

Thunderfox - UNIX Tutorial Site Design Document

Goals

- To teach the user how to use UNIX, starting from the basics
 - Provide information about underlying UNIX/computing concepts
 - How to get into Terminal/Putty
 - Tutorials on how to accomplish certain tasks using UNIX
- To test the user's knowledge
 - Include quizzes on the material taught
- To be used as a reference for UNIX
 - Create an extensive and accessible list of commands that users can come back to
- To teach the background/history of UNIX
 - Who invented UNIX
 - Why to use UNIX?
 - Where it is/was used

User Experience

Audience Definition

- Student - not necessarily new to computing, but new to the concept of command line interfaces and UNIX commands.
- Professor - could have many reasons to utilize the site, maybe to brush up on UNIX, learn new UNIX tricks, or to avoid teaching students the basics. Background in computing not necessarily well established, but generally assumed to have a good idea on how to use UNIX.
- Indecisive buyer/wild card - could have a number of reasons to learn UNIX, and might not know what UNIX is, but it is generally assumed that they have very little background in computing in general.

Personas/Scenarios

Chris - Student

Chris is a first year Computer Science student at RIT. Chris has some programming experience and is very confident in his ability to succeed in the CS program at RIT. However, on the first day of class he realizes that he has to submit his homework through a program that only exists in the UNIX machines in the Golisano College of Computing and Information Sciences.

Chris has never used UNIX in his life. He knows that he needs to understand basic commands for his major classes. Chris can use our page's tutorials for a quick introduction to UNIX and all the commands he might need. The landing page's button links to the beginner tutorials show him where in the site he should start. After the first tutorial, he decides to click on the link to that topic's quiz so he can test his knowledge of the material. He can determine which tutorials are relevant to him because they're titled according to the task they can teach him to do. He also likes that our website provides a tutorial to use Putty, a program that allows him to ssh into the CS computers so that he can do his work from his home computer.

His classes only require that he uses his UNIX knowledge once a week, so he tends to forget the commands. Luckily, he has easy access to our website's reference list of UNIX commands.

John - Professor

John is a professor in the ISTE department at RIT. He is one of the older professors that doesn't like change. John hates the new MyCourses interface so he has decided to stay away from it as much as possible. Instead of using the Dropbox, the only way students can submit their assignments is by pushing it to the department's server. To do that, students must be taught how to use UNIX commands. However, John does not want to waste class time teaching them how to use the command line.

John likes our website because he can send his students to it so they can learn everything they need to submit their work. He also likes to use some of the questions on the quizzes in our website in his own exams.

While reviewing the site to make sure it's up to his teaching standards, John came upon the "Getting Started" tutorial in the tutorial section. He read the section on Windows command line emulators and was very happy to learn that you can simulate a UNIX command line in windows. He installed the command line in his computer using our website's tutorial and now loves it more than the windows' command prompt.

James - Indecisive buyer

James is a 28-years-old man with a stable job. He accidentally poured water on his Mac computer and the Apple store is charging him a ridiculous amount to repair it. James decided that he doesn't want to buy another Mac, but he is used to the operating system and thinks that windows is too far from what he had before.

Some of James' friends have suggested that he gets a new computer with a Linux OS. However, he doesn't know much about this operating system. James decides to research Linux, and finds himself on our site trying to find information about Linux and other UNIX-based operating systems. He lands on the homepage, and goes to the "About UNIX" section. He learns about their history and uses, and finally decides to install Linux in a new computer. As he gets

used to the new operating system, James likes to use our page as a reference for the UNIX required to operate his new OS.

Competitive Analysis

Extra screenshots are included in Appendix A

First Site: <http://www.ee.surrey.ac.uk/Teaching/UNIX/>

Notes:

Content: Proposed as a series of “tutorials” (like classes or lecture notes) rather than raw information. Jumps straight into technical terms without much background information.

Design: Simple. Maybe 4 colors used in total on the entire page. All information is accessible with one click. Lacks features though.

Homepage:

The screenshot shows the homepage of the "UNIX Tutorial for Beginners". The title "UNIX Tutorial for Beginners" is at the top center. Below it is a subtitle: "A beginners guide to the Unix and Linux operating system. Eight simple tutorials which cover the basics of UNIX / Linux commands." There are three main sections of tutorials:

- Introduction to the UNIX Operating System**
 - What is UNIX?
 - Files and processes
 - The Directory Structure
 - Starting an UNIX terminal
- Tutorial One**
 - Listing files and directories
 - Making Directories
 - Changing to a different Directory
 - The directories . and ..
 - Pathnames
 - More about home directories and pathnames
- Tutorial Two**
 - Copying Files
 - Moving Files
 - Removing Files and directories
 - Displaying the contents of a file on the screen
 - Searching the contents of a file
- Tutorial Three**
 - Redirection
 - Redirecting the Output
 - Redirecting the Input
 - Pipes

To the right of the tutorials, there is a sidebar with a section titled "UNIX and Linux books" containing a link to a list of books. Below the sidebar, there is some placeholder text: "Server r Server r found found" and "Firefox can't find t widgetserver.ama; widgetserver.ama;". At the bottom, there are two more instances of the same placeholder text: "Server rServer r found found" and "Firefox can't find t typing errors sun; typing errors sun;".

Second site: <https://www.tutorialspoint.com/UNIX/>

Notes:

Content: Much like the first example, there is a lot of technical terminology without definition. Site is designed for a user who is competent with computers already. Content is very diverse, there is a plethora of it.

Design: Cluttered at first, but very straight forward once the viewer is adjusted to it. Links and icons on the header of the page are overboard, could confuse new users.

Homepage:

The screenshot shows the homepage of the tutorialspoint.com/UNIX/ website. At the top, there is a navigation bar with links for Jobs, SENDFiles, Whiteboard, Net Meeting, Tools, Articles, and social media icons for Facebook, Google+, Twitter, LinkedIn, and YouTube. Below the navigation bar, there is a main banner with the word "UNIX" and a "LEARN UNIX" button. To the left, there is a sidebar with a "LEARN UNIX computer operating system" section and a list of topics under "Unix / Linux for Beginners". The main content area features a "UNIX / LINUX Tutorial" with a "PDF Version" link, a "Quick Guide" link, a "Resources" link, a "Job Search" link, and a "Discussion" link. It also includes a brief history of Unix and its purpose. Below this, there is a section titled "Audience" with a description of the tutorial's purpose. On the right side of the main content area, there is a sidebar with a video player showing a race car, a "FALL TV IS BACK" advertisement for NBC, and a "World's Fastest AMA Live" video. The overall design is cluttered with many links and social media icons.

Third site: <https://www.unixtutorial.org/>

Notes:

Content: Very, very basic nav. List of commands (separated into basic and advanced), a reference guide, a glossary, and a list of books on UNIX (along with a “contact me” tab). More blog-like literature on the first page than actual tutorials on UNIX. Seems to assume the user is more intermediate than amateur.

Design: feels like a blog more than a tutorial site. Font and colors are appealing and easy to read.

