lit 4 linux

Group Project ISTE 240

Team Leader: Sarah Irons
Content Creator: Evren Ince
Information Architect: Deena Feldmann
Graphic Designer: Deena Feldmann
Interaction Designer: Miguel Galan

9/12/19
Established team roles
Set a general meeting time
Collected contact information
Submitted: team information
Goals for next meeting:
Review what the project is
Establish a communication means
Delegate tasks to respective roles
Set deadlines for tasks
Establish basics of the site
Plan next meeting and things to have done by then

9/18/19 12pm global village
Established goals for the site
Delegated tasks
Decided on a topic
Set deadlines
Planned a rough time for the next meeting and what to have done by then

9/27/19 3pm Global Village
Re-established site intentions
More toward teenagers
Flash cards
How to do that with javascript
Use a button to click to get the answer
Fill in the blank stuff
Crossword for commands
Persona ideas
2 highschool one college
Someone who knows nothing, need to know it out of necessity
Someone who doesnt know but wants to
Someone who knows and wants to know more
Litforlinux as a title

10/6/19 3pm global village

Final report finishing

Finish personas

Finish wireframes

Finish site map

Site discussion

Idea for a game (similar to candy land or life) that the user would progress through by answering questions regarding specific commands

Add general topic pages (definitions and such)

Maybe add an interactive terminal so users could test commands and such

Add a madlib thing

Fill in the blank

Account page(progress shown)

Choose an avatar to use for the games

Show topic progress

Save information

Lit 4 Linux is a website that intends to educate beginner users on the basics of Linux. Our primary audience will be teenagers and young college students that want to learn Linux. Whether it is someone who knows nothing about Linux but wants to learn, or someone who knows some Linux but wants to learn more, our site hopes to attract and teach them. By using a variety of games surrounding different commands and lessons, Lit 4 Linux hopes to teach people Linux in an entertaining, yet simple way. The site will feature different puzzle types, including crossword puzzles and fill in the blank challenges, allowing people to learn coding in their own preferred way. Additionally, there will be flash cards available to study with and an account page to track topic progress with. Lit 4 Linux hopes to teach people how to really use Linux, for any reason that they may want to learn it.

Introduction to Linux and installation

About Linux OS, Installation of CentOS

Essentials of Basic Linux Commands

Listing files, Switching directories, Create Files, Viewing Files, Finding Files and Directories

Essentials of Advanced Linux Commands

Managing files effectively, 'Sort' commands, Printing text/string in terminal, Advanced listing of files

User, Group, and File Permissions Management

Adding or creating new users, Modifying or changing user attributes, Difference between su and sudo

Linux Package Management

Yum package management

Linux Services

Configuring Linux services to start or stop, Disable unwanted services in Linux, Managing 'Systemd' services using 'Systemctl'

Basic Shell Scripting

Understand Linux shell and bash shell scripting, Create basic bash scripts for automating manual tasks

• Getting Started

• What is Linux? History, How to install, Which distribution to choose and the differences of each

Command Line

• The shell, basic commands including: pwd, cd, ls, touch, file, cat, less, history, cp (Copy), mv (Move), mkdir (Make Directory), rm (Remove), find, help, man, exit

• Playing with Text - Commands for playing with text and text manipulation includes: stdout, stdin, stderr, pipe, cut, paste, head, tail, sort, grep

• Different types of text editors and their differences: nano, vi, vim

• User Management - Users and groups, differences between users with varying permissions, root, commands to show user information including: /etc/passwd, /etc/shadow, /etc/group, User management tools

• Fun with Files - File permissions, modifying permissions, ownership permissions

Alysha

18 years old
Headed for a 2-year degree

An aspiring dental hygienist.
Enjoys exploring the outdoors.
Likes a new challenge

She is presented with technology at work she have never used before.
Is curious on how it works and would like to know more.
Finds the site through a friend that is an avid linux user.
Does not want to spend more money on knowing how to use it.
Enjoys doing puzzles such as fill in the blank, crosswords, and hangman.

