions and More
  - Quiz on Editing files using pico or vi
  - Quiz on publishing your website
- Command Lookup
  - Command lookup page with various unix commands covered in tutorial and others that are not
- About Us
  - Page with our group information on it and information about the site
- Contact Us
  - Page where user can contact us for whatever reason
- Site Map
  - Listing of all the pages on the site (Dynamically created)

## 4.2 Architectural Blueprints

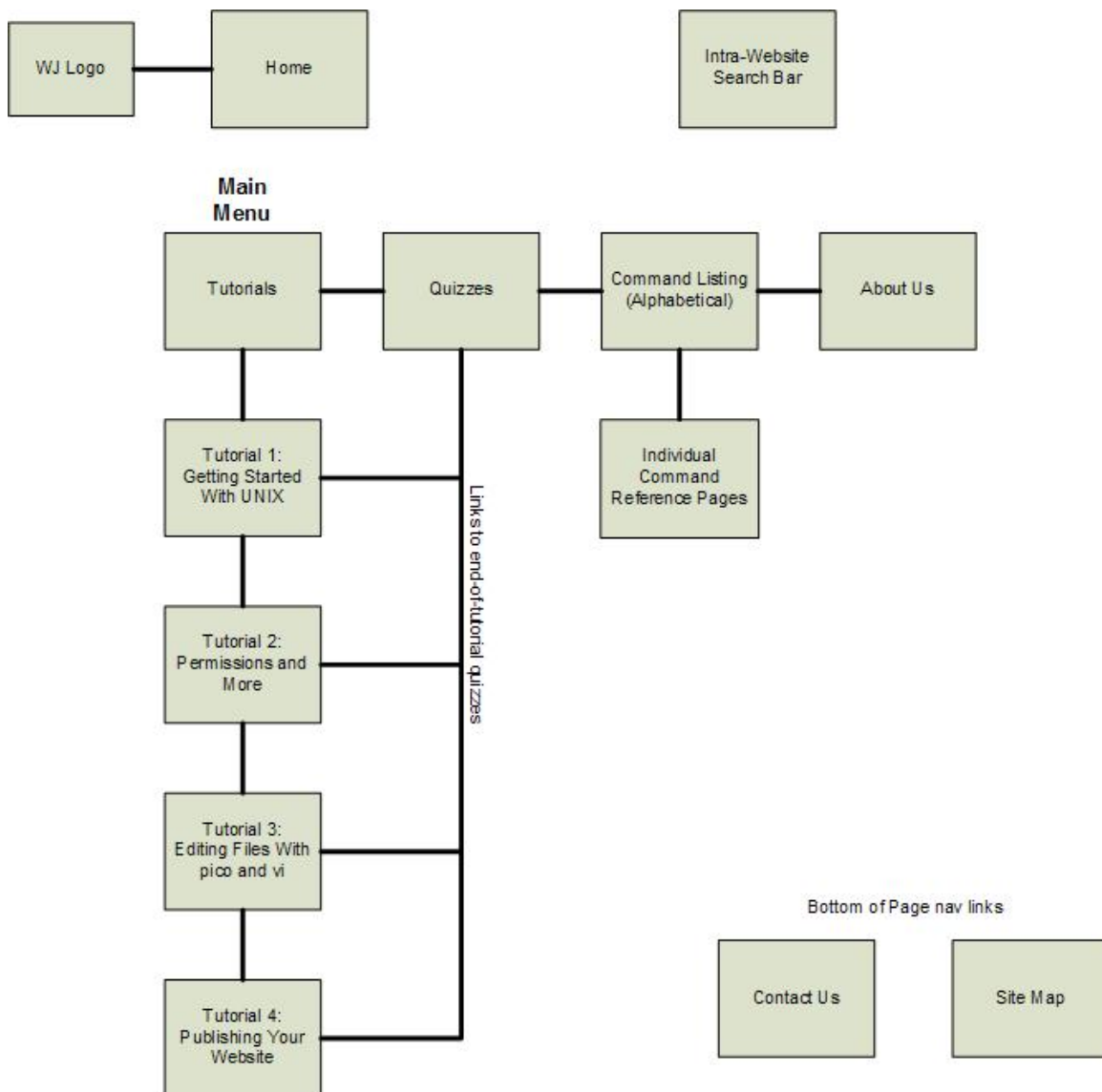


Figure 5: Navigation Block Diagram

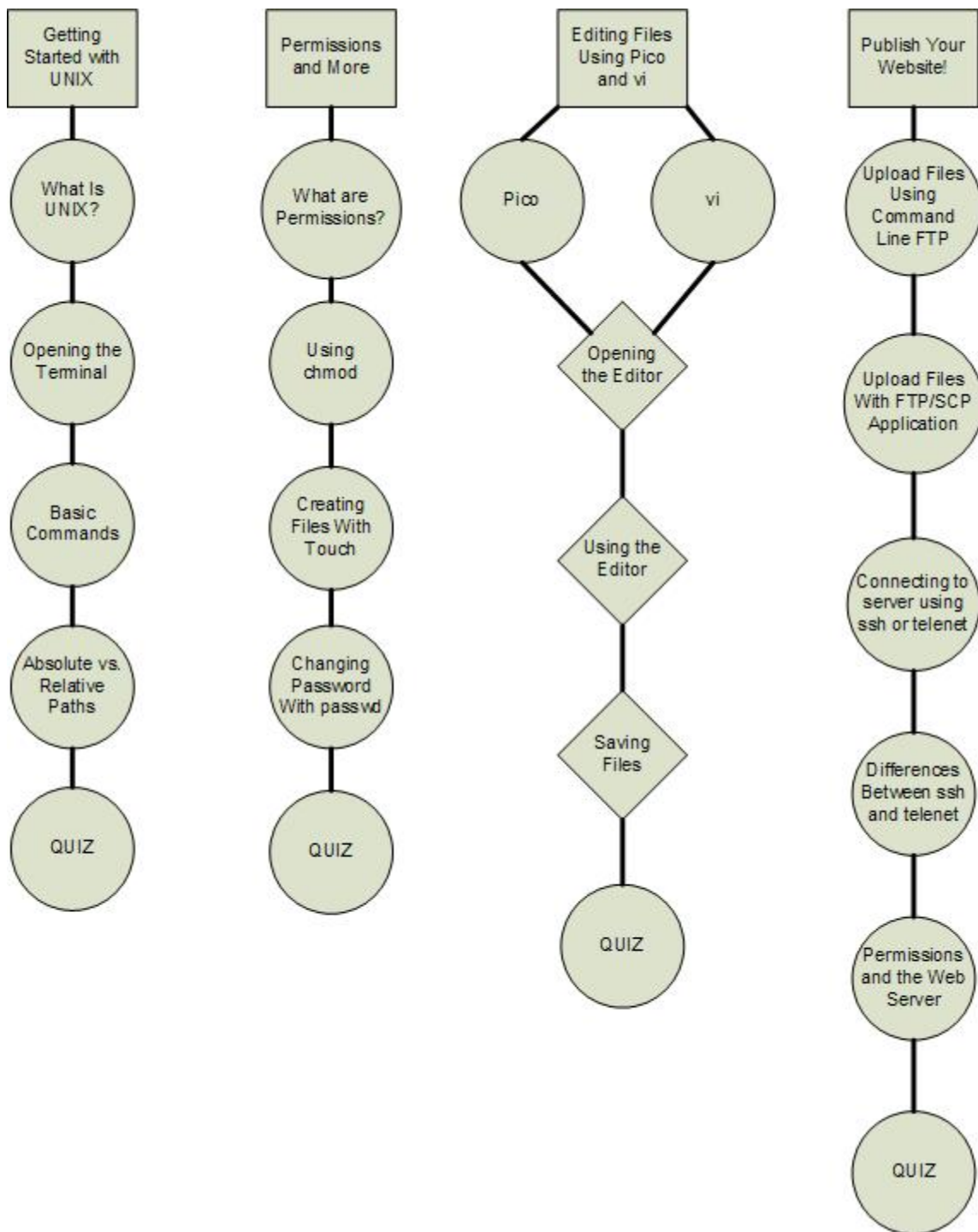


Figure 6: Tutorial Content Tree

## 4.3 Global and Local Navigation Systems

### Global Navigation

- Home - Link to our home page describing our mission of the site
- Tutorials - Menu of links to our various tutorials offered on UNIX
- Quizzes -Menu of links to our quizzes offered on each tutorial
- Command Lookup - Link to our UNIX command page
- About Us - Link to a page about our team
- Contact Us - Link to a form where a user can leave feedback/comments

### Local Navigation

- Tutorials
  - Getting Started With Unix - Link to our first tutorial
  - Permissions and More - Link to our section tutorial
  - Editing Files using Pico or VI - Link to our third tutorial
  - Publishing your website - Link to our final tutorial

Tutorials will have multiple pages to navigate between using next page and previous page (or clicking page numbers), as well as a link to the quiz for that tutorial. This is a local navigation scheme for each tutorial.