Homepage:

The screenshot shows the homepage of Unix Tutorial. At the top, there's a navigation bar with links for HOME, UNIX BOOKS, UNIX COMMANDS, UNIX GLOSSARY, UNIX REFERENCE, ASK ME A QUESTION, CONTACT ME, and the date SEPTEMBER 27, 2017. A search bar is also present. Below the navigation, there's a section titled "UNIX TUTORIAL COMMUNITY" with social media icons for Facebook, RSS, and Twitter. A sidebar on the left features an advertisement for "ManageEngine ServiceDesk Plus" with a "FREE" offer. The main content area displays a blog post titled "How To Determine OS Version on Your Raspberry Pi" from January 8, 2017, by Unix Tutorial, with 0 comments. The post includes a note encouraging readers to subscribe to the RSS feed and follow the author on Twitter. The text of the post discusses how to determine the OS version on a Raspberry Pi by checking the /etc/os-release file, with a code snippet showing the terminal command and its output.

```
root@s7:~# cat /etc/os-release
PRETTY_NAME="Raspbian GNU/Linux 8 (jessie)"
NAME="Raspbian GNU/Linux"
VERSION_ID="8"
VERSION="8 (jessie)"
ID=raspbian
```

Fourth site: <http://people.ischool.berkeley.edu/~kevin/UNIX-tutorial/toc.html>

Notes:

Content: almost identical to the first site. Very basic, however it does expand on some of the basic ideas more than the other sites. Site is set up as a series of text lectures with exercises at the end of each to test the users hands on ability.

Design: extremely basic. Three colors. Nothing fancy or eye catching, except the touches done with boxes specifically for code.

Homepage:

The screenshot shows a web page titled "UNIX Tutorial". At the top is a "Table of Contents" bar. Below it is a list of eight numbered sections, each with a brief description of its content and the commands covered.

| Section | Description | Commands |
|---|---|--|
| 1. Introduction | Introducing UNIX and the shell | <i>whoami, passwd, logout</i> |
| 2. Logging in, logging out | Logging into and out of your UNIX account, setting your password — commands: | <i>whoami, passwd, logout</i> |
| 3. Looking around | Introducing the filesystem, working with files and folders — commands: | <i>pwd, ls, cd</i> |
| 4. Managing files and folders | Creating, moving, and deleting files and folders, setting permissions — commands: | <i>mkdir, rmdir, cp, mv, rm, chmod</i> |
| 5. Viewing and editing files | Viewing and changing file contents — commands: | <i>cat, less, pico</i> |
| 6. Printing | Using the UNIX printing system — commands: | <i>lpr, lpq, lprm, enscript</i> |
| 7. Spying on your neighbors | Seeing who else is logged in and what they're up to — commands: | <i>who, w, last</i> |
| 8. Getting more information | | |

Fifth site: <http://www.open-of-course.org/courses/course/view.php?id=45>

Notes:

Content: Straight forward, but angled towards users that have a background in computing. Hard to follow. Nav is full of stuff that's unrelated to UNIX.

Design: modern, but somewhat confusing. Too much scrolling and repetition.

Homepage:

The screenshot shows the homepage of the "Unix Tutorial for Beginners" course. At the top, there is a navigation bar with links for "Open of Course" and "Course Categories". A message indicates "You are currently using guest access (Log in)". Below the header, the title "Unix Tutorial for Beginners" is displayed in a large, bold font. A breadcrumb trail shows the path: Home > Courses > Operating Systems > Unix. On the left, a navigation sidebar lists categories like "Home", "Current course", "Unix" (which is expanded to show "Participants"), "Courses" (expanded to show "Art and Music", "Business", "Computer Applications", "Computer Programming", "Languages", "Operating Systems", "Webdesign", "Other", and "Non-English Courses"), and "NEW GOOGLE ADSENSE". The main content area contains a detailed description of Unix, links to "Unix Forum", "Origin and Legal notes", and "Typographical conventions", and a "Flattr this!" button. At the bottom, a section titled "Topic 1" is partially visible.

Sixth site: <https://www.guru99.com/UNIX-linux-tutorial.html>

Notes:

Content: Index page is very barebones, just lists the content in a friendly format that separates each topic into different categories based on difficulty. Starts from the very bottom and works up through all concepts. Probably the best example. Too many ads and popups when browsing, though.

Design: Very barebones, semi-modern design. Flows well and important information stands out with diagrams and other media.

Homepage:

The screenshot shows the homepage of Guru99. At the top, there is a navigation bar with links for Home, Testing, SAP, Web (which is highlighted in blue), Must Learn!, Big Data, Live Projects, Blog, and a search icon. Below the navigation bar, there is a large banner with the text "Linux/Unix Tutorial for Beginners: Learn Online in 7 days". Underneath the banner, there is a section titled "Training Summary" which contains a paragraph about the benefits of learning Linux. At the bottom of the page, there is a dark blue footer bar with the text "Join Our FREE Linux Tutorials", "Learn in 7 Days!", an input field for an email address, a green "Join Now" button, and a close button.

Seventh site: <https://www.cs.sfu.ca/~ggbaker/reference/UNIX/>

Notes:

Content: Very concise content. Clear as well as short, leaves a summary at the end of each section. No extra navigation.

Design: Content is well defined, the difference between the commands and the notes is very clear. Well contrasting, easy to focus on.

Homepage:

The screenshot shows a web page titled "UNIX Tutorial for Beginners". At the top, a note states: "This is a mirror of the [UNIX Tutorial for Beginners](#) from Michael Stonebank at the [University of Surrey](#). It has been mirrored with [his permission](#)." Below this, there are three main sections: "Typographical Conventions", "Introduction to The UNIX operating system", and "Tutorial One". "Tutorial One" contains a bulleted list: "• Listing files and directories", "• Making Directories", "• Changing to a different Directory", "• The directories . and ..", "• Pathnames", and "• More about home directories and pathnames". "Tutorial Two" contains a bulleted list: "• Copying Files", "• Moving Files", "• Removing Files and directories", "• Displaying the contents of a file on the screen", and "• Searching the contents of a file". "Tutorial Three" contains a bulleted list: "• Redirection", "• Redirecting the Output", and "• Redirecting the Input". The page has a dark blue sidebar on the left and a light gray header bar at the top.

