ICP5 – Group 12

Sri Nikhitha Boddapati – sb4dz@umsystem.edu - 16322565

GitHub link: https://github.com/Srinikhitha98/Web-Mobile-Dev-Spring-2022/tree/main/Web/ICP5

Sukumar Bodapati – sb5zh@umsystem.edu - 16326105

GitHub link: https://github.com/sukumarbodapati/Web-Mobile-Spring-2022/tree/main/Web/ICP5

ICP5: Angular

Outcomes of ICP5:

Angular is a frond-end framework which enhances the JS for building the applications.

Objective:

To develop a to do list application and a counter using the Angular.

Initially we created a html page which has two buttons for the tasks.

1. Counter-When user clicks on counter, UI displays the counter for the women's day event.
2. To do List-When user clicks on the to do list, user can see his to do list and can also edit his list.

Task 1: To Do List

HTML:

- Created html page with a placeholder to enter the to do list item, button to add the item to list .
- For the items we have added, we can either remove them or complete them. Created table for the list of items
- Added bootstrap to the html to make it responsive web design and to style the page.

App.Component.ts:

Like JavaScript, this file has the code that controls the behavior of the page. As per the requirements, we must write three methods for add the to-do list items, delete the item, mark the item when it is done.

- Define the list of items and a string element newTd for the input.
- Method to add: If the entered string is empty, need to pop an alert with the text "Please enter a new to do value" else the string will be pushed to the list of items.
- Method to delete: User can delete the item by clicking on the delete button on the UI page. When user clicks on the delete button it triggers this delete method when the items will be popped out from the list.
- Method to mark the items are done User can make the listed items as done by clicking on the to do list items. The selected item will be marked as done.

Created name and completed Boolean variables in the module.

We have pre-defined some of the to do list values. User can delete or modify them accordingly.

Task 2: Counter

HTML:

Created a HTML page which displays the count down.

App.Component.ts:

- Initialized the counter string and countdown element.
- Assign the countdown element with the event date and convert into milli seconds.
- Since the counter must run continuously, we have used set Interval method to call the function continuously to get the countdown.
- Declare another variable and assign it with today's date.
- Calculate the difference between the event date and today's date.
- Calculate the hours, days, minutes, seconds based on the logic.
- Assign the value to the string to display.

Code:

1.To-Do list logic:

```typescript
// Write code to push new item
submitNewItem() {
  if(this.newTd){
    let tdl=new TDL();
    tdl.name=this.newTd;
    tdl.completed=true;
    this.tdls.push(tdl);
    this.newTd=''

  }else{
    alert('Please enter a new todo value')
  }
}

// Write code to complete item
completeItem(id:number) {
  this.tdls[id].completed=!this.tdls[id].completed;
}

// Write code to delete item
deleteItem(id:number) {
  this.tdls=this.tdls.filter((v,i)=>i!==id)
}

}
```

2.Counter Logic:

```
}
//created a new element and assigned the event date
coudown = new Date("march 10, 2022 15:35:25").getTime();
//this method calls the function continously with a time delay if ne
x = setInterval(() => {
  //Assign with the todays and convert into milliseconds
  var today = new Date().getTime();
  //calculate the difference between event date and today's date
  var diff = this.coudown - today;
  //calculate the days,hours,minutes,seconds
  var days = Math.floor(diff / (1000 * 60 * 60 * 24));
  var hrs = Math.floor(diff % (1000 * 60 * 60 * 24) / (1000 * 60 * 6
  var min = Math.floor(diff % (1000 * 60 * 60) / (1000 * 60));
  var sec = Math.floor(diff % (1000 * 60) / (1000));
  //Assisgn all the value to the counter string
  this.counter = days + " d " + hrs + "h " + min + "m " + sec + "s";
```

Output:

TodoList	Counter

Counter:

TodoList	Counter

Counter

International Women's Day

17 d 17h 18m 45s

Event date : March 8,2022

Todo List:

TodoList	Counter

To Do List

Enter Todo value	Add ToDo list

1	ICP Submission	🗑
2	Groceries	🗑
3	~~Travelling~~	🗑
4	Shopping	🗑
5	Meeting	🗑