- Quizzes
  - Quiz 1
  - Quiz 2
  - Quiz 3
  - Quiz 4



## 5. Visual Design

### 5.1 Layout Grids

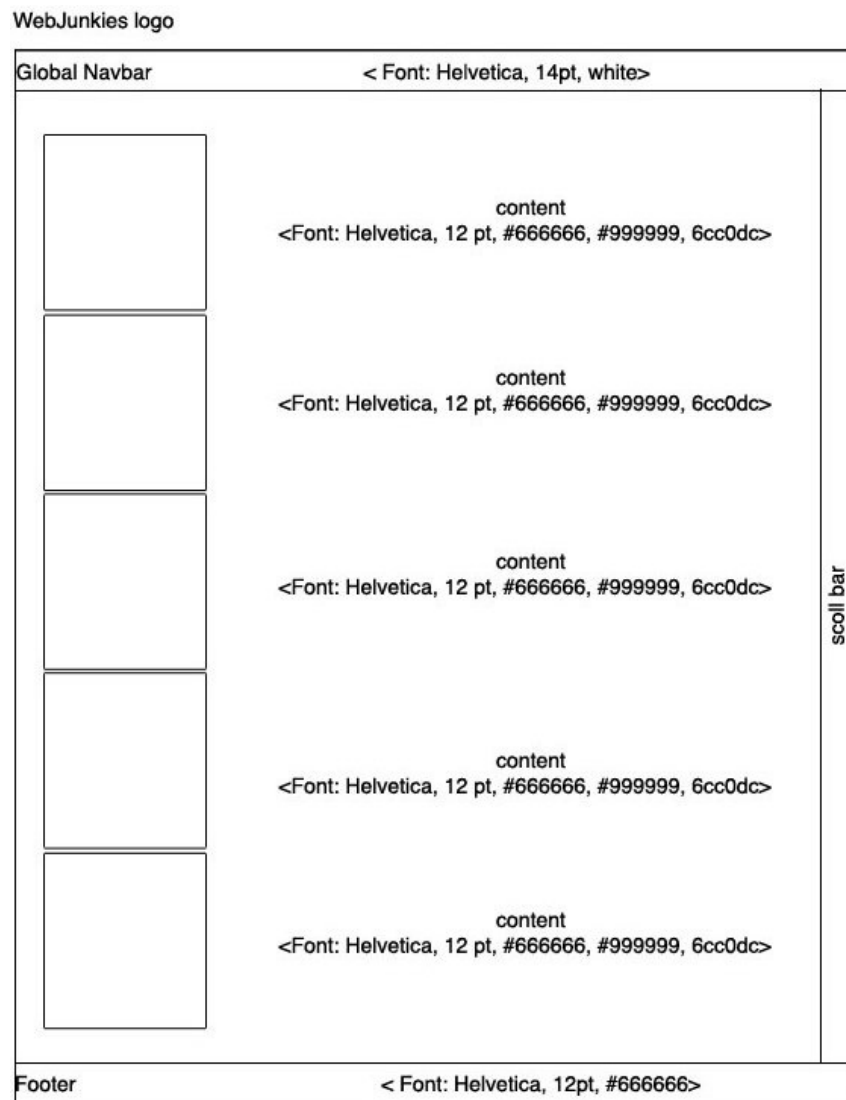


Figure 7: About Us Page Option 1

WebJunkies logo

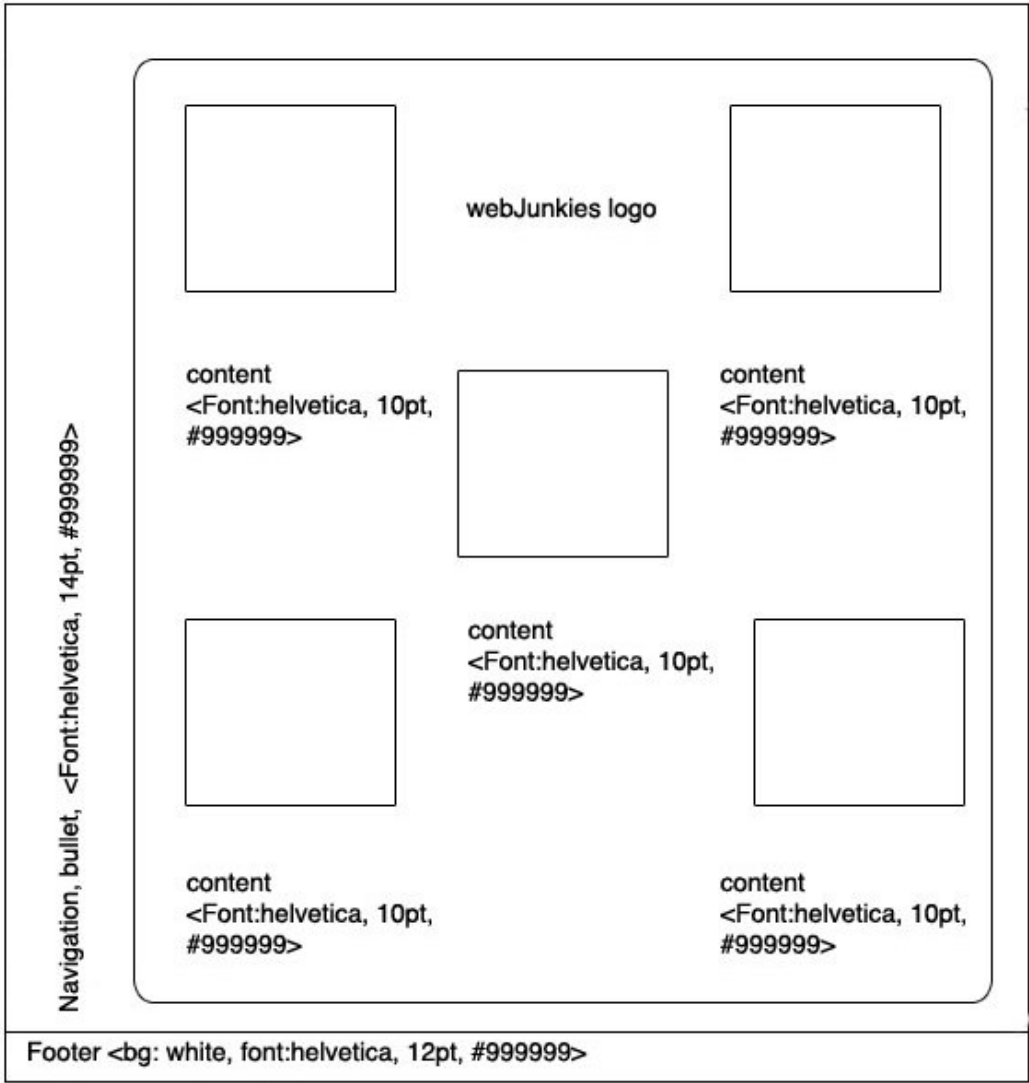


Figure 8: About Us Page Option 2

WebJunkies logo

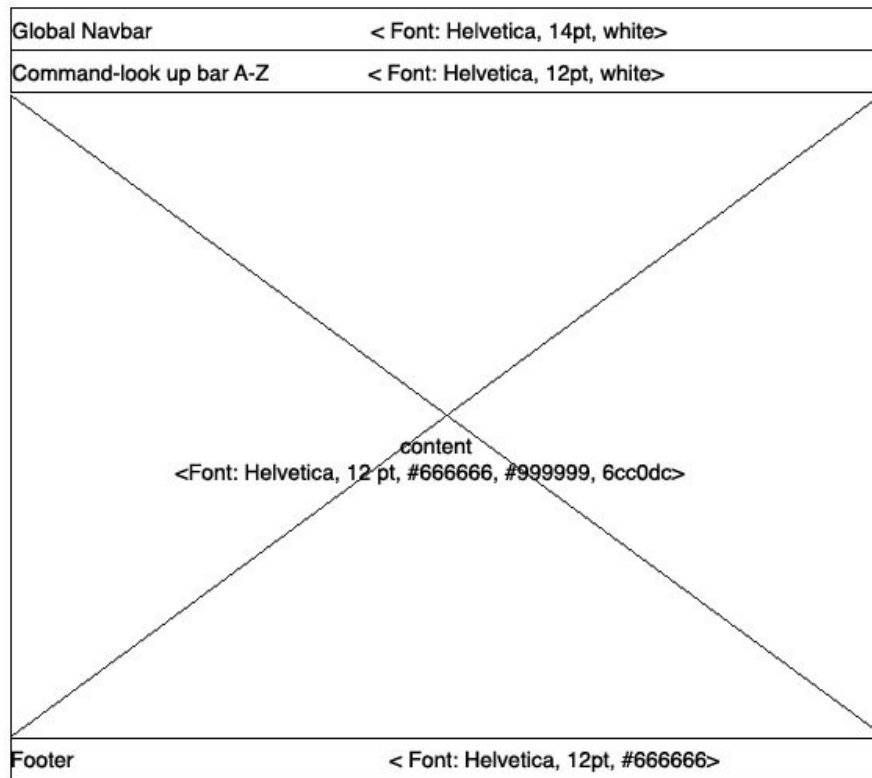


Figure 9: Command Reference Page Option 1

WebJunkies logo

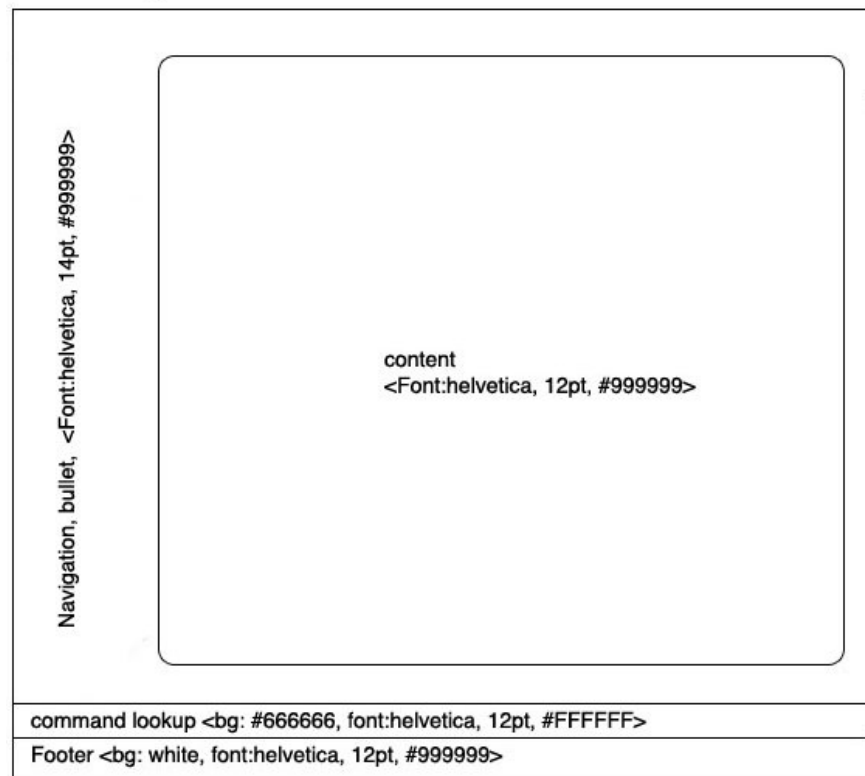


Figure 10: Command Reference Page Option 2

WebJunkies logo

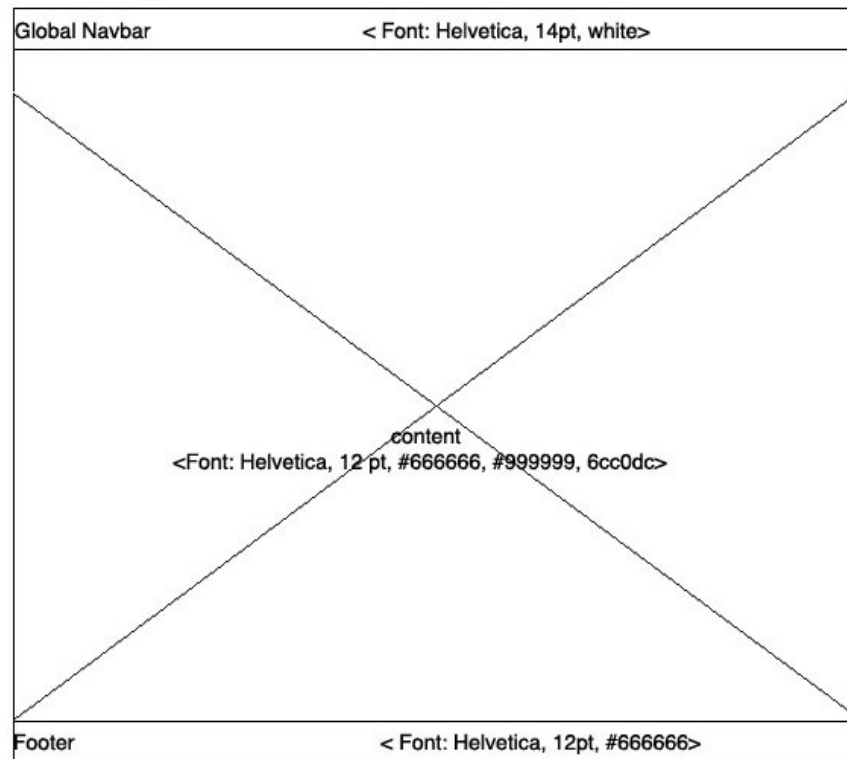


Figure 11: Home Page Option 1

WebJunkies logo

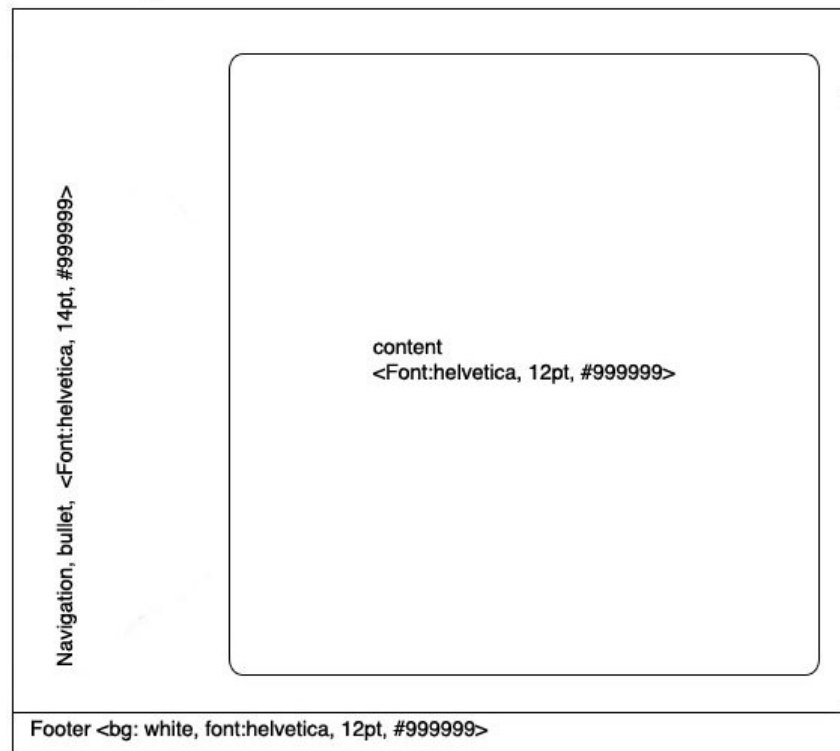


Figure 12: Home Page Option 2

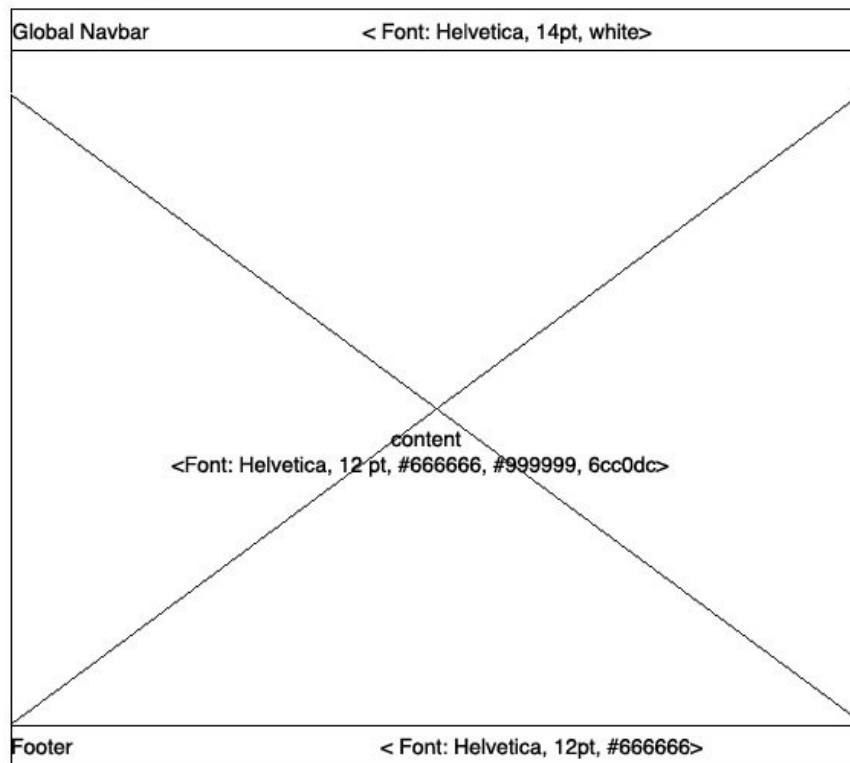


Figure 13: Quiz Page Option 1

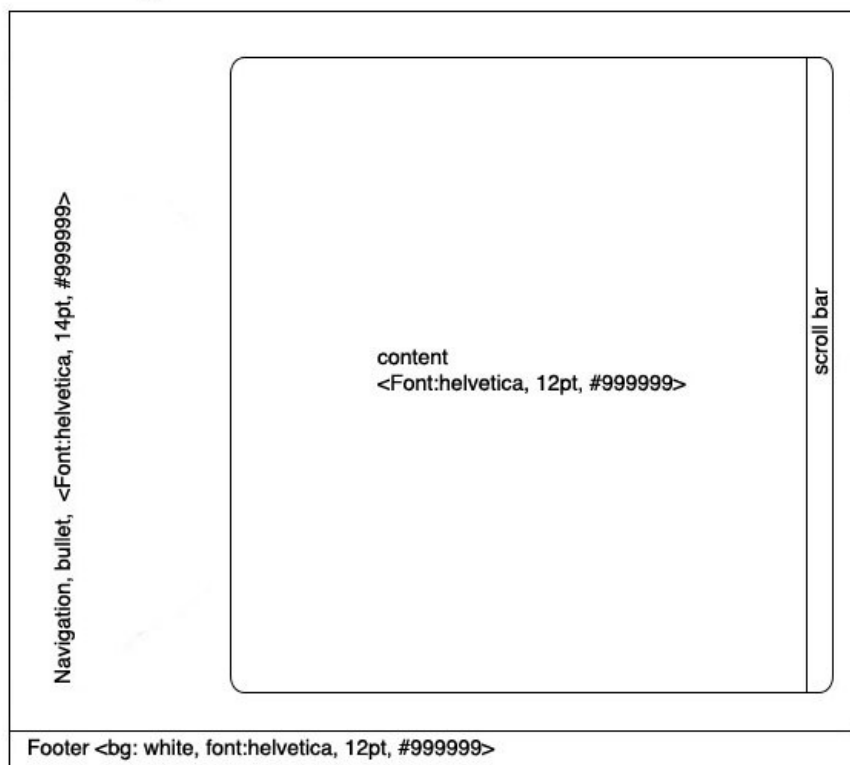


Figure 14: Quiz Page Option 2

WebJunkies logo

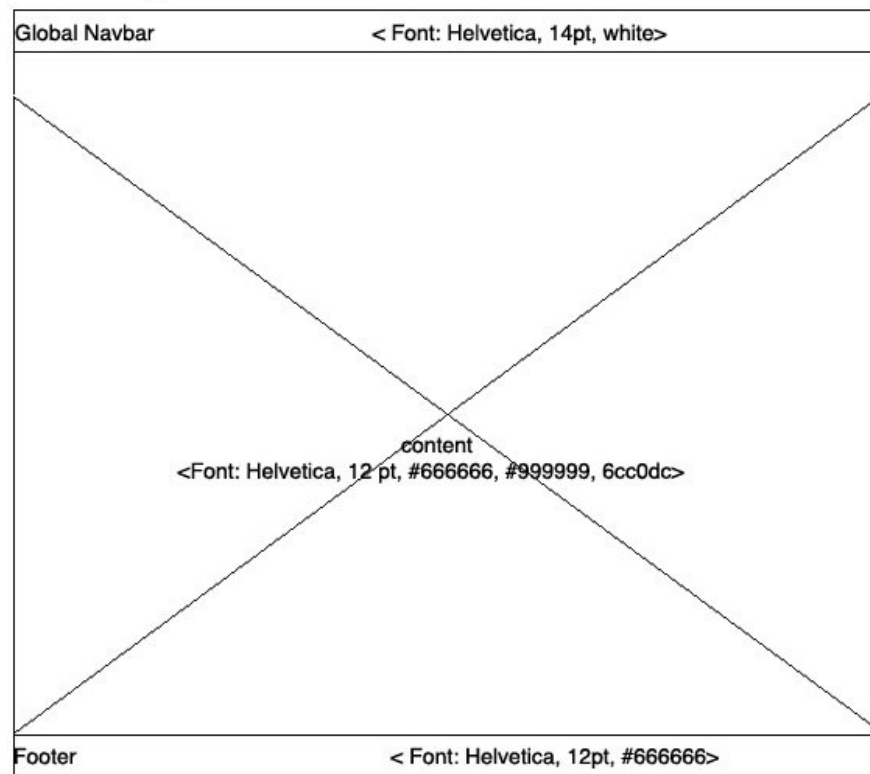