Summary

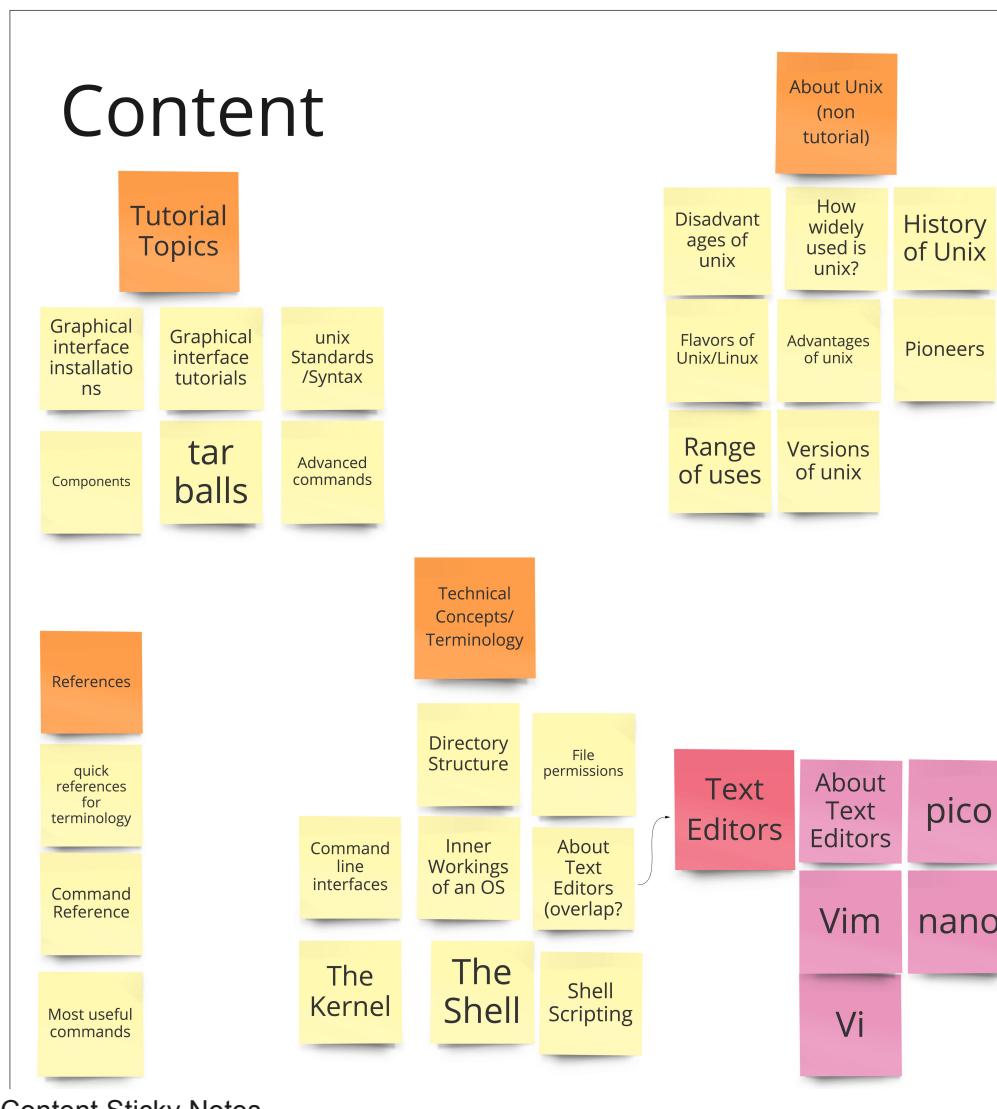
In summary, it seems that many of the competing sites tend to leave out important foundational concepts or historical context that would leave our entry level consumer at a disadvantage. Many of these sites take a barebones approach with very little excess content or “fluff” which would prove effective to more experienced or technical user, but not necessarily to a beginner. In this case, however, it may be necessary to steer away from excess content to keep the site in line with its goal of teaching UNIX. Thus, ideal design and content combination would be a modern flow with slightly more than barebones content.

Site Content

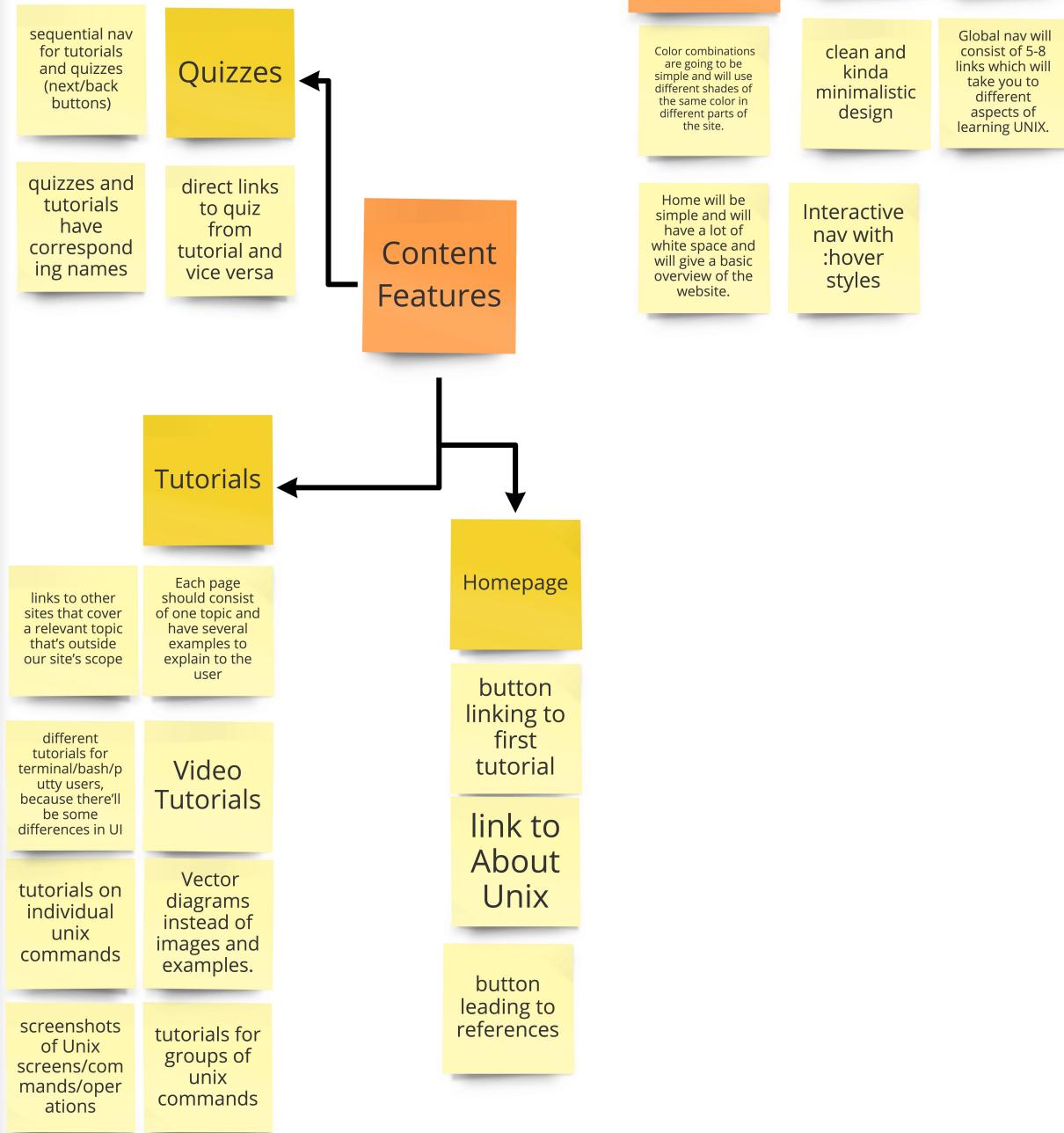
Content Grouping and Labeling

- Home
- Tutorials
- Quizzes
- Reference
- About UNIX
- About Us
- Sources(?)

Organized Sticky Notes



Site Features



Site feature Sticky Notes

Site Structure

Site Structure Listing(or Summary)

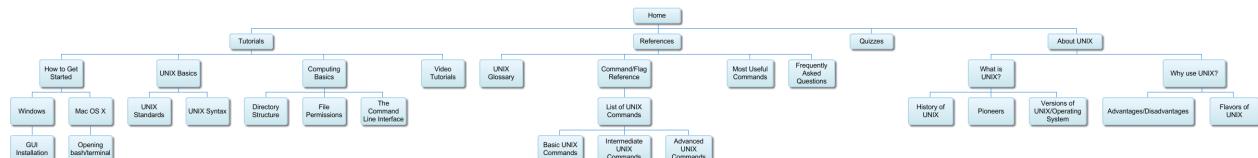
- Home
- Tutorials
 - Computing Basics
 - Directory Structure
 - File permissions
 - The Command Line interface
 - Getting Started
 - Windows
 - Terminal emulator(e.g. PuTTY) installation guide
 - Mac OS X
 - Opening bash/terminal
 - Explain the parts of the display
 - Address any differences between the displays of bash, terminal, and Windows terminal emulators
 - UNIX Basics
 - UNIX Standards
 - UNIX Syntax
 - UNIX Components
 - System Hardware
 - Kernel
 - Shell
 - Video Tutorials
- Quizzes
 - Quizzes correspond exactly to tutorials
- References
 - UNIX Glossary
 - Command/Flag Reference
 - List of UNIX Commands
 - Basic UNIX Commands
 - Intermediate UNIX Commands
 - Advanced UNIX Commands
 - List of Flags
 - Most Useful Commands
 - Frequently Asked Questions
- About UNIX
 - What is UNIX?
 - History of UNIX
 - Pioneers
 - Versions of UNIX/Operating System

