

## TR-104

### July

#### 23 July : **HTML/CSS**

1. Introduction html/css and rules and syntax
2. About Tags and code structure , Image tag, anchor tag
3. Class(span class) and id

#### **CORE PYTHON**

1. Introduction python and syntax
  2. List and examples and operations
  3. Range of indexes positive and negative
  4. Sets and operations on sets using python
- Practice

#### 24 July : **HTML/CSS**

4. Form validation , Form with fieldset and legend
5. Frames, frameset with rows and columns, IFrames(song and video play)
5. Overlapping

#### **CORE PYTHON**

6. Dictionaries(loop through it, nested, copy etc)
  7. Tuples and operations on it
  8. Get() function/ math function
  9. Range() function
  10. Continues and break function
- Practice

#### 25 July : **HTML/CSS**

7. Pseudoelements
8. Ordered and unordered list
9. Letter spacing and word spacing and visibility

#### **CORE PYTHON**

10. Loops and its types
  11. OOps( polymorphism, inheritance, encapsulation,data abstraction)
- Practice

#### 26 July : **HTML/CSS**

10. Class and id
- Give color to link's and four types-Visited, Hover, Active, Link

11. Display image and aligned it
12. Table designed and color it, Table border color

### **CORE PYTHON**

13. Access specifiers
14. Gui (Tkinter) , run tkinter for create  
(labels,checkbox,frames,menu,scrollbar,top-level,spinbox,panedwindow,canvas and arc)

Practice

27 July : Holiday

28 July : Holiday

29 July : **HTML/CSS**

13. Span tag
14. Text-shadow
15. Margin(left, right,top,bottom)
16. Box- sizing
17. Key- frame
18. Gradient( mixture of colors), Draw circle with gradient

### **CORE PYTHON**

Practice

30 July : **HTML/CSS**

23. Cursor
24. Current color
25. Media query, Media query for desktop
26. Overflow(visible,Hidden, Scroll,Auto)

Practice

31 July : **HTML/CSS**

19. Transform and transition
20. Image reflection
21. Max- width
22. Box- border, outline border, border image

Practice

## **August**

1.August: Introduction and simple code

Variable declaration(html,css)

Buttons using onclick

## Practice

2 August : Pd clas

3 August : Off

4 August: Off

5 August : Arrays (find position, length)

Array functions(sorting, reverse, push, pop, shift, unshift ,  
delete, filtering(some, every, filter)

Practice

6 August : typeof and Isarray

Multidimensional array and operations

Practice

7 August : Indexof, slice, splice, reduce

Array.map, Combine two arrays(concat)

Practice

8 August : for loop, for..in() loop, for..of() loop ,forEach() loop

Practice

9 August : Doubt Session

10 August : Off

11 August : Off

12 August : Loops and practicals using loops

Practice

13 August :Holiday

14 August:Practice

15 August :Independence Day

16 August: Pd class  
17 August : Off  
18 August : Off  
19 August : Holiday (Raksha-Bandhan)

## **DJANGO**

20 August : Introduction and installation  
    Folders structure  
    Framework of django  
21 August : Superuser administrator  
    Routing (url.py and add links)  
22 August: Render html page (create templates, settings.py, views.py, urls.py)  
23 August : pd class and doubt session  
24 August : Off  
25 August : Off  
26 August : Call Css and Js and in django  
    Call images in django  
27 August : Methods in django (get and post)  
    CSRF token in forms  
28 August : Model and how to create it in django  
    Update, delete and add new records  
29 August : Database and install dbsqlite  
    Send four values to databases (dbsqlite)  
30 August : Doubt Session  
31 August : Off

## **September**

1 September : Off  
2 September (Mon): Training guides(settings.py, views.py  
    (contact), models.py(request.post.get),  
    Forms values comes to views.py and store in Database (create views.py),  
    create admin.py, app.py, urls.py  
3 September (Tue): practice  
4 September (Wed): Forms values comes to views.py and store in Database  
    (create views.py)  
5 September (Thu): Practice  
6 September (Fri): Doubt Session  
7 September (Sat): Off  
8 September (Sun): Off  
9 September (Mon): Fetch queries using django  
10 September (Tue): Fetch queries using django

11 September (Wed): Practice  
12 September (Thu): Practice  
13 September (Fri): pd class Doubt Session  
14 September (Sat): Off  
15 September (Sun): Off

