Summary for 4ᵗʰ week internship:

In this week Koushik sir discussed the topic as follows:

1. Function
2. Blueprint
3. Class
4. Accessing the class
5. Constructor
6. Class properties
7. Array
8. Accessing an array
9. Objects
10. Conditions(if statement)
11. Loops(for, while)
12. Example programs

All of these concepts were explained briefly with an example.

On Monday Koushik sir discussed about functions.

Where in a function we can call the string which is declared as,

String a="surfboard";

String b="payments";

Function get function (a, b)

{

C=a+b;

}

Blueprint: Blueprint is the layout of an image. In that layout we can include properties and actions.

Class: class is an instance of object.

For example, a dog which has the properties like gender, breed, name, color, age.

We can include these properties in a class as follows:

```
Class Dog {

String name;

String gender;

Int age;

}
```

In the above example name, gender and age are the blueprint of the class Dog;

We can call the function using

```
Dog Dog1=Dog ("tommy","female","1");
```

We can call the function using the class and assigns the value as

```
Dog1.name;
```

Likewise,

```
Dog2.name;
```

Constructor: Without using the function we can call the class using constructor.

Example:

A dog has a properties like name, gender, age and a dog which barks, eats, sleeps, plays are all actions.

```
Class Dog

{

String name;

String gender;

Int age;

}

Dog (name, gender, age)

{

Name=name;

Gender=gender;
```

Age=age;

}

//constructor which calls the class name.

Void barks ()

{

Print ("barking");

}

Dog1.name;

Dog2.gender;

Dog3.age;

//A class which calls the properties.

Class: A class has two attributes:

1. Has something

2. Does something

Has something that includes the properties.

Example: A dog has name, age, gender as its properties.

Does something which performs some action.

Example: A dog which do barking, sleeping, playing, and eating. These are all some actions in which a dog can do.

On Tuesday I took leave due to my mom's health issues.

On Wednesday Today Koushik sir started revising the previous topic on function, class, class properties and methods with an examples.

Then today he took class on Array, how to access an array, objects and conditions.

Array: An array is a list of objects.

Example: list some list= [3,"hello","false","true"]

In this example array is declared using list with the name called some list and declared the value as 3, hello, false and true.

An Array is accessed using the **index value;**

Say for an example: [0] is assigned to 3

[1] Is assigned to hello

[2] Is assigned to false

[3] Is assigned to true

Print (some list [2])

->it displays "false".

Object: object is an instance of class;

It has a **key** and **value;**

For accessing an object we can use key

For example: a:3

b:5

here a and b are keys,3 and 5 are values

somelist("a")->it displays the value 3;

condition:if (condition)

int a=10;

{

If(a==10)

{

Print("correct")

}

Else

{

Print("wrong")

}

In this example, a is declared the value 10.

Then it checks the condition if 10==10 means then it prints "correct"

Else it prints "wrong".

== Means it checks both the sides that is LHS=RHS

Once if statement is executed then another part will not be executed.

Another example:

Int a=5;

If (a<10)

{

Print ("value is less than 10")

} else if (a==10)

{

Print ("value is equal")

}

Else if (a>10)

{

Print ("value is greater than 10)

}

First it checks the if condition then it goes to the next part and so on.

Loop: loop is repetition.

For example: for (i=0; i<10;i++)

{

Print (I)

}

The value of I is initialized to 0.

Then it checks the condition i<10.

Then iteration i++ takes place. The loop is repeated until it meets the condition.

For loop is the breakdown of if statement.

Example:

Int i=0;

If (i<10)

{

Print (i)

}

I++;

If (i<10)

{//loop continues

}

Json->JavaScript object notation.

Today I worked on my project where my mentor assigned me.The project is about to display a webpage which contains payment method option and card details and user information using html and css.

On Thursday i took leave due to my mom's illness.

On Friday the day started with working on my project. I started reading the docs in w3 schools to implement border under the text and its length. I have learned and find the solution. We can achieve it by using the tab **border bottom: solid grey 5px;** solid grey defines the color of the line and 5px defines the size of the line.