- Flavors of UNIX
- Why Use UNIX?
 - Advantages/Disadvantages of UNIX
 - Range of uses

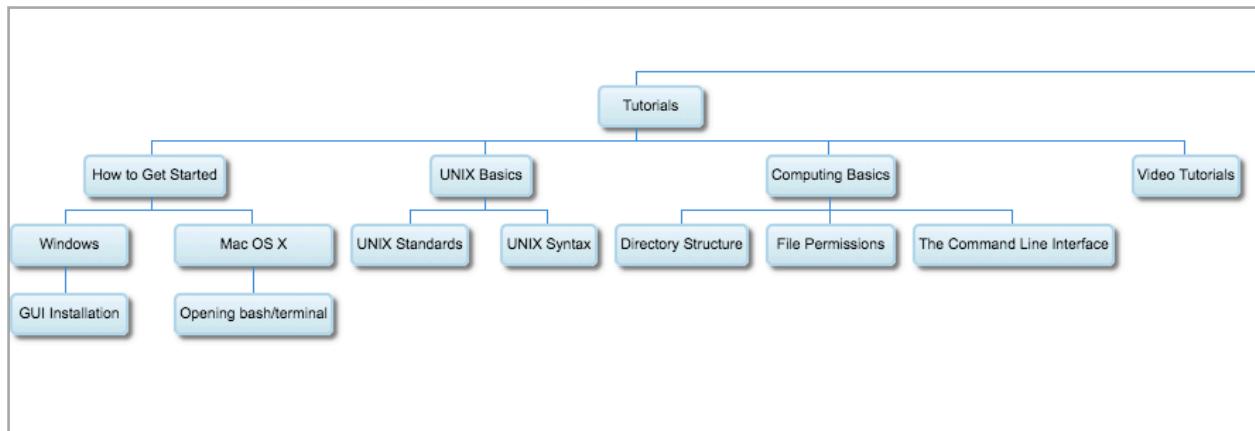
Global and Local Navigation Systems

- The global navigation contains links to all the major sections of the site: Homepage, Tutorials, References, Testing and About UNIX.
- Logo that takes user back to Homepage
- The local navigation for Tutorials-How to Get Started page will have links that teleport between 'Windows' and 'Mac OS X' pages.
- Tutorials will link to their corresponding quizzes, and vice versa
- Quizzes and tutorials will link to the previous and following topics
- 'UNIX Commands' pages, links that quickly take users to different sections.
- Links located on the side of the page that link to each lower level pages.
- Links that directs to external video tutorials.
- Button on every page that can be clicked to quickly jump back to the top of the page

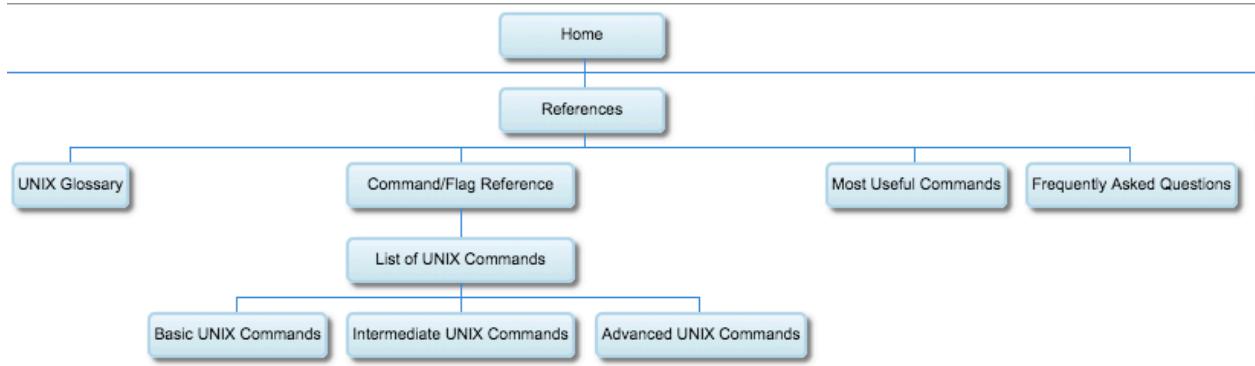
Architectural Blueprints



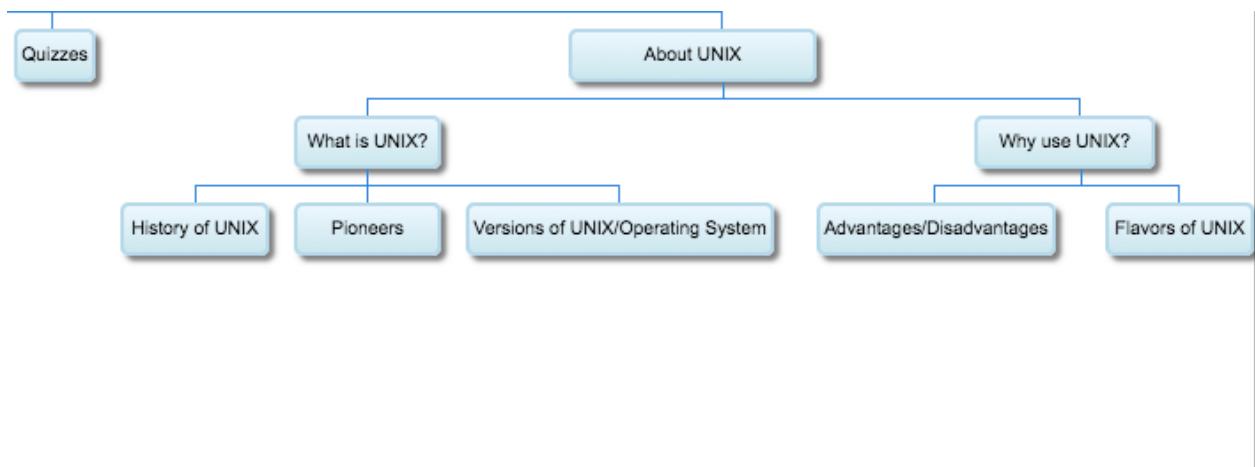
Architectural Blueprints (continued)



Left side of blueprint



Middle of blueprint



Right side of blueprint

Functional Requirements

Structural Requirements

- The web app should be able to host interactive quizzes for the user to take.
- The web app should have functional memory to remember where a user left off.
- The web app should have quiz memory to remember scoring for a particular user
- Possibly have user accounts for individualized tutorial experience?
- The app should provide a general Interactive learning experience for complex subjects (reinforce complex terms/points with rollover functions, external links, clickable diagrams, etc.)
- The app could provide an interactive CLI simulator for the user to test commands they're learning in.