Figure 15: Tutorial Page Option 1

WebJunkies logo

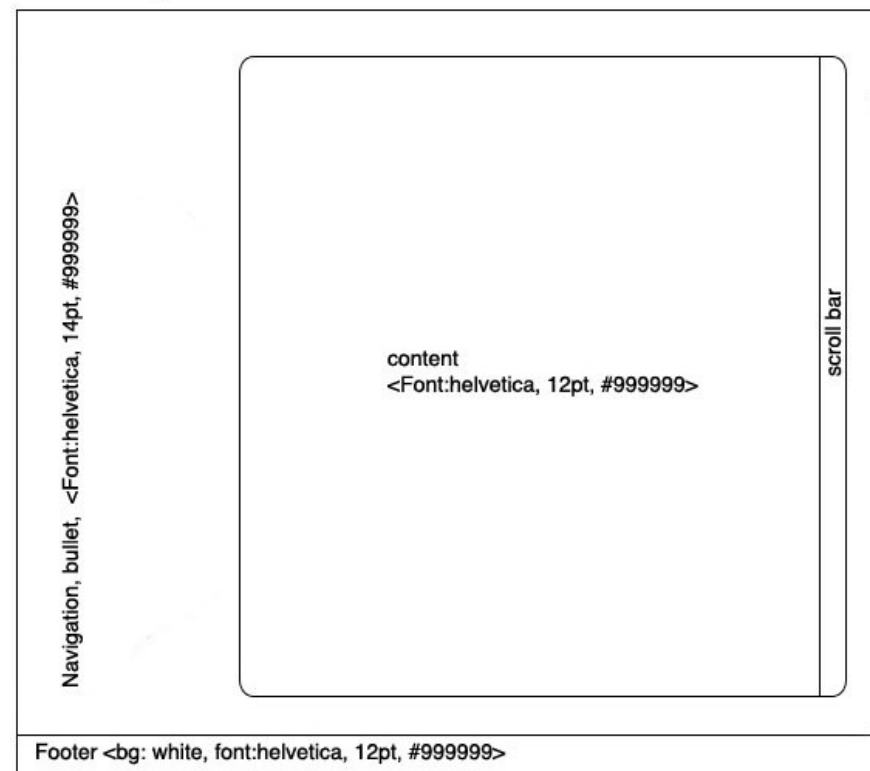


Figure 16: Tutorial Page Option 2

## 5.2 Design Sketches

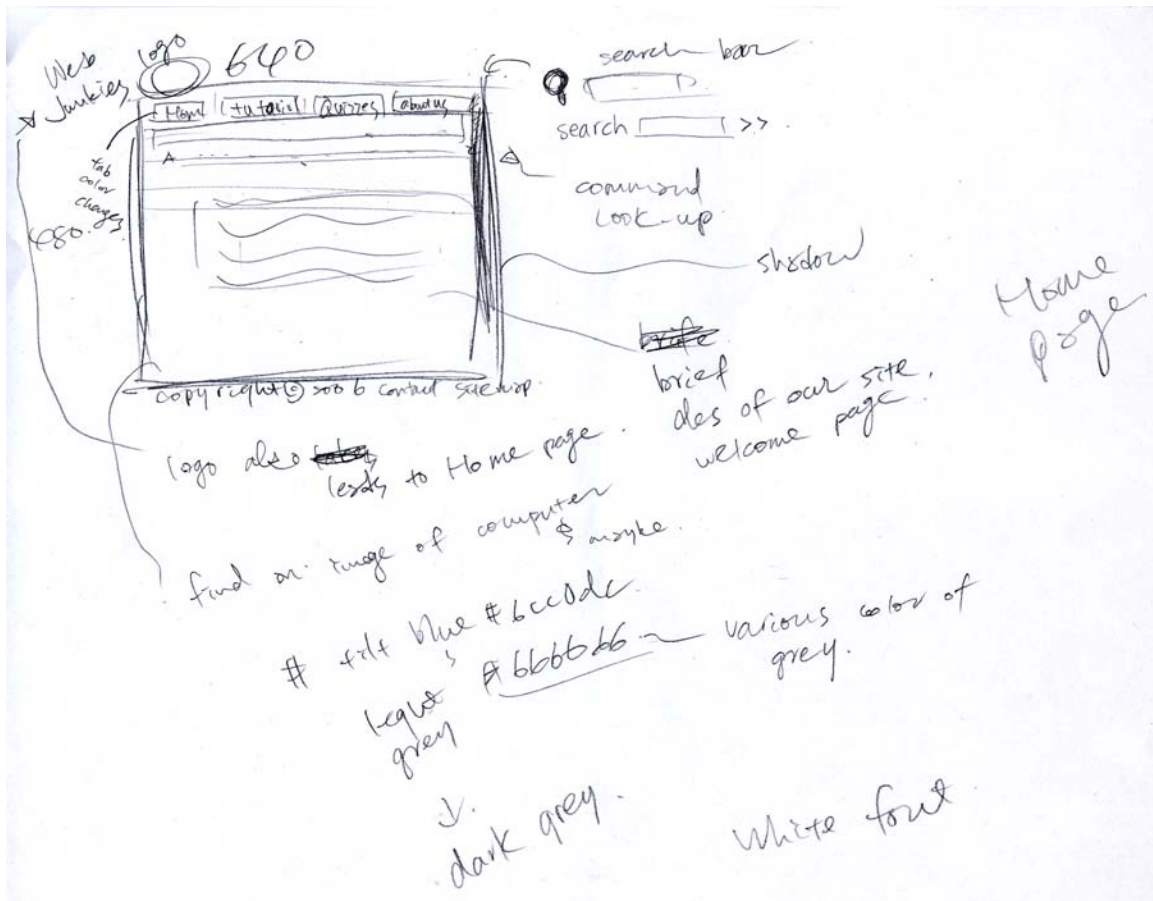


Figure 17: Home Page Sketch for Option 1

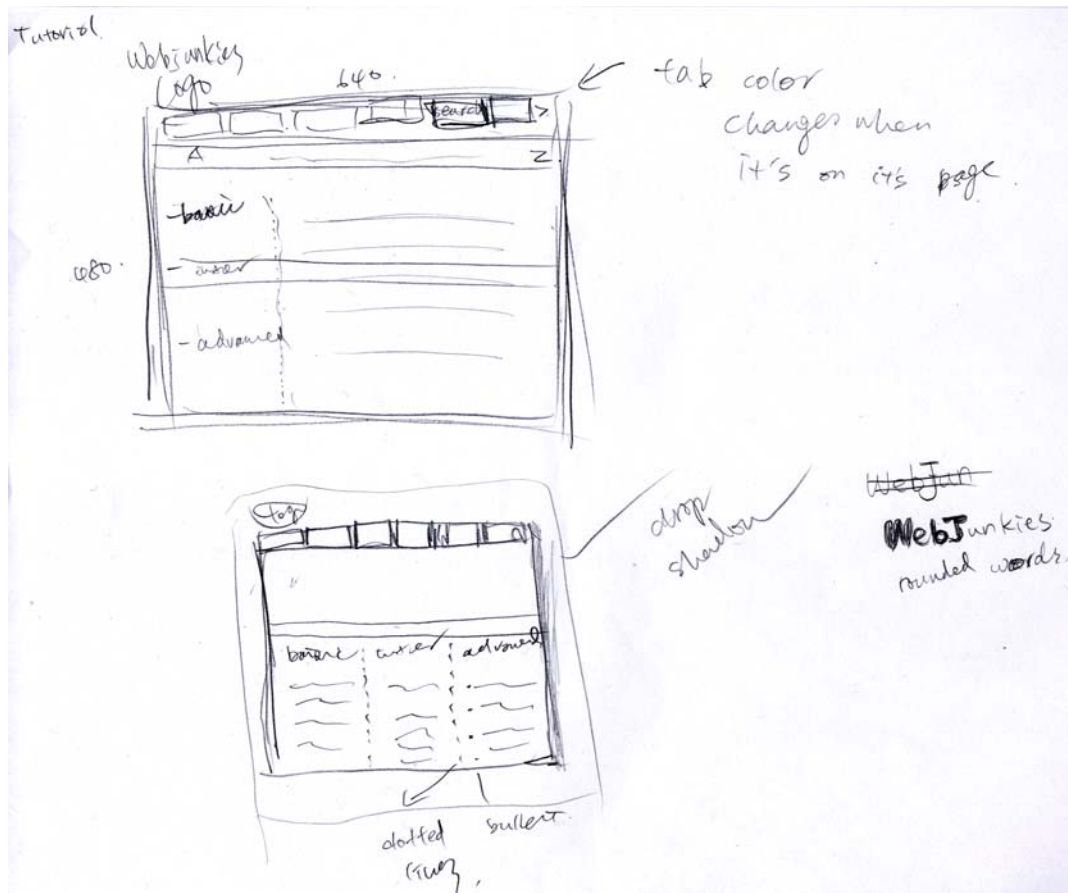


Figure 18: Tutorial and Command Reference Pages Sketch for Option 1

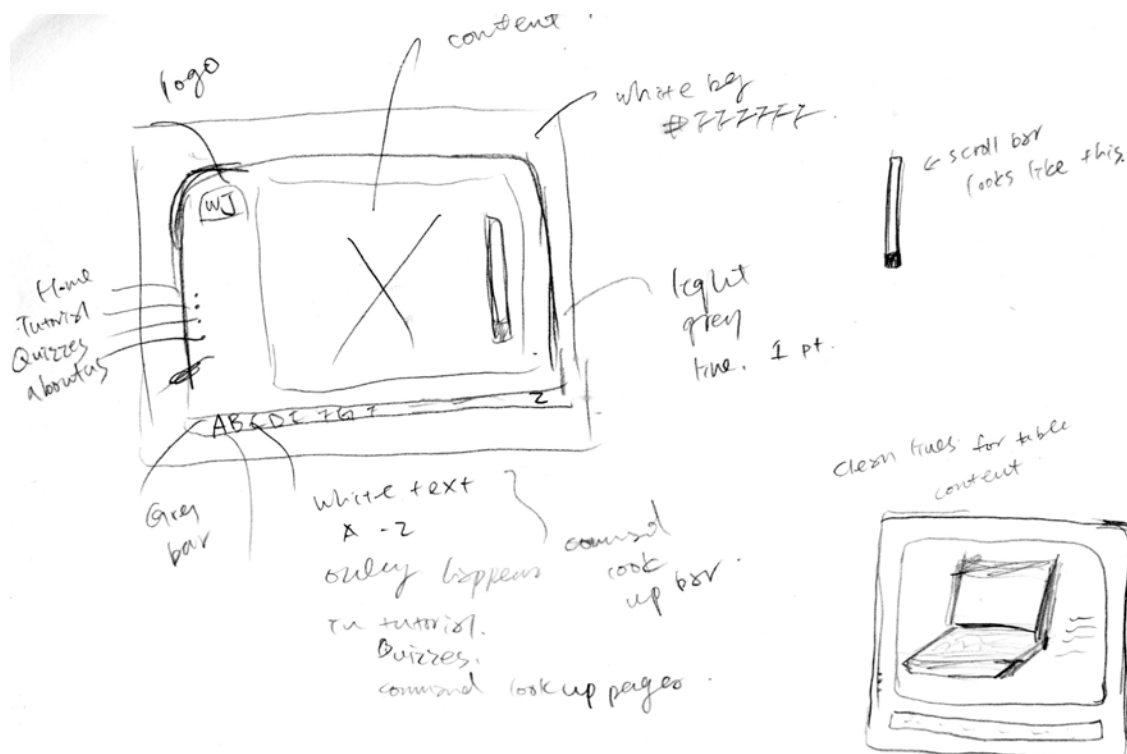


Figure 19: Option 2 General Form Sketch



## 5.3 Page Mock-ups

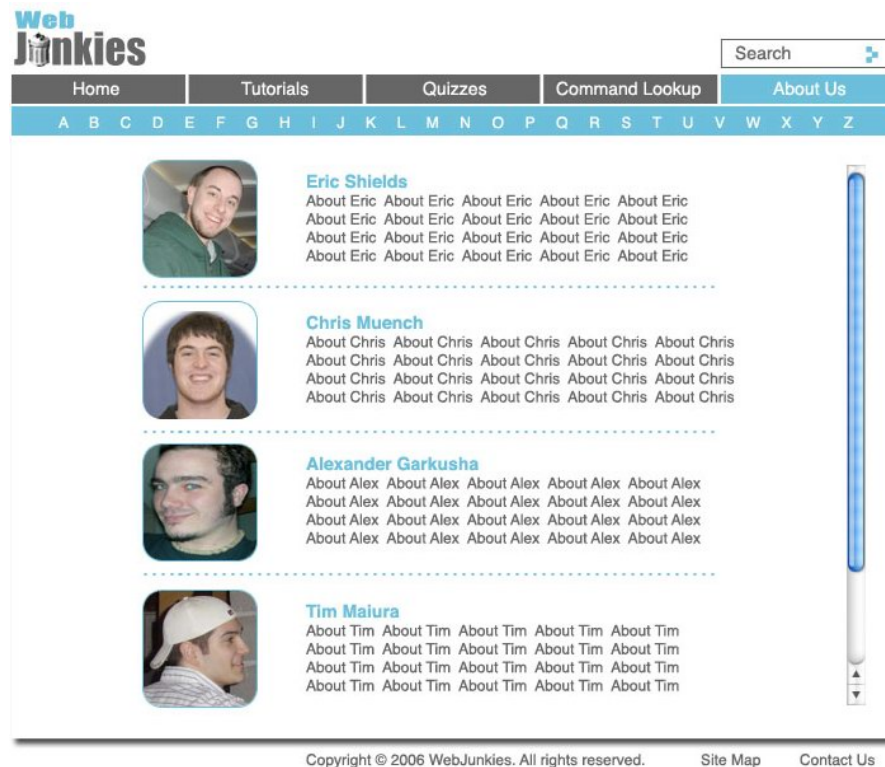


Figure 20: About Us Page Mock-Up

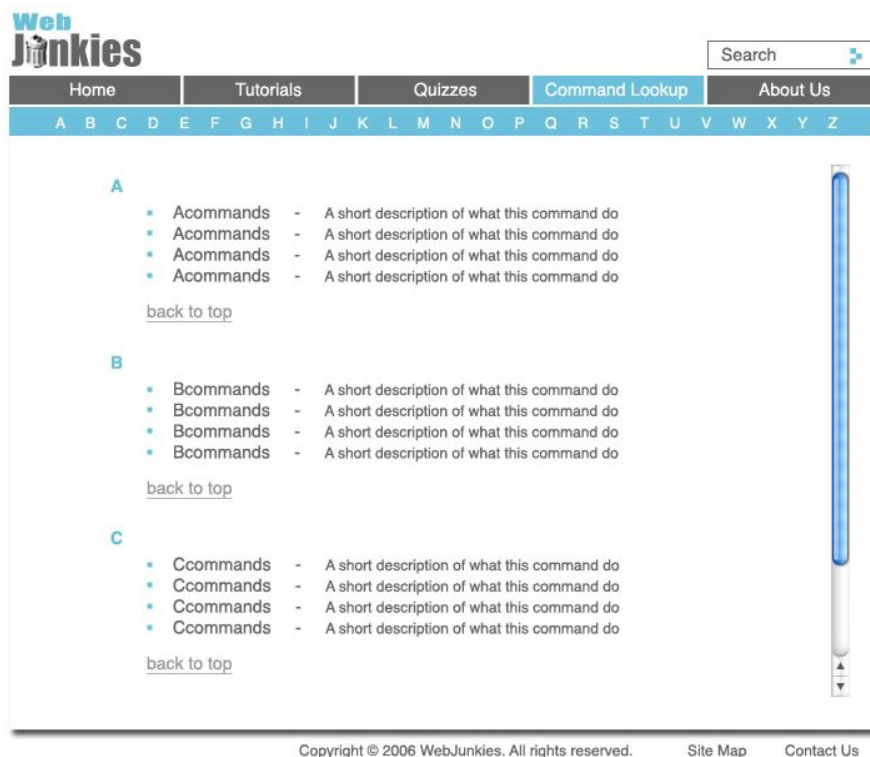


Figure 21: Command Reference Page Mock-Up

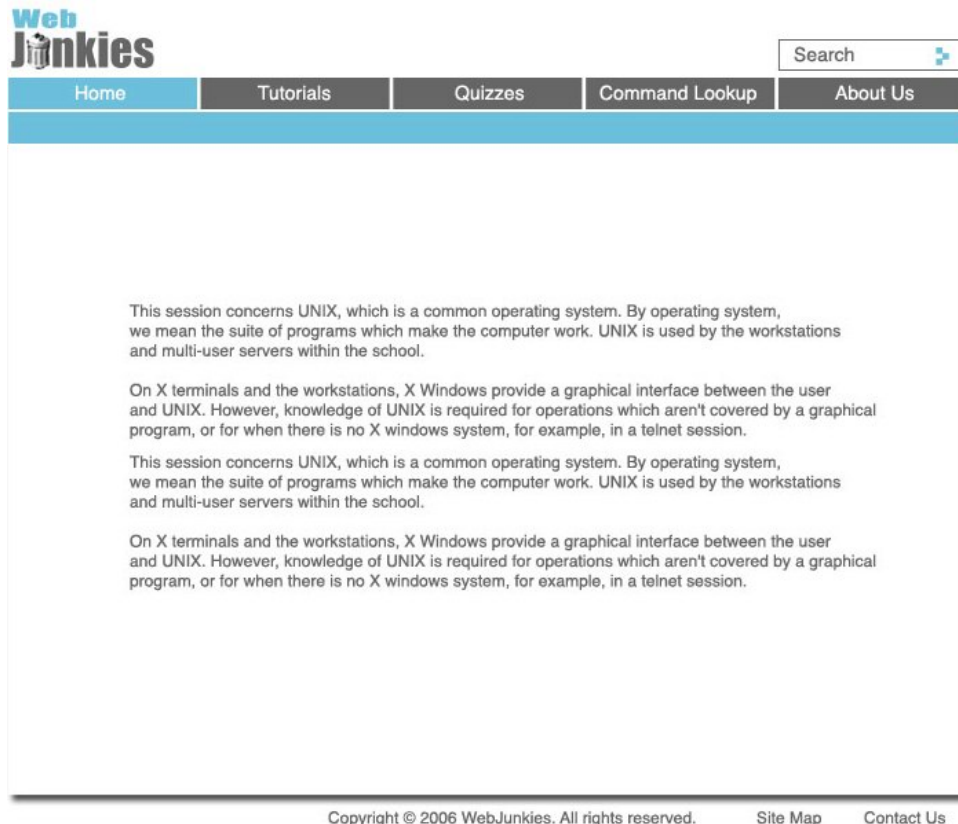


Figure 22: Home Page Mock-Up

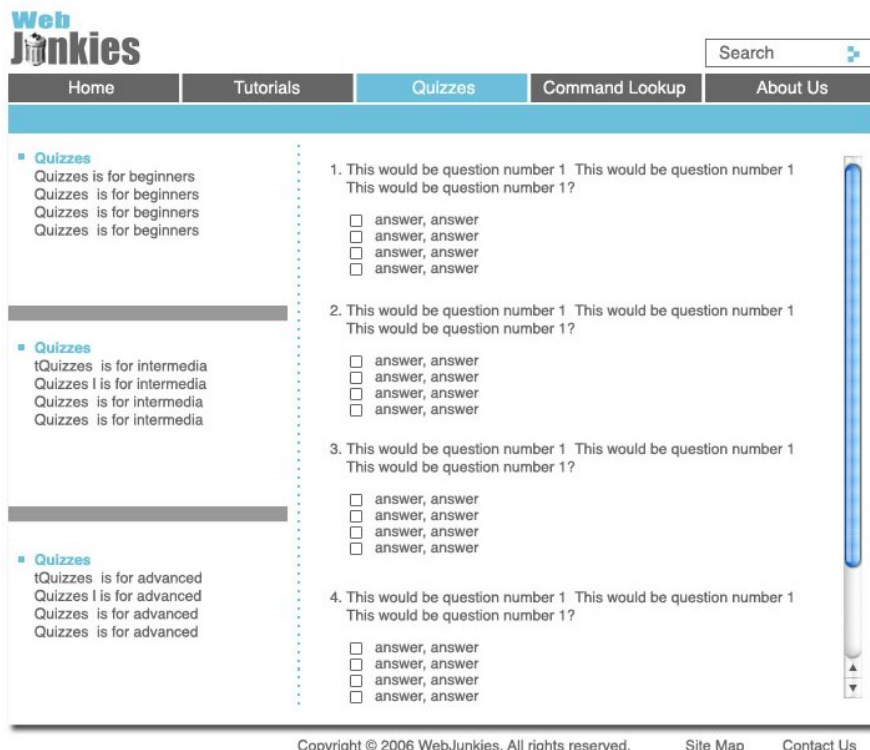


Figure 23: Quiz Page Mock-Up

Home	Tutorials	Quizzes	Command Lookup	About Us
