Text Editor using Angular JS

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Aim

To create a text editor using AngularJS.

Procedure

- Import angular js script.

- Have options such as cut, copy, paste and new, open, save in a dropdown navigation bar.

- On clicking these buttons, their respective functions are called angular controller using ng-click.

- Below this is an area given where text is to be entered.

- For cut function the string in the text area is copied to the clipboard and replaced by an empty string in the text area.

- For copy function the string selected is copied in to the clipboard.

- For paste function the string in the clipboard is pasted on the text area.

- For save function, the data in the text area is stored as a plaintext file with the provided name.

Code

```html
<!DOCTYPE html>
<html>
<head>
        <title> Text Editor </title>
        <script
→   src="https://cdnjs.cloudflare.com/ajax/libs/angular.js/1.8.2/angular.js"></script>
        <style type="text/css">
                .dropbtn
                {

                        background-color: #4CAF50;
                        color: white;
                        padding: 16px;
                        font-size: 16px;
                        border: none;
                        cursor: pointer;
                }
                .dropdown
                {
```

```
            position: relative;
            display: inline-block;
        }

        .dropdown-content
        {
            display: none;
            position: absolute;
            background-color: #f9f9f9;
            min-width: 160px;
            box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
            z-index: 1;
        }

        /* Links inside the dropdown */
        .dropdown-content a
        {
            color: black;
            padding: 12px 16px;
            text-decoration: none;
            display: block;
        }

        /* Change color of dropdown links on hover */
        .dropdown-content a:hover
        {
                background-color: #f1f1f1
        }

        /* Show the dropdown menu on hover */
        .dropdown:hover .dropdown-content
        {
            display: block;
        }
    </style>
</head>
<body  ng-controller = "app" ng-app = "myapp">

    <div style="display: flex; text-align: center; align-items: center; flex-flow:
    ↪  column;">
        <div style="width: 500px">
                    <h3> All Files</h3>
        </div>
        <table  ng-repeat = "x in list track by $index" >
                <tr> <td style="width: 500px"> <span style="float:left;"> {{
                ↪  x.fileName }}              </span>
                    <button style = "float:right" ng-click = "x.show =
                    ↪  toggle(x.show); x.text = toggle2(x.text); save(); " >
                    ↪  {{ x.text }} </button>
                        <button style = "float:right"
                        ↪  ng-click="downloadFile(x.fileName, x.data); "
                        ↪  >Download </button>
                        <button style = "float:right" ng-click="open(x.data,
                        ↪  x.fileName); " >Open</button>
                </td> </tr>
                <tr> <td> <textarea  ng-hide = "x.show" style=" height: 300px;
                ↪  width: 500px;" ng-model = "x.data" readonly="true">
                ↪  </textarea> </td> </tr>
        </table>

        <div style="width: 500px;">
```