Backend Technologies

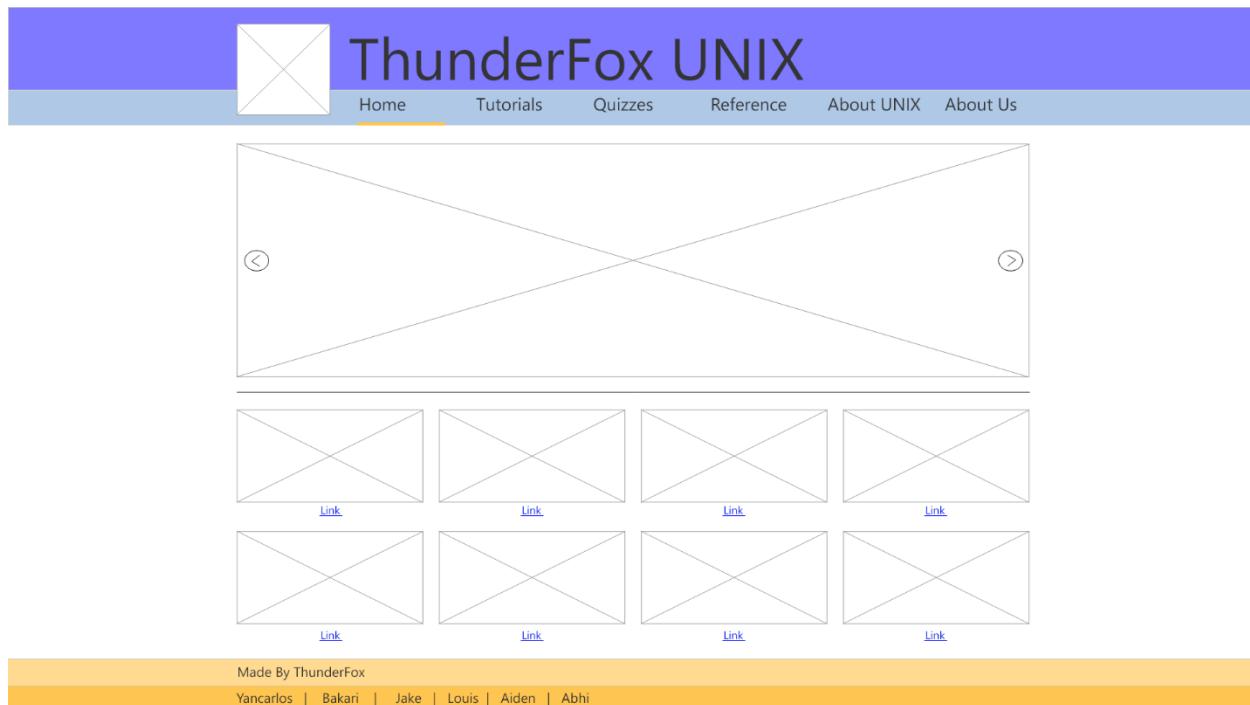
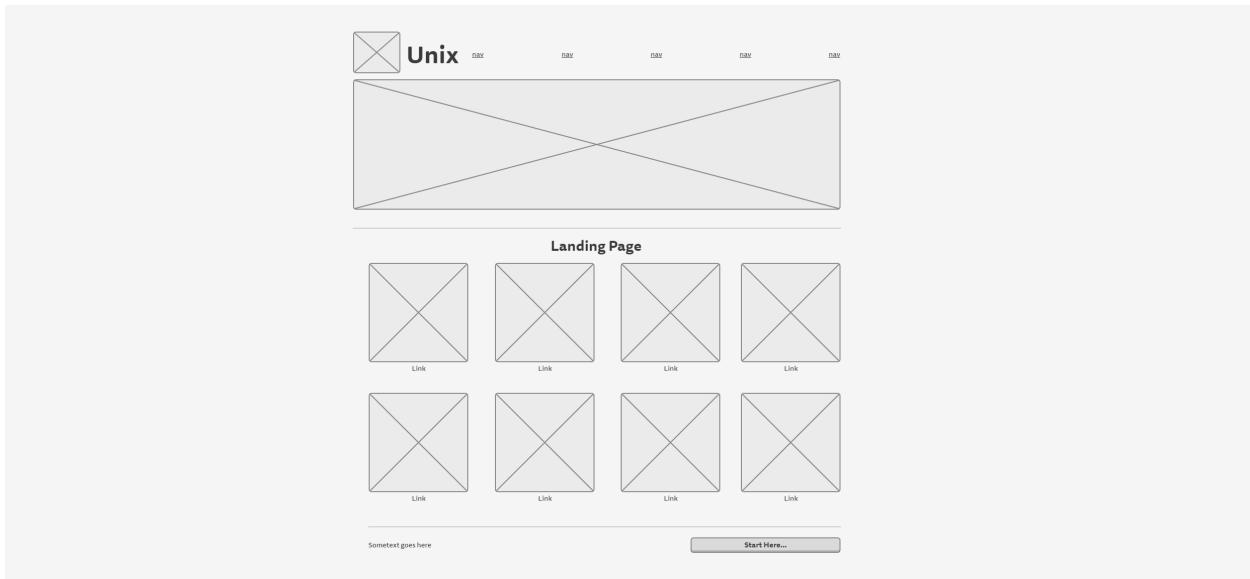
Some backend tech that will need to be implemented to support the above functions:

- SQL database for pulling quiz questions/storing user data (if we do accounts)
- PHP for SQL interfacing
- JavaScript for interactive functions with the quizzes and for interactive graphics/content.
- Some kind of parsing system for interactive CLI
- Functional Memory using browser storage