Michael

16 years old
wants to make video games in college

Likes horror movies and gaming.
Volunteers at Target for their events.
Enjoys making pictures with graphics attached to them.

He gets curious about other technologies.
Knows about linux operating, but finds no need to use it, says "it can be done without it". Enjoys using Adobe Photoshop for his weekend projects on his MacBook pro and rarely does he use the terminal.
Finds this website looking to automate his projects.

Jacob

19 years old

Plays video games
Pitcher on his college baseball team

He was completely unaware about the Linux environment before college, but is in a major where he needs to use it all the time.
His dream job is working for Google.

Site A:
https://linuxjourney.com/

Description:
    LinuxJourney is a site that intends to teach the basics of how to use Linux through text tutorials. The site covers a variety of lessons ranging from basic command-line to a more complex packages topic. Topics such as the filesystem and networking are also introduced, and there are books recommended to the user if they want to further their knowledge. Lessons work by introducing the topic and commands necessary through text and then asking the user to complete an exercise and question, neither of which are required to progress.

Strengths:
Introduces a variety of topics about different Linux concepts
Starts from the basics and works up in complexity
All of the tutorials and resources are free

Weaknesses:
The site only uses written tutorials, there are no videos or any other presentation of information and the topics do not go too in-depth
There is no interactive shell, it is up to the user to either find another one online, or to test the commands within their own command line on their system
Each topic only has one question at the end, there is no in-depth way to test a person's understanding of the lesson
When the user is viewing a topic, there is no easy way to transition to a different topic without going back to the homepage and then choosing a different topic from there
No way to search for a specific topic or lesson

Conclusion:
    LinuxJourney has a lot of potential of being a great site to learn linux on, but it does not reach its full potential. The topics are short and not super in-depth and there is no way for the user to practice the concepts introduced or test themselves because of the way that the site is set up. There is no clear way to navigate between topics without returning to the homepage, although the range of topics offered covers a lot of what someone would need to learn to really understand Linux. Our site will make sure to include quizzes and other ways for users to test themselves, as well as in-depth topics.

Site B:
https://www.codecademy.com/

Description:
    Code Academy is a site intended to teach a variety of different coding languages and concepts to a variety of people. There are different learning plans offered for different jobs or markets that a person could want to enter that field, although many of the features necessary for that require a paid pro membership. Code Academy features interactive exercises for each topic, allowing the user to both read and then test out what they learn to try and really understand the concepts. Even though a lot of the upper level topics and features are saved for pro members, the free options work well to teach users the basics of different languages, such as syntax and file structure.

Strengths:
There is a large variety of languages offered on the site, attracting many different users
Topics are sorted into different paths, so the user can figure out what is relative to what they want to learn
Code Academy offers an interactive shell within their site, allowing the user to participate in different exercises to test their knowledge
For each topic, the basics are introduced first and then that knowledge is built upon

Weaknesses:
Certain sections and topics of the site do not dive too deep into the information, even at the higher level topics
Once the user is inside a topic and an exercise, trying to navigate to a different one is not super easy
Only some languages and lessons are free, with the others requiring a pricey pro membership
Some of the paid features are key to really learning a language or concept

Conclusion:
    If most of the features essential to learning different languages were not reserved for pro members, code academy would be an acceptable website to learn the basics of coding with. Instead it just leaves users with a rough idea of syntax and basic program construction and no real idea of how to approach a real project. Ideally our site would feature some of the best features of code academy, as well as more and being completely free for everyone.

Site C:
https://www.w3schools.com/

Description:
W3Schools is a free site that teaches a variety of languages and topics through examples and interactive shell. It can also act as a reference source to different languages, such as HTML, CSS, and SQL, because of the way that the site is structured and information is organized and presented. The site intends on teaching people coding in an easy-to-understand and straightforward way, also presenting information in a way that increases in topic complexity.

