Dev Club

Lecture 1

The Basics

Outline

Linux Bash

Git Basics and Versioning

Basics of HTML

Styling - CSS and Bootstrap
  Styling your HTML
  Building Responsive Webpages

Basic Javascript (For UI)

Getting started with Linux

- ▶ Looks difficult to start with but is your best friend, Very important to learn working through CLI for developers, Gives access to internal structure that GUI can't access

Getting started with Linux

- ▶ Looks difficult to start with but is your best friend, Very important to learn working through CLI for developers, Gives access to internal structure that GUI can't access
- ▶ Set permission rights in CSC & GCL (CHMOD).

Getting started with Linux

▶ Looks difficult to start with but is your best friend, Very important to learn working through CLI for developers, Gives access to internal structure that GUI can't access

▶ Set permission rights in CSC & GCL (CHMOD).

▶ Sudo (is GOD!!!), Install an app -> sudo apt-get install git, Reach CSC from your rooms -> ssh cs517xxxx@ssh1.iitd.ac.in

Getting started with Linux

- ▶ Looks difficult to start with but is your best friend, Very important to learn working through CLI for developers, Gives access to internal structure that GUI can't access
- ▶ Set permission rights in CSC & GCL (CHMOD).
- ▶ Sudo (is GOD!!!), Install an app -> sudo apt-get install git, Reach CSC from your rooms -> ssh cs517xxxx@ssh1.iitd.ac.in
- ▶ Proxy Settings for terminal. VM an option to try but not a permanent alternate.

Getting started with Linux

- ► Looks difficult to start with but is your best friend, Very important to learn working through CLI for developers, Gives access to internal structure that GUI can't access
- ► Set permission rights in CSC & GCL (CHMOD).
- ► Sudo (is GOD!!!), Install an app -> sudo apt-get install git, Reach CSC from your rooms -> ssh cs517xxxx@ssh1.iitd.ac.in
- ► Proxy Settings for terminal.
  VM an option to try but not a permanent alternate.
- ► Short Task.

Getting started with Linux

▶ Looks difficult to start with but is your best friend, Very important to learn working through CLI for developers, Gives access to internal structure that GUI can't access

▶ Set permission rights in CSC & GCL (CHMOD).

▶ Sudo (is GOD!!!), Install an app -> sudo apt-get install git, Reach CSC from your rooms -> ssh cs517xxxx@ssh1.iitd.ac.in

▶ Proxy Settings for terminal.
VM an option to try but not a permanent alternate.

▶ Short Task. Try to make use of terminals on the CSC systems (ubuntu). Search for commands that you dont know.

Contributing and Collaborating

- Make a GitHub account.

Contributing and Collaborating

- Make a GitHub account.
- Certain basic commands - git clone, push, pull, reset, merge (Explore more while working..)

Contributing and Collaborating

- Make a GitHub account.
- Certain basic commands - git clone, push, pull, reset, merge (Explore more while working..)
- Version control, managing merge conflicts, local and remote

Contributing and Collaborating

- Make a GitHub account.
- Certain basic commands - git clone, push, pull, reset, merge (Explore more while working..)
- Version control, managing merge conflicts, local and remote
- Resources - https://try.github.io/
  Read at - http:
  //www.vogella.com/tutorials/Git/article.html

Contributing and Collaborating

- ▶ Make a GitHub account.
- ▶ Certain basic commands - git clone, push, pull, reset, merge (Explore more while working..)
- ▶ Version control, managing merge conflicts, local and remote
- ▶ Resources -https://try.github.io/
  Read at-http:
  //www.vogella.com/tutorials/Git/article.html
- ▶ A short Task -

Contributing and Collaborating

- Make a GitHub account.
- Certain basic commands - git clone, push, pull, reset, merge (Explore more while working..)
- Version control, managing merge conflicts, local and remote
- Resources -https://try.github.io/
  Read at-http:
  //www.vogella.com/tutorials/Git/article.html
- A short Task - Create your own account, create a new repo using git bash, make some edits, commit and push your changes.

HTML-The Page Layout Mechanism

- ▶ HTML stands for Hyper Text Markup Language.

HTML-The Page Layout Mechanism

- ▶ HTML stands for Hyper Text Markup Language. A markup language is used for the processing and presentation of text.

HTML-The Page Layout Mechanism

▶ HTML stands for Hyper Text Markup Language. A markup language is used for the processing and presentation of text.

▶ HTML tags, Attributes and Values

< a href = "www.abc.com" > Example < /a > of a tag.

HTML-The Page Layout Mechanism

- HTML stands for Hyper Text Markup Language. A markup language is used for the processing and presentation of text.

- HTML tags, Attributes and Values

  $< a \ href = "www.abc.com" > Example < /a > of \ a \ tag.$

- Basic Structure of an HTML page.

HTML-The Page Layout Mechanism

- HTML stands for Hyper Text Markup Language. A markup language is used for the processing and presentation of text.
- HTML tags, Attributes and Values

  $< a\ href = "www.abc.com" > Example < /a > of\ a\ tag.$

- Basic Structure of an HTML page.
- Add-ons - HTML Tables, images and divisions.