2

```html
                <span class = "dropdown" style="float: left;">
                        <button class="dropbtn">File</button>
                        <div class="dropdown-content">
                            <a href="#" ng-click = "upload_show=false;
                            ↪   newfile_show = true; newFileName ='';
                            ↪   newFileData='' ">New</a>
                            <a href="#" ng-click =
                            ↪   "Save(newFileName,newFileData);">Save</a>
                            <a href="#"  ng-click = "upload_show=true;
                            ↪   newfile_show = false; ">Upload</a>
                </div>

                </span>
                <span class = "dropdown" style="float: left;">
                        <button class="dropbtn">Edit</button>
                        <div class="dropdown-content">
                            <a href="#" onclick = "cutit()">Cut</a>
                            <a href="#" onclick = "copyit()">Copy</a>
                            <a href="#" ng-click="pasteit()">Paste</a>
                </div>

                </span>
                <div class = "upload_cont" ng-show = "upload_show">
                        <h3> Upload File </h3>
                        <table>
                                <tr>
                                        <td>Upload : </td>
                                        <td><input type="file"
                                        ↪   id="fileToLoad"></td>
                                        <td><button  ng-click =
                                        ↪   "loadFileAsText();
                                        ↪   ">Open</button></td>
                                </tr>
                        </table>
                </div>
                <div class ="newFile" ng-show = "newfile_show">
                        <h3> Create New File </h3>
                        <form>
                                <div style="text-align: left;"> File Name :
                                ↪   <input ng-model = "newFileName"> </div>
                                <br>
                                <textarea class="js-cuttextarea" ng-model =
                                ↪   "newFileData" style="padding:0px; height:
                                ↪   200px; width: 500px;" placeholder="Enter
                                ↪   Text">
                                </textarea>
                        </form>

                </div>
        </div>
</div>
<script type="text/javascript">

        var cutTextareaBtn = document.querySelector('.js-textareacutbtn');