At 11.30am we had Koushik sir's class. Sir discussed about the topic which he had covered from Monday onwards. Then he started discussing about the topic **loops** and explained with many examples.

Loops: To avoid repetition we use the concept called loops. The most commonly used loops are

- **while**
- **For**

Syntax for while loop:

While (condition)

{

Body// it repeats the loop until it becomes false;

}

Example:

Int a=10; // a is assigned as 10

Int b=a; // b is assigned as a

Print ("a");

Print ("b"); //b prints the address of a. It never prints the value;

Int a=30;

Print (a);

Example:

Example using with return and without using return how it works:

Int a=10;

Int b=20;

Int addition (a, b)

{

Return a+b;

}

//inside the function we use return statement so it returns the value by adding it.

Int a=10;

Int b=20;

Int add (Int x, Int y)

{

Return x+y;

}

Int c=add (a, b)

Print(c);

//first it calls the function add (a, b).

The value of a and b is assigned to Int x and Int y as 10, 20;

Then it adds the value and return to the function and prints the value.

In this example, we use the return statement inside the function. When we calls the function it searches for the variables a and b which is declared globally and performs the function.

Example:

String text1="hello";

String text2="hai";

Void somefunc ()

{

Print ("text1+text2");

}

Void someotherfunc ()

{

String text3="hey"; //declared inside the function cannot be accessed;

}

Void newfunc ()

{

Print ("text3");

}

Somefunc ();

Someotherfunc ();

Newfunc ();

The output of this program is

Hello hi

Undefined //the variable is declared inside the function cannot be accessed so it is undefined.

Example:

String text1="hello";

String text2="hai";

Void somefunc ()

{

String text3="hey";

}

Void someotherfunc ()

{

String text4="there";

}

Print (text4);

Someotherfunc ();

Print (text4);

Output:

Undefined//the variable is declared inside the function it never prints the value;

Undefined//it checks inside the function and goes to the top if it is declared globally then it prints the value else it is undefined.

Koushik sir wrote many examples and we discussed about the output with him. I got the clear understanding from that examples about the function declaration and calling the function and all.

After that we went to lunch break.

From 2pm to 3.30pm I cleared the doubts on algorithm which I didn't completed with my mentor. Richy explained detaily about the problem which gave me to understand the problem logically by giving some examples.

From 3.30pm to 4 pm Koushik sir gave the printout to everyone which contains some problems regarding coding using the function. He told us to write the output for each program. The problem is given to check whether we understand the concept where he taught in the morning session.

From 4.00 pm to 5.30 pm we have meeting with Haskin sir about the internship. He made a conversation with us how the internship is going and during these 3 weeks what are all we learned from the mentors and he asked whether we interns achieve the goal what we set in the beginning and all.

The one thing from this meeting I learned is that we should take **responsibility and ownership** to achieve our goal. Inspite of doing for others we people should take responsibility to complete the task is the most important in achieving the goal.

Then he showed some previous intern batch write ups without using AI how they presented the write ups. Generally write ups is given only for our understanding like how we understood the topic they are discussing where we recall those things happened in the class. These are all the points we should keep in mind while writing the summary of that day. Through his conversation I got a positive mindset like how we achieve the goal by taking responsibility and ownership by ourselves.

From 5.30pm to 6.30pm I had meeting with priya about the project. She gave some inputs about the project and she gave me some task regarding flex box, how to order the flex box in row wise and column wise using the flex box properties. I completed the task she gave to me and she told me to implement these flex box properties in my project.

Then we discussed about the problems where Koushik sir gave to us in the afternoon. Then she told me to complete the problem on Monday which Koushik sir gave to us and also she told me to complete the UI design of the project on Monday.

This week I worked on my project where my mentor assigned me.The project is about to display a webpage which contains payment method option and card details and user information using html and css. In this project I used flex box

and its properties to design the webpage. Using html I designed the webpage and by using the css I styled the webpage like color, alignments, background image and all. In this week I learned many new concepts in html and css. By implementing what I learned into the project makes me to understand the concepts very well.