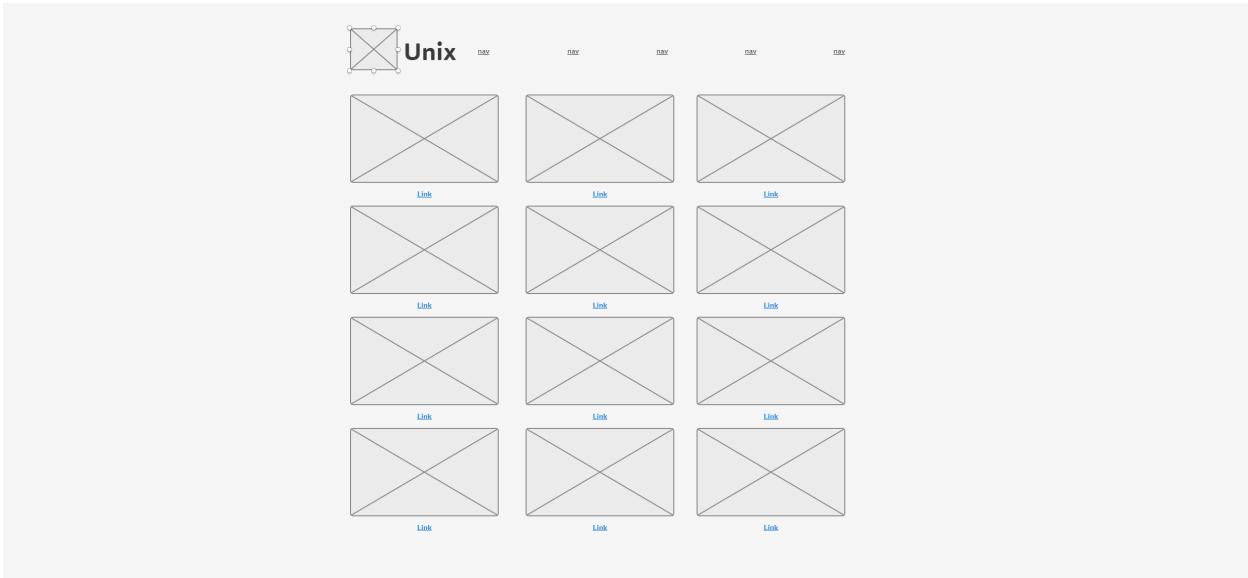
Visual Design

Mock-ups

Landing page



This can be a page where all the topics for the tutorials can be listed



ThunderFox UNIX

Home Tutorials Quizzes Reference About UNIX About Us

Made By ThunderFox

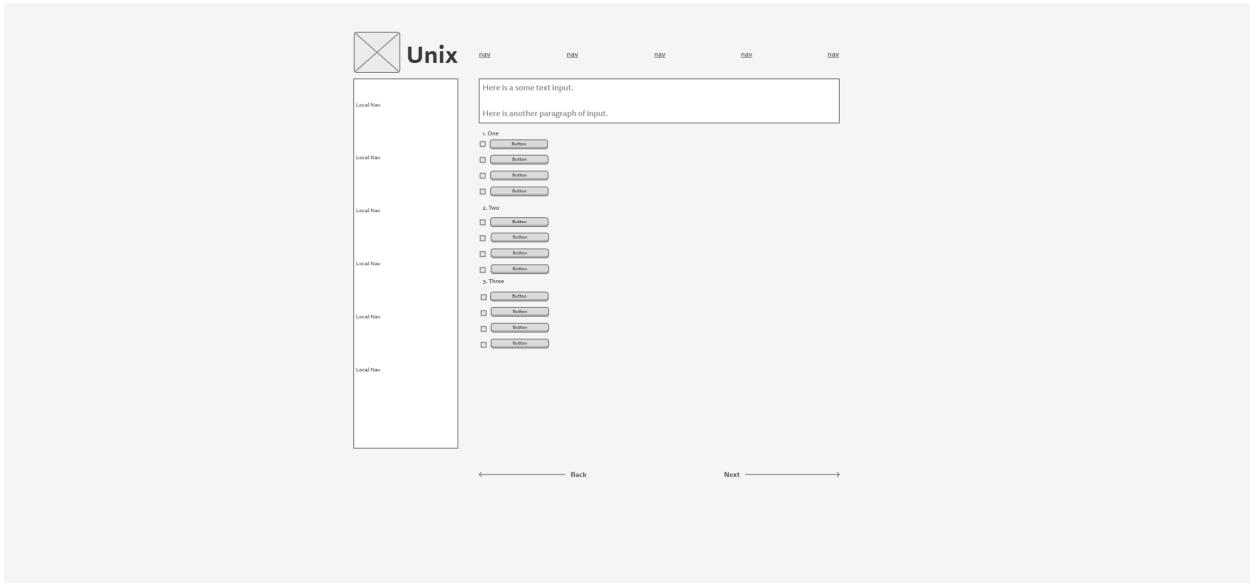
Yancarlos | Bakari | Jake | Louis | Aiden | Abhi

These are some of the tutorials pages we can do.

This screenshot shows a Unix tutorial page. At the top left is a logo with a square containing a cross and the word "Unix". Below it is a sidebar with the title "Local New" repeated six times. The main content area contains two paragraphs of text: "Here is some text input." and "Here is another paragraph of input.". There are horizontal scroll bars on the right side of the content area. At the bottom are navigation links: "Back" and "Next".

This screenshot shows a ThunderFox UNIX tutorial page for "Text Editors". The header features a blue bar with the "Unix" logo and the text "ThunderFox UNIX". Below the header is a navigation menu with links: Home, Tutorials, Quizzes, Reference, About UNIX, and About Us. On the left, there are "Last Lesson" and "Lesson" navigation buttons. The main content area has a large title "Text Editors". To the left is a sidebar titled "Contents" with links: About, Pico, Vim, Nano, and Vi. The main content area contains two blocks of placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla pellentesque ligula eget hendrerit fermentum. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Mauris in nisi eu nisi suscipit pulvinar. Morbi bibendum sapien nibh, vel vulputate augue commodo at. Vestibulum eu volutpat dolor. Fusce hendrerit, nibh ac dictum feugiat, eros odio semper elit, rutrum tempor ex neque eget nunc. In ac est sapien. Cras tempus arcu eu velit hendrerit, eu scelerisque ex rutrum. Mauris nec nisi ac tellus aliquet vehicula. Sed non convallis urna. Morbi nec ex tempus magna hendrerit aliquet in vitae neque." and "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla pellentesque ligula eget hendrerit fermentum. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Mauris in nisi eu nisi suscipit pulvinar. Morbi bibendum sapien nibh, vel vulputate augue commodo at. Vestibulum eu volutpat dolor.". Navigation links "Back" and "Next" are at the bottom.

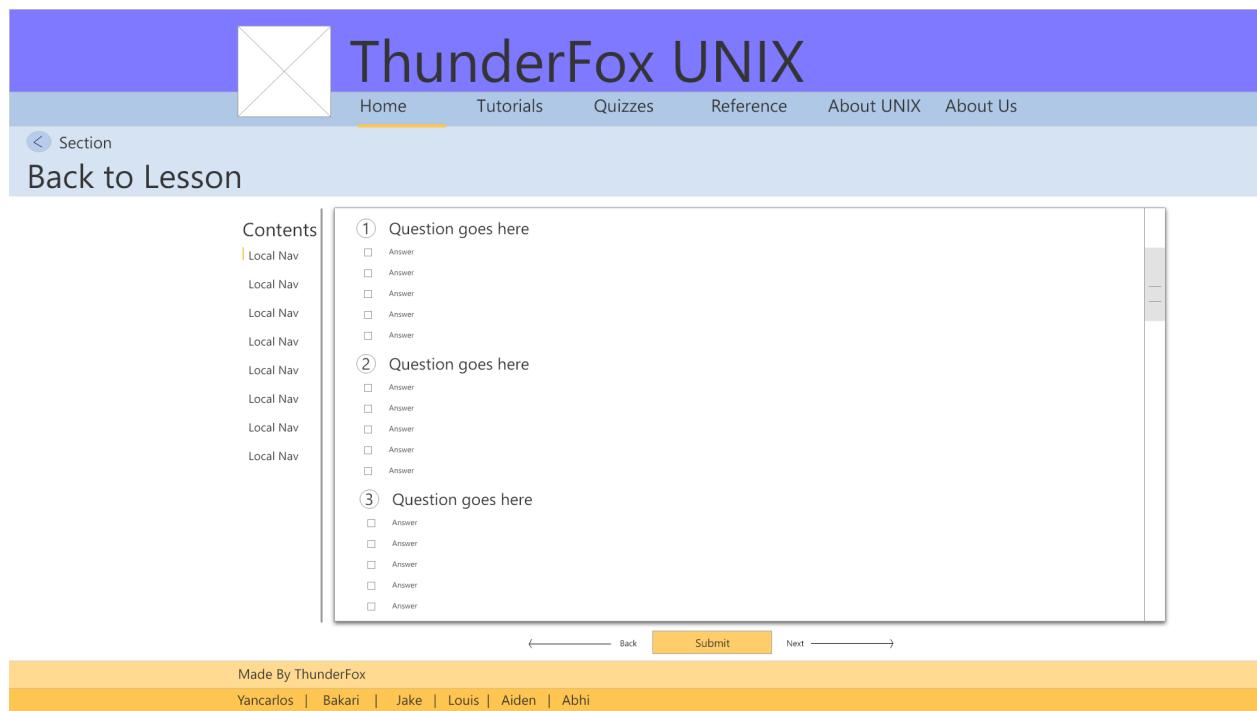
Quiz Page



A wireframe diagram of a quiz page. At the top left is a logo with a square containing a diagonal cross and the word "Unix". To its right is a horizontal navigation bar with five items labeled "nav", "nav", "nav", "nav", and "nav". Below the logo is a vertical sidebar on the left containing six "Local Nav" entries. The main content area on the right contains two text boxes: one with "Here is some text input." and another with "Here is another paragraph of input.". Below these is a list of questions and answers:

- 1. One
 - Button
 - Button
 - Button
 - Button
- 2. Two
 - Button
 - Button
 - Button
 - Button
 - Button
- 3. Three
 - Button
 - Button
 - Button
 - Button
 - Button

At the bottom are "Back" and "Next" navigation buttons.