        function cutit()
        {
          var cutTextarea = document.querySelector('.js-cuttextarea');

          var successful = document.execCommand('cut');
          var msg = successful ? 'successful' : 'unsuccessful';
          console.log('Cutting text command was ' + msg);
```

```javascript
}
function copyit()
{
        var cutTextarea = document.querySelector('.js-cuttextarea');
    var successful = document.execCommand('copy');
    var msg = successful ? 'successful' : 'unsuccessful';
    console.log('Cutting text command was ' + msg);
}
angular.module("myapp",[]).controller('app', function($scope)
{
        $scope.list = JSON.parse(localStorage.getItem('Array'));
        if($scope.list==null)
        {
                $scope.list = [];
        }
        $scope.pasteit =  function()
        {
                var cutTextarea =
                ↪   document.querySelector('.js-cuttextarea');
                navigator.clipboard.readText().then(
                ↪   function(clipText)
                {
                        prev = "";
                        if(cutTextarea.selectionStart!=0)
                                prev =
                                ↪   cutTextarea.value.substring(0,
                                ↪   cutTextarea.selectionStart);
                        next = "";

                        ↪                               if(cutTextarea.selecti
                                next =
                                ↪   cutTextarea.value.substring(cutTextarea.selecti
                                ↪   cutTextarea.value.length);
                         console.log(prev+ clipText +next);
                        console.log("Clip :" + clipText);
                        cutTextarea.value = prev + clipText + next;
                        $scope.newFileData = cutTextarea.value;
                        $scope.$apply();
                });
        }
        $scope.loadFileAsText = function()
        {
                let fileToLoad =
                ↪   document.getElementById("fileToLoad").files[0];
                let fileReader = new FileReader();
                let new_obj =
                {
                        fileName : fileToLoad.name,
                        data :"",
                        show : true,
                        text : "Show"
                };
                fileReader.onload = function(fileLoadedEvent)
                {
                        let textFromFileLoaded =
                        ↪   fileLoadedEvent.target.result;
                        new_obj.data = textFromFileLoaded;