Strengths:
Every feature and lesson is completely free
Both specific examples and topics are available for each language offered
A shell is offered to allow people to try out the example code for each step and to change it and see what happens depending on what is changed
W3Schools can also act as a reference source to different languages
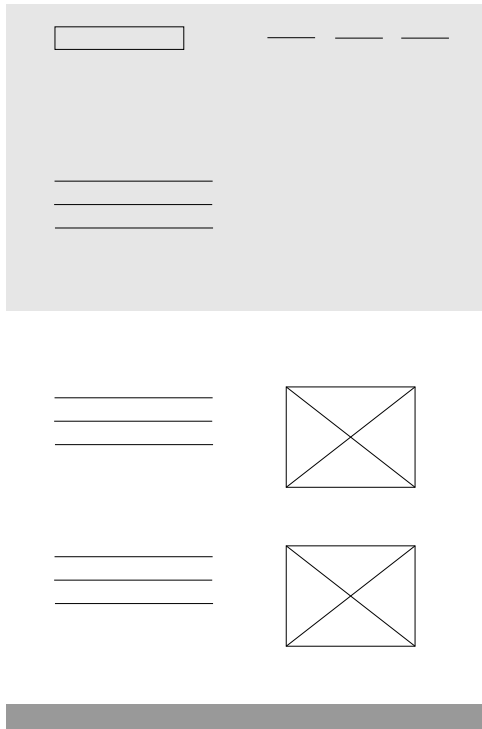
Weaknesses:
Navigating between different sections can be difficult, the user has to search for specific topics and sometimes there are duplicate results
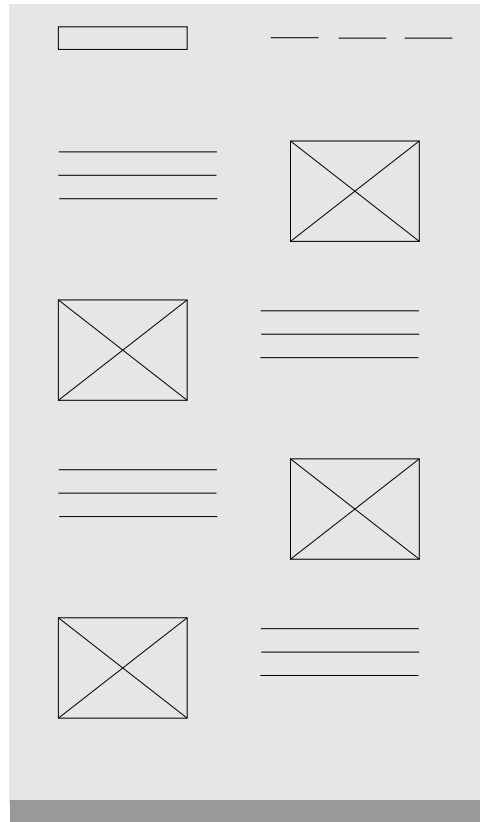Similar to most coding websites, not all concepts are gone in-depth enough to really learn the concepts