<p><b>Tutorial Part I</b>  this tutorial is for beginners  this tutorial is for beginners  this tutorial is for beginners  this tutorial is for beginners</p>	<p><b>Tutorial Part II</b>  this tutorial is for intermedia  this tutorial is for intermedia  this tutorial is for intermedia  this tutorial is for intermedia</p>	<p><b>Tutorial Part III</b>  this tutorial is for advanced  this tutorial is for advanced  this tutorial is for advanced  this tutorial is for advanced</p>		
<p>▪ <b>Lesson 1</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 2</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 3</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 4</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 5</b>  This lesson will teach you..  This lesson will teach you..</p>	<p>▪ <b>Lesson 1</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 2</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 3</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 4</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 5</b>  This lesson will teach you..  This lesson will teach you..</p>	<p>▪ <b>Lesson 1</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 2</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 3</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 4</b>  This lesson will teach you..  This lesson will teach you..</p> <p>▪ <b>Lesson 5</b>  This lesson will teach you..  This lesson will teach you..</p>		

**Figure 24: Tutorial Page Mock-Up**

## ***Appendix A: Competitive Analysis***

Many of the sites analyzed had one major flaw; a very bland and boring website design. Even though they all had pretty good content, all of them except web monkey were pretty boring to look at. Some of them did not even have global