                        $scope.upload_show = false;
                        $scope.newfile_show = true;
```

```javascript
                    $scope.newFileData = new_obj.data;
                    $scope.newFileName = new_obj.fileName;
                    $scope.$apply();
                    console.log(new_obj);
            };
            fileReader.readAsText(fileToLoad, "UTF-8");
    }
    $scope.Save = function(fileName, fileData)
    {
            if(fileName==null)
            {
                    alert("Enter File Name");
                    return false;
            }
            let new_obj =
            {
                    fileName : fileName,
                    data : fileData,
                    show : true,
                    text : "Show"
            };
            $scope.list.push(new_obj);
                    save();
            $scope.$apply();

    }
    $scope.open =  function(fileName,data)
    {
            $scope.upload_show = false;
            $scope.newfile_show = true;

            $scope.newFileData = fileName;
            $scope.newFileName = data;
    }
    $scope.downloadFile = function(fileName,data)
    {

            var textToSaveAsBlob = new Blob([data],
            ↪  {type:"text/plain"});
            var textToSaveAsURL =
            ↪  window.URL.createObjectURL(textToSaveAsBlob);
            var fileNameToSaveAs = fileName;
            var downloadLink = document.createElement("a");
            downloadLink.download = fileNameToSaveAs;
            downloadLink.innerHTML = "Download File";
            downloadLink.href = textToSaveAsURL;
            downloadLink.style.display = "none";
            downloadLink.click();
    }
    $scope.save = function()
    {
            localStorage.setItem("Array",
            ↪  JSON.stringify($scope.list));
    }
    save = function()
    {
            localStorage.setItem("Array",
            ↪  JSON.stringify($scope.list));
    }
    $scope.toggle = function(x)
    {
```

```
                              return (x^true);
                }
                $scope.toggle2 = function(x)
                {
                        if(x==='Show') return 'Hide';
                        else return 'Show';

                }
        })
    </script>
</body>
</html>
```
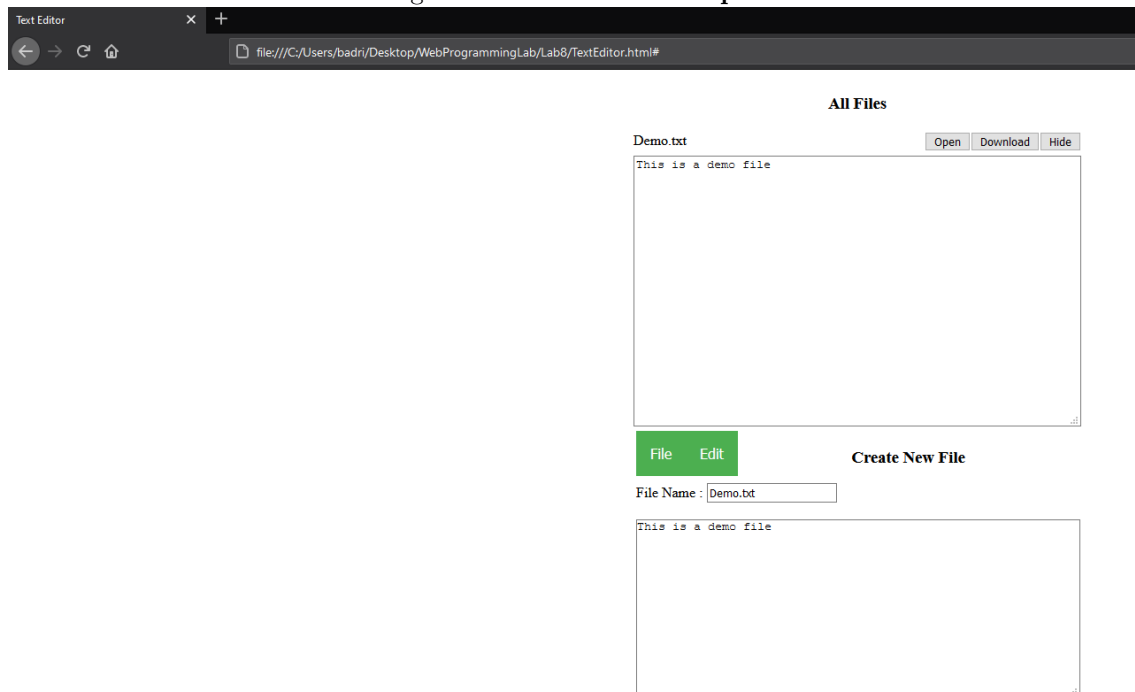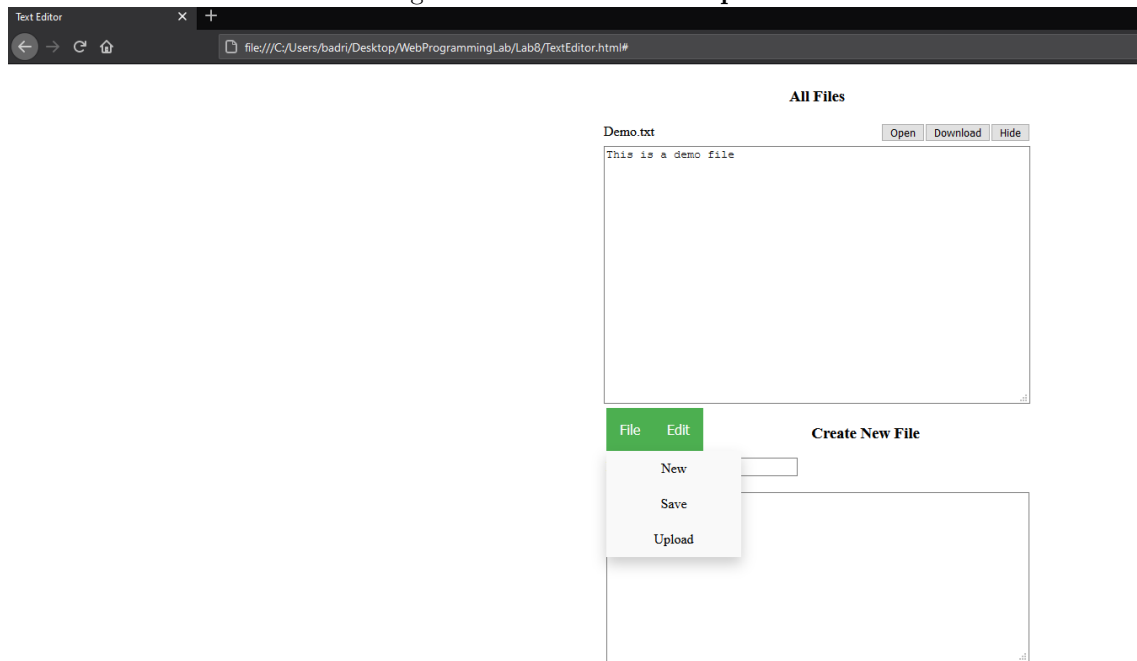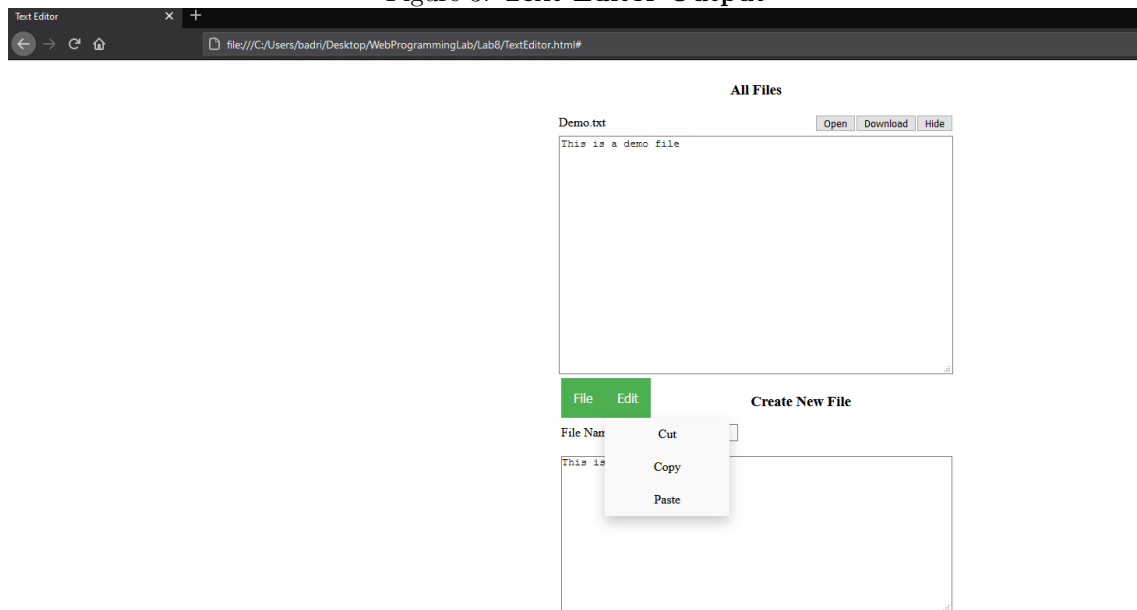
Output

Figure 1: **Text Editor Output**

Figure 2: **Text Editor Output**

Figure 3: **Text Editor Output**

Result

Thus the text editor was created and the output was verified successfully.