Conclusion:
Overall the site does a good job of introducing and teaching different coding topics and languages to people. The fact that everything is free is a nice feature, making it accessible to everyone. Our site will hopefully also be able to be used as a reference source in the same way that w3schools is, allowing people to both learn specific and general topics.
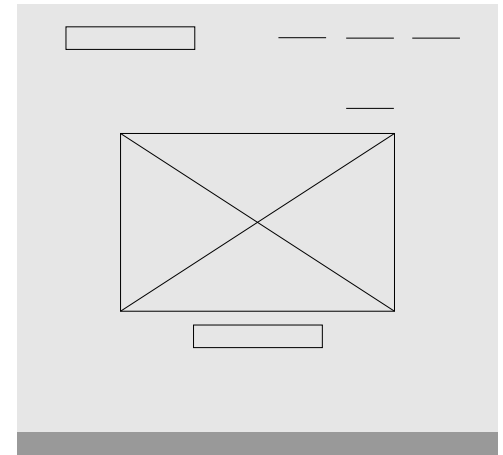
This is the home page. There will be a breif description at the top, then when you scroll down,
 - What is Linux?
 - History
 - How to install
 - Which distribution to choose
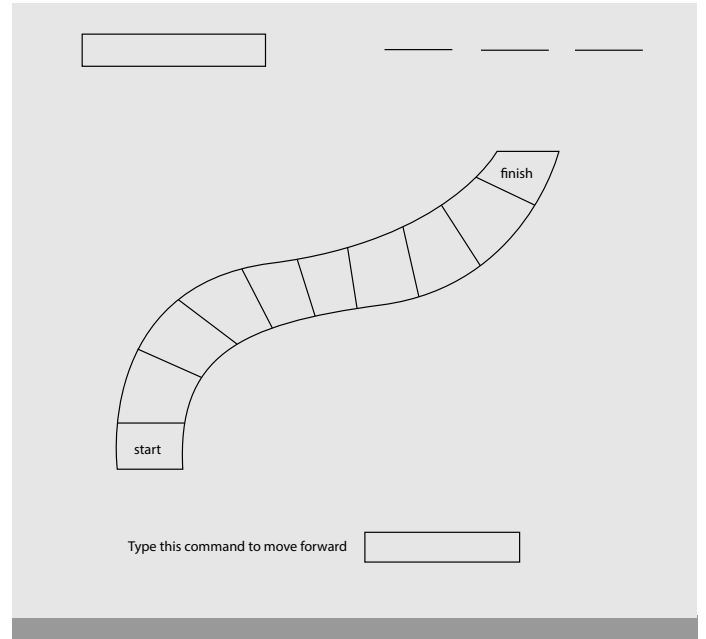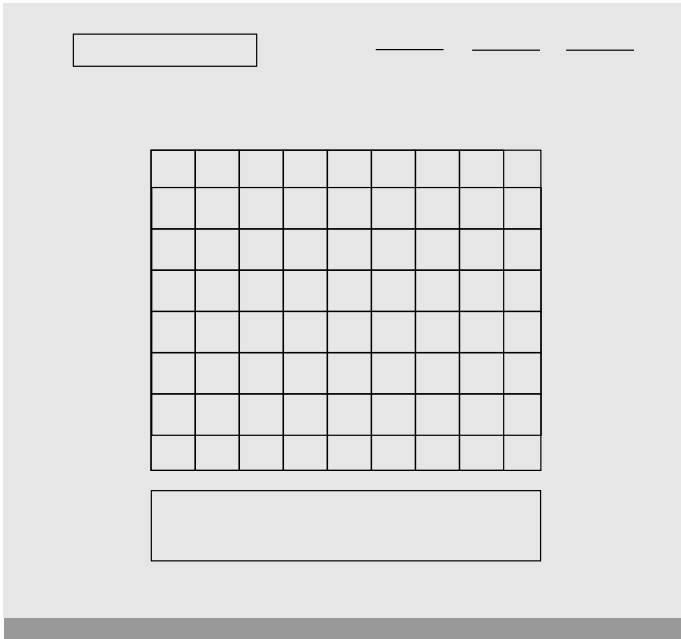 - The differences of each

getting started:
basic info for linux, discription, what it looks like etc
more in depth than about page

Flash Cards that help you remember the basic commands

The shell, basic commands including:
pwd, cd, ls, touch, file, cat, less, history, cp (Copy),
mv (Move), mkdir (Make Directory), rm (Remove), find, help, man, exit

click the button and the definition appears, there will be an option to see them all in list form