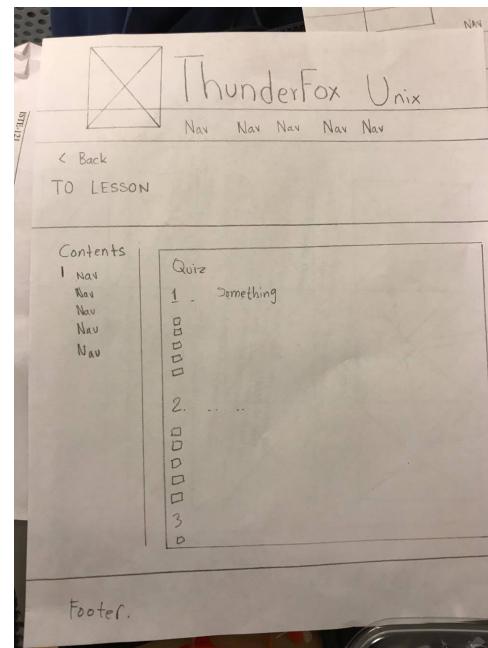
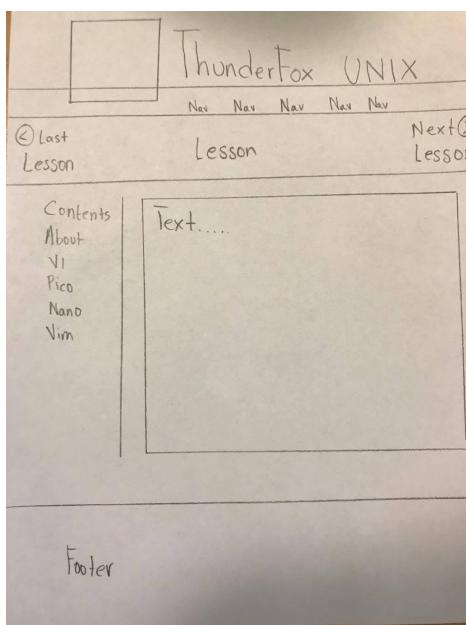
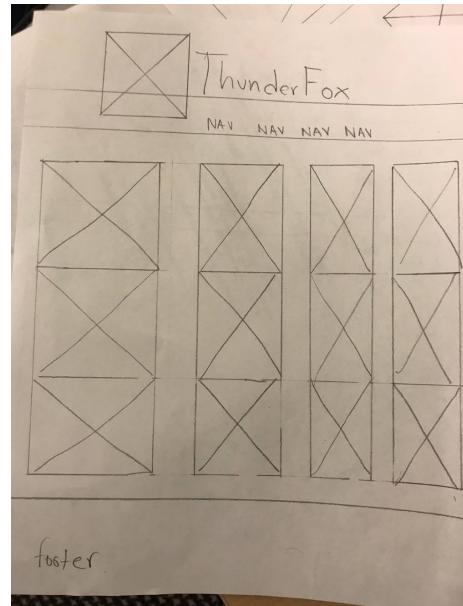
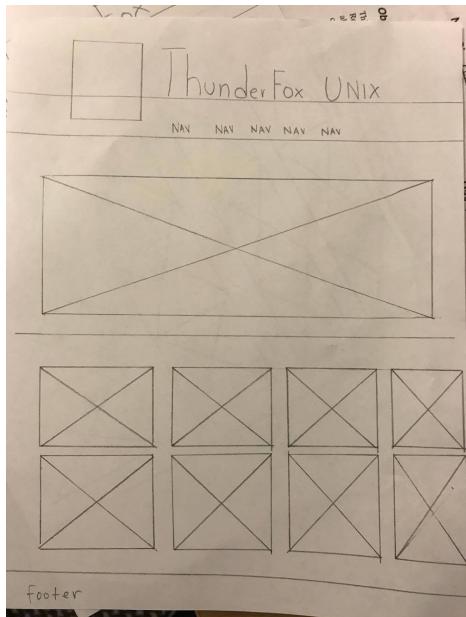


Screenshot of the ThunderFox UNIX website showing a quiz page. The header features a purple bar with the "Unix" logo and the text "ThunderFox UNIX". Below it is a blue navigation bar with links: Home (highlighted), Tutorials, Quizzes, Reference, About UNIX, and About Us. On the left, there's a sidebar with a "Section" link and a "Back to Lesson" button. The main content area displays three numbered questions:

- ① Question goes here
 - Answer
 - Answer
 - Answer
 - Answer
 - Answer
- ② Question goes here
 - Answer
 - Answer
 - Answer
 - Answer
 - Answer
- ③ Question goes here
 - Answer
 - Answer
 - Answer
 - Answer
 - Answer

At the bottom are "Back", "Submit" (highlighted in yellow), and "Next" buttons. The footer is a yellow bar with the text "Made By ThunderFox" and a list of names: Yancarlos | Bakari | Jake | Louis | Aiden | Abhi.

Sketches



Appendix A: Competitive Analysis

Site 1

<http://www.ee.surrey.ac.uk/Teaching/UNIX/>

UNIX Tutorial One

1.1 Listing files and directories

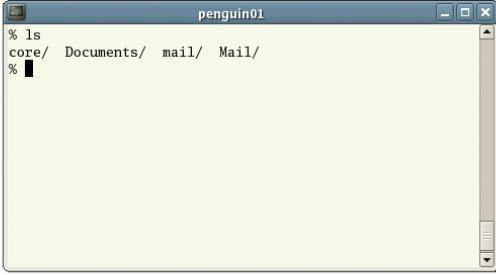
ls (list)

When you first login, your current working directory is your home directory. Your home directory has the same name as your user-name, for example, **ee91ab**, and it is where your personal files and subdirectories are saved.

To find out what is in your home directory, type

```
$ ls
```

The **ls** command (lowercase L and lowercase S) lists the contents of your current working directory.



A screenshot of a terminal window titled "penguin01". The window contains the following text:
% ls
core/ Documents/ mail/ Mail/
% █

There may be no files visible in your home directory, in which case, the UNIX prompt will be returned. Alternatively, there may already be some files inserted by the System Administrator when your account was created.

Site 2

<https://www.tutorialspoint.com/UNIX/>

Listing Files

The screenshot shows a sidebar menu titled 'LEARN UNIX' with a sub-section 'computer operating system'. Under 'Unix / Linux for Beginners', there are several links: Unix / Linux - Home, Unix / Linux - Getting Started, Unix / Linux - File Management, Unix / Linux - Directories, Unix / Linux - File Permission, Unix / Linux - Environment, Unix / Linux - Basic Utilities, Unix / Linux - Pipes & Filters, Unix / Linux - Processes, Unix / Linux - Communication, and Unix / Linux - The vi Editor. A second section titled 'Unix / Linux Shell Programming' contains links: Unix / Linux - What is Shell?, Unix / Linux - Using Variables, and Unix / Linux - Special Variables.