### **SQL**

16 September (Mon): Introduction databases and sql  
                                Installation of xamp  
                                Localhost/phpMyAdmin  
17 September (Tue): Basic queries (select, update, insert, delete)  
18 September (Wed): Operations on databases like (delete 3rd record,  
                                update records, print all records, print  
                                particular record, add new record, insert record)  
19 September (Thu): Queries:- Max, min, count,sum, avg  
20 September (Fri): Doubt Session  
21 September (Sat): Off  
22 September (Sun): Off

23 September (Mon): Orders (Ascending and descending)

24 September (Tue): Groups by  
Like command

25 September (Wed): Practice

26 September (Thu): Practice

27 September (Fri): Doubt Session

28 September (Sat): Off

29 September (Sun): Off

### **PYTHON LIBRARIES**

30 September (Mon): Numpy python library, Installation of numpy

Check version of numpy, Arrays using numpy (ndim method)

Slicing of arrays

31 September (Tue): Data types in python libraries ( string, integer, float,  
boolean, complex, time date, datetime, object, unicode, void)

Find datatype of array using numpy

Copy() and view() method in numpy

### **October**

1 Oct: Shape() Concatenate() method ( join 2d array along rows axis=1)

Stacking along rows using hstack() method ,

stacking along columns using vstack() method, stacking along

height using dstack() method

2 Oct: Split array into 3 parts ,Searching of array elements using  
where() method:- ( find indexes where values are even ) ,Sorting  
using numpy

3 Oct: Filtering of array Randint(), Randomly generate integer no, rand()  
for other type no, If randomly generate no according to size or  
length of array, If randomly generate no according to rows and columns

4 Oct: Pd class

5 Oct: Off

6 Oct: Off

7 Oct: Doubt Session

8 Oct: : Choice() method for random no, Shuffle() method:- varies position of no  
Shape() and size() method of array

9 Oct: Full() method:- create matrix, Char.multiply(),  
char.capitalize(), char.upper(), char.lower(), char.join(),  
char.equal():- for comparing elements

10 Oct: Dot() method:- Multiplication of two matrix,  
Transpose() method:- exchanging of matrix , Unique() method:-

for print   unique   valueRavel() method

11 Oct: Pd class

12 Oct:Off

13 Oct:off

14 Oct: Numpy statistical functions:-Amax(), Amin(), mean(), sum(),  
product(), peak to peak(), average(), percentile()

15 Oct: PANDAS LIBRARY, Introduction and check version  
Installation ,DataFrame() method, Dictionary of list  
Python pandas series,Read CSV files, Filter limited columns

16 Oct: Read Json files, Pandas data cleaning methods  
( like empty cells, wrong data, duplicate data) ,Dropna() method,  
Fillna(), replace only specified columns

17 Oct: Corr() method:- Finding relationship  
Plot() method :- Plotting using pandas and scatter() method

18 Oct: Pd class

19 Oct: Off

20 Oct:Off

21 Oct: MATPLOTLIB LIBRARY, Intro and installation  
Draw graph of x,y coor using matplotlib, Graph with multiple points  
Plotting without line, Default x points

22 Oct: Matplotlib markers using scatter,Customize marker colors, size, labels  
Marker edge color customize

23 Oct: Explode() method, Add shadow() method, Add legend()  
and legend with header

24 Oct: Create Histogram, Show random no in form of histogram  
Subplot() method , Create Barchart

25 Oct: Pd class

26 Oct: Off

27 Oct: Off

28 Oct: Color, width, height in barchart, Add grid lines to plot  
Show only x-axis/y-axis of grid lines, Change color , line style of grid

29 Oct:Practice

30 Oct:Practice

31 oct: Practice

## **November**

1 nov: Pd class

2 nov: off

3 nov: off

4 nov: project using frontend technologies

5 nov: project using frontend technologies

6 nov: project using frontend technologies

7 nov: project using frontend technologies

8 nov: Pd class

9 nov: off

10 nov: off

11 nov: project using frontend technologies

12 nov: project using frontend technologies

13 nov: conversion using django

14 nov; conversion using django

15 nov: Doubt Session

16 nov: off

17 nov: off

18 nov: database connectivity of project

19 nov: database connectivity of project

20 nov : Holiday

21 nov: Holiday

24 nov: Final testing

28 nov: Pd class

29 nov: off

30 nov; Off

## **PROJECT WORK (FINAL 20 DAYS)**

Documentation project report+ daily dairy +ppt+final report