Crossward puzzle
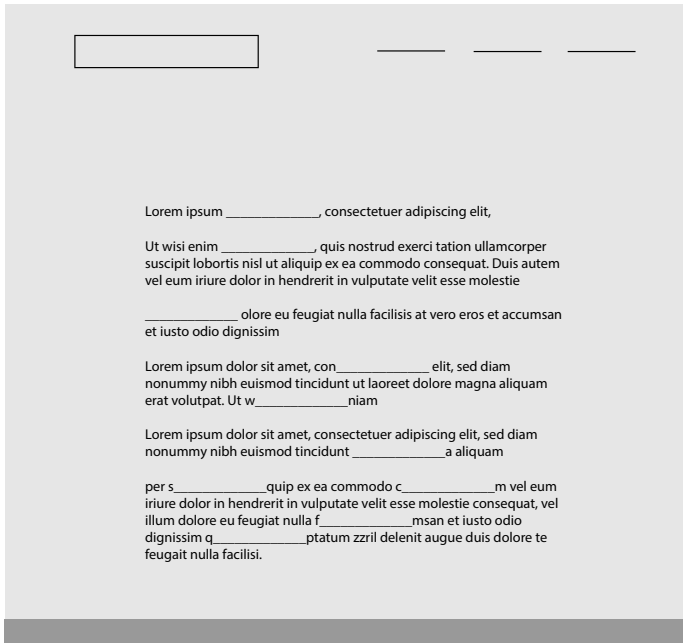Commands for playing with text and text manipulation includes:
stdout, stdin, stderr, pipe, cut, paste, head, tail, sort, grep
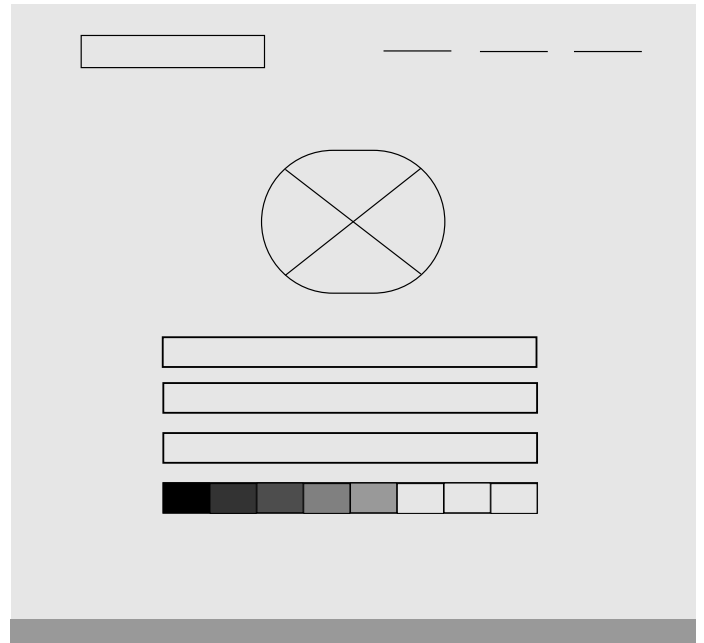Different types of text editors and their differences:
nano, vi, vim

when you fill in the entire word, the clue will drop opacity

Users and groups, differences between users with varying permissions, root, commands to
show user information including: /etc/passwd, /etc/shadow, /etc/group, User management tools

start

finish

Type this command to move forward

Lorem ipsum _____, consectetuer adipiscing elit,

Ut wisi enim _____, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie

_____ olore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim

Lorem ipsum dolor sit amet, con_____ elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut w_____niam

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt _____a aliquam

per s_____quip ex ea commodo c_____m vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla f_____msan et iusto odio dignissim q_____ptatum zzril delenit augue duis dolore te feugait nulla facilisi.

complete the sentences by filling in the right command

progress page/ personal account
has all your info and your progress in the games

logo

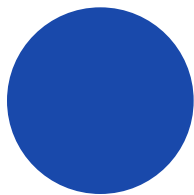## colors
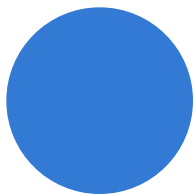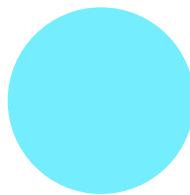
#6E81FD   #1949AB   #327AD3   #74EEFF

typeface

omnes medium
PT Sans Narrow