To list the files and directories stored in the current directory, use the following command –

```
$ls
```

Here is the sample output of the above command –

```
$ls
```

```
bin      hosts  lib      res.03
ch07    hw1    pub      test_results
ch07.bak  hw2    res.01  users
docs    hw3    res.02  work
```

The command **ls** supports the **-l** option which would help you to get more information about the listed files –

```
$ls -l
```

```
total 1962188
```

```
drwxrwxr-x  2 amrood amrood   4096 Dec 25 09:59 uml
-rw-rw-r--  1 amrood amrood   5341 Dec 25 08:38 uml.jpg
drwxr-xr-x  2 amrood amrood   4096 Feb 15 2006 univ
drwxr-xr-x  2 root   root    4096 Dec  9 2007 urlspedia
-rw-r--r--  1 root   root   276480 Dec  9 2007 urlspedia.tar
drwxr-xr-x  8 root   root    4096 Nov 25 2007 usr
drwxr-xr-x  2  200   300    4096 Nov 25 2007 webthumb-1.01
```

Site 3

You are here: [Home](#) / [Unix Commands Reference](#) / Unix text editors

Unix text editors

There's quite a few ways for you to edit your texts in Unix. This page summarizes the most common [Unix commands](#) for text editing.

Unix text-mode editors

These editors work in your text-only Unix session and are most quick and lightweight ways to make some changes to a text file.

- ed
- vi
- vim
- pico

Unix text editors with GUIs

These editors are more advanced tools with support for graphics users interface (GUI), which essentially allows for representing available editing options in more user-friendly way and support mouse for typical editing operations.

<https://www.unixtutorial.org/>

Site 4

<http://people.ischool.berkeley.edu/~kevin/UNIX-tutorial/toc.html>

2. Logging in, logging out

Commands covered in this section: ***whoami, passwd, logout***

Since UNIX supports multiple users at one time, you must identify yourself to the system before you can begin using it. This process is called *logging in*. When you connect to a computer running UNIX (often called a *UNIX host*), you are asked to provide two pieces of information in order to log in: your *username* (also called a *login name*), which is your identity on the system, and your *password*, which proves (or at least improves the likelihood) that you are indeed who you say you are. Throughout the tutorial, we will assume your username is "natasha" and you are logging into a UNIX host called "peabody.wossamotta-u.edu."

Exercise 2.1

Connect to a UNIX host on which you have an account. If you are connecting from a machine running Mac OS X or Linux, you'll need to launch the Terminal application and use the *ssh* command to connect as shown in the example below. (If you're running Windows, you'll need to download and install an SSH client such as [PuTTY](#).) Of course, you'll need to substitute your actual username and the hostname of the computer you want to connect to in place of "natasha" and "peabody.wossamotta-u.edu," respectively.

```
$ ssh natasha@peabody.wossamotta-u.edu
natasha@peabody.wossamotta-u.edu's password: <your_password_here>

Last login: Fri Feb 14 08:21:43 from bullwinkle.wossamotta-u.edu
Fedora Linux 3.6.11-4.fc16.x86_64 #1 SMP Tue Jan 8 20:57:42 UTC 2013

Welcome to peabody.wossamotta-u.edu! Report any problems by sending e-mail
to help@wossamotta-u.edu.

** NOTE: peabody will be down from 10:00 am to 11:00 am
**          on Saturday, February 22 for a hardware upgrade.

$
```

Site 5

UNIX Tutorial Two

2.1 Copying Files

cp (copy)

`cp file1 file2` is the command which makes a copy of `file1` in the current working directory and calls it `file2`

What we are going to do now, is to take a file stored in an open access area of the file system, and use the `cp` command to copy it to your `unixstuff` directory.

First, `cd` to your `unixstuff` directory.

```
% cd ~/unixstuff
```

Then at the UNIX prompt, type,

```
% cp /vol/examples/tutorial/science.txt .
```

(Note: Don't forget the dot (.) at the end. Remember, in UNIX, the dot means the current directory.)

The above command means copy the file `science.txt` to the current directory, keeping the name the same.

(Note: The directory `/vol/examples/tutorial/` is an area to which everyone in the department has read and copy access. If you are from outside the University, you can grab a copy of the file [here](#). Use 'File/Save As...' from the menu bar to save it into your `unixstuff` directory.)

<http://www.open-of-course.org/courses/course/view.php?id=45>

NAVIGATION

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Site 6

<https://www.guru99.com/UNIX-linux-tutorial.html>

Syllabus

Linux Fundamentals

- ↳ **Tutorial** Introduction to the Linux Operating System
- ↳ **Tutorial** Linux Distributions & Installation
- ↳ **Tutorial** Linux Vs. Windows
- ↳ **Tutorial** Terminal V/s File Manager

Getting Started

- ↳ **Tutorial** Must Know Linux/Unix Commands
- ↳ **Tutorial** File Permissions in Linux/Unix

Advance Stuff!

- ↳ **Tutorial** Redirection in Linux/Unix
- ↳ **Tutorial** Linux/Unix Pipes, Grep & Sort Command
- ↳ **Tutorial** Linux - Regular Expressions

In this tutorial, you will learn-

- Ownership of Linux files
- Permissions
- Changing file/directory permissions with 'chmod' command
- Absolute(Numeric) Mode
- Symbolic Mode
- Changing Ownership and Group
- Summary

The concept of **permissions** and **ownership** is crucial in Linux. Here, we will discuss both of them. Let us start with the **Ownership**.



Site 7

<https://www.cs.sfu.ca/~ggbaker/reference/UNIX/>

2.1 Copying Files

cp (copy)

`cp file1 file2` is the command which makes a copy of `file1` in the current working directory and calls it `file2`

What we are going to do now, is to take a file stored in an open access area of the file system, and use the `cp` command to copy it to your `unixstuff` directory.

First, `cd` to your `unixstuff` directory.

```
* cd ~/unixstuff
```

Then at the UNIX prompt, type,

```
* cp /vol/examples/tutorial/science.txt .
```

(Note: Don't forget the dot (.) at the end. Remember, in UNIX, the dot means the current directory.)

The above command means copy the file `science.txt` to the current directory, keeping the name the same.

(Note: The directory `/vol/examples/tutorial/` is an area to which everyone in the department has read and copy access. If you are from outside the University, you can grab a copy of the file [here](#). Use 'File/Save As.' from the menu bar to save it into your `unixstuff` directory.)

Appendix B: Content Inventory

Jake

- Most useful commands
- Advantages of UNIX
- Disadvantages of UNIX
- How widely used is UNIX
- Range of uses
- Command line interfaces
- Shell Scripting
- tar balls

Yan

- History of UNIX
- Versions of UNIX
- Pioneers
- UNIX Standards
- Components

- The Kernel
- The Shell
- Directory Structure
- File permissions
- Text Editors
- Vi
- Vim
- Pico
- Quizzes
- Video Tutorials

Bakari

- tutorials on individual UNIX commands
- references for terminology/commands
- quizzes
- sequential nav for tutorials and quizzes (next/back buttons)
- tutorials for groups of UNIX commands
- links to other sites that cover a relevant topic that's outside our site's scope
- different tutorials for terminal/bash/putty users, because there'll be some differences in UI
- screenshots of UNIX screens/commands/operations
- direct links to quiz from tutorial and vice versa
- quizzes and tutorials with corresponding names

Abhi

- Home will be simple and will have a lot of white space and will give a basic overview of the website.
- Color combinations are going to be simple and will use different shades of the same color in different parts of the site.
- Global nav will consist of 5-8 links which will take you to different aspects of learning UNIX.
- While hovering over a certain nav menu it will open a dropdown menu for the specific topics which are covered in the larger topic.
- Each page should consist of one topic and have several examples to explain to the user
- Vector diagrams instead of images and examples.

Louis

- Command Reference
- Historical Content
- Flavors of UNIX/Linux
- Inner Workings of an OS
- Advanced command section
- Graphical interface installations
- Graphical interface tutorials