navigation. Now we realize that UNIX is non graphical and sometimes boring, but that does not mean the web site teaching UNIX has to be boring. Based our analysis, we believe our website will have great content and by easy to navigate, fun to be at, and a pleasure to look at.

## ***Appendix B: Content Inventory***

- *Basic Commands*
  - cd
  - ls
  - mkdir
  - mv
  - cp
- *Advanced Commands*
  - chmod
  - rm
  - touch
  - passwd
- *Text Editors*
  - pico
  - vi
- *General Content (included on all pages)*
  - Site Name
  - WebJunkies Logo
  - Date last modified on each page (in the footer)
  - Group Members Name (in the footer)
  - Global navigation to each section of site
- *Home Page*
  - Short introductions of what the goal of the site is
- *Quizzes Page*
  - List of quiz questions for each tutorial (10 for each tutorial)
- *About Us Page*
  - Picture of each member of the group
  - Short biography on each member of group (Name, major, interests...ect)
  - Description of what each member did in the group

- *Command Lookup Page*
  - MAN pages of all commands covered in Tutorials
  - Additional MAN pages for other commands not covered in tutorial
  - Short descriptions of what each command does.
- *Contact Us Page*
  - A form for the user to fill out information and send us a questions/comment.

## **Appendix C: Site Structure Listing**

- Home
- Tutorials
  - Getting Started With Unix
    - What is Unix?
    - Opening Terminal
    - Basic Commands
    - Absolute vs Relative Paths
  - Permissions and More
    - What are permissions?
    - Using chmod
    - Creating files with touch
    - Changing password with passwd
  - Editing Files using pico or vi
    - Using Pico
      - Opening pico
      - Using the editor
      - Saving files
    - Using VI
      - Opening VI
      - Using the editor
      - Saving files
  - Publish your website!
    - Upload files using command line FTP
    - Upload files using FTP/SCP application
    - Connecting to server using ssh or telnet
    - Differences between ssh and telnet
    - Application of permissions (with web server)
- Quizzes
  - Quiz on Getting Started With Unix
  - Quiz on Permissions and More
  - Quiz on Editing files using pico or vi
  - Quiz on publishing your website
- Command Lookup
  - Command lookup page with various unix commands covered in tutorial and others that are not

- About Us
  - Page with our group information on it and information about the site
- Contact Us
  - Page where user can contact us for whatever reason
- Site Map
  - Listing of all the pages on the site (Dynamically created)