HTML-The Page Layout Mechanism

- ▶ HTML stands for Hyper Text Markup Language. A markup language is used for the processing and presentation of text.
- ▶ HTML tags, Attributes and Values

  < a href = "www.abc.com" > Example < /a > of a tag.

- ▶ Basic Structure of an HTML page.
- ▶ Add-ons - HTML Tables, images and divisions.
- ▶ Task - Try to create your own portfolio page. Put an image on it. You may want to use tables as well. Try out various formatting styles.

Outline

CSS

▶ Styling of HTML tags - Property and Value. Some common properties - color(rgb, hex code, rgba, etc.), position, margin, etc.

$$h1 \ \{font - family : Georgia; color : white; \}$$

CSS

▶ Styling of HTML tags - Property and Value. Some common properties - color(rgb, hex code, rgba, etc.), position, margin, etc.

$$h1 \ \{font - family : Georgia; color : white; \}$$

▶ Too many tags with similar properties or differentiating between two same tags but in different places?

CSS

▶ Styling of HTML tags - Property and Value. Some
  common properties - color(rgb, hex code, rgba, etc.),
  position, margin, etc.

  $$h1 \ \{font - family : Georgia; color : white; \}$$

▶ Too many tags with similar properties or differentiating
  between two same tags but in different places?
  Solution: Enclose within divisions, use of classes and ids

▶ Further Reading -
  https://www.codecademy.com/learn/learn-css

CSS

▶ Styling of HTML tags - Property and Value. Some
common properties - color(rgb, hex code, rgba, etc.),
position, margin, etc.

$$h1\ \{font-family: Georgia; color: white; \}$$

▶ Too many tags with similar properties or differentiating
between two same tags but in different places?
Solution: Enclose within divisions, use of classes and ids

▶ Further Reading -
https://www.codecademy.com/learn/learn-css

▶ Task - Your portfolio page doesn't look so well after all.
Add some styling and colors to it.

Outline

Bootstrap

- ▶ Inbuilt classes. Ease of usage. e.g. container, navbar, tabs, button etc.

Bootstrap

- ▶ Inbuilt classes. Ease of usage. e.g. container, navbar, tabs, button etc.
- ▶ Grid System and division into 12 parts. esponsive design.

Bootstrap

- Inbuilt classes. Ease of usage. e.g. container, navbar, tabs, button etc.
- Grid System and division into 12 parts. Responsive design.
- Further Reading - https: //www.w3schools.com/bootstrap/default.asp

Bootstrap

- Inbuilt classes. Ease of usage. e.g. container, navbar, tabs, button etc.
- Grid System and division into 12 parts. Responsive design.
- Further Reading - https: //www.w3schools.com/bootstrap/default.asp
- Task - Make your webpage mobile and tablet responsive. It is recommended that you add images as well.

Javascript - The addons to HTML and CSS

- A dynamic programming language that is used to change the DOM structure. (Output can be according to user interaction.)

Javascript - The addons to HTML and CSS

- ▶ A dynamic programming language that is used to change the DOM structure. (Output can be according to user interaction.)
- ▶ With HTML can provide fully versatile content.

Javascript - The addons to HTML and CSS

- A dynamic programming language that is used to change the DOM structure. (Output can be according to user interaction.)
- With HTML can provide fully versatile content.
- Can be used to create games , galleries, video-players and what not.

Javascript - The addons to HTML and CSS

- A dynamic programming language that is used to change the DOM structure. (Output can be according to user interaction.)
- With HTML can provide fully versatile content.
- Can be used to create games , galleries, video-players and what not.
- Its child jQuery provides countless extensions which can be inserted into a website with as few as 5 lines.

Javascript - The addons to HTML and CSS

- A dynamic programming language that is used to change the DOM structure. (Output can be according to user interaction.)
- With HTML can provide fully versatile content.
- Can be used to create games , galleries, video-players and what not.
- Its child jQuery provides countless extensions which can be inserted into a website with as few as 5 lines.
- Task - Try to create a page with a button which when clicked adds a line of text on your html page.

Javascript - The addons to HTML and CSS

- A dynamic programming language that is used to change the DOM structure. (Output can be according to user interaction.)
- With HTML can provide fully versatile content.
- Can be used to create games , galleries, video-players and what not.
- Its child jQuery provides countless extensions which can be inserted into a website with as few as 5 lines.
- Task - Try to create a page with a button which when clicked adds a line of text on your html page. Additional Task: Look up some interesting jquery plug-ins

Summary

▶ This lecture covered the basics that you require before moving on.

▶ Note: You will need to get a more hands-on approach by trial and failure to be proficient in this.

▶ Never forget your friends: Stack Overflow and Google, they shall help you more than anyone else.

▶ Take-away
  ▶ Complete all the tasks individually.
  ▶ Integrate them into one repo on your Github account.
  ▶ Remember: This is just the beginning.

For Further Reading I

📕 Codecademy
www.codecademy.com/learn.

📄 w3schools
www.w3schools.com.

📄 MDN
https://developer.mozilla.org/en-US/.