Fixed Deposit Closure Calculator

Please follow below steps to integrate Fixed Deposit Closure Calculator In your website

Step 1: Add Plugins:

- JQuery: Download JQuery Plugin from the following link-(https://www.cdnpkg.com/datepick/file/jquery.plugin.min.js/
)
- Bootstrap: Download JQuery Plugin from the following link-(https://getbootstrap.com/docs/4.6/getting-started/download/)
- Canvas Js: Download JQuery Plugin from the following link-(https://canvasjs.com/assets/script/canvasjs.min.js)

Step 2: Create a HTML Page for Fixed Deposit Calculator:

• FDclosurecalculator.html:

```
<div class="mt-3 calculator">
    <center>
       <h4 class="mb-2">Fixed Deposit Closure Calculator</h4>
    </center>
  </div>
  <div class="row" style="border: 3px solid #0099CC; ">
    <div class="col-8 mb-3 mt-2">
       <div>
         <button class="btn btn-primary " onclick="location.href =</pre>
'./index.html'"> Homepage </button>
       </div>
    </div>
    <div class="row">
       <div class="d-flex justify-content-start">
         <div class="col-lg-6">
            <div class="row mb-2">
              <div class="col-md-8">
              <label class="">Types of Customer</label>
            </div>
            <div class="col-md-4">
              <div class="">
              <input class="flex-column form-check-input" type="radio"</pre>
value="0" id="normal" name="rd"
                 checked="checked">
              <label class="form-check-label" for="normal">Normal</label>
            </div>
              <div class="">
              <input class="flex-column form-check-input" type="radio"</pre>
value="0.5" id="seniorCitizen" name="rd">
              <label class=" form-check-label" for="seniorCitizen">Senior
```

```
Citizen</label>
            </div>
         </div>
         </div>
            <div class="row mb-2">
              <div class="col-8"> <label class="mb-3"
for="rdCrationDate">FD Creation Date</label></div>
              <div class="col-4"> <input class="form-control" type="date"</pre>
                   id="rdCrationDate" value="2020-03-25"></div>
              </div>
            <div class="row mb-2">
              <div class="col-8">
                 <label class="" for="amountOfDeposite">Amount Of
Deposite</label>
              </div>
              <div class="col-4">
                <input class="form-control" type="text"</pre>
                   id="amountOfDeposite" value="1000" />
              </div>
            </div>
            <div class="row mb-2">
              <div class="col-8">
                <label for="penaltyRate">Penalty Rate(Rate Below
Notes)</label>
              </div>
              <div class="col-4">
                <select name="interest" id="penaltyRate" class="form-</pre>
select"
```

```
<option class="dropdown-item" value="0">0</option>
                   <option class="dropdown-item"</pre>
value="0.5">0.5</option>
                   <option class="dropdown-item" value="1">1</option>
                 </select>
              </div>
            </div>
            <div class="row mb-2">
              <div class="col-8">
                 <label class="mb-3" for="matDate">Maturity Date</label>
              </div>
              <div class="col-4">
                <!-- <p id="date" class="float-sm-end"> -->
                <input type="text" id="maturitydate" readonly class="form-</pre>
control disabled">
              </div>
            </div>
            <div class="row mb-2">
              <h6>Maturity Details</h6>
            </div>
            <div class="row mb-2">
              <div class="col-8">
                <label class="" for="rateOfIntrest">Rate Of
Interest(%)</label>
              </div>
              <div class="col-4">
                <!-- <p id="rateOfIntrest" class="float-sm-end">4.9% --
                <input type="text" id="rateOfIntrest" readonly class="form-</pre>
```

```
control disabled" value="5.2%">
                <input type="hidden" id="hdnrateOfIntrest" value="5.2">
              </div>
           </div>
           <div class="row mb-2">
              <div class="col-8">
                <label class="" for="matAmount">Maturity Amount
              </div>
              <div class="col-4">
                <!-- <p id="matAmount" class="float-sm-end"> -->
                <input type="text" id="maturityAmount" readonly</pre>
class="form-control disabled">
              </div>
           </div>
           <div class="row mb-2">
              <div class="col-8">
                <label class="" >Principle Amount</label>
              </div>
              <div class="col-4">
                <!-- <p id="matAmount" class="float-sm-end"> -->
                <input type="text" id="principleAmount" readonly</pre>
class="form-control disabled">
              </div>
           </div>
           <div class="row mb-2">
              <div class="col-8">
                <label class="mb-3" for="intrestAmount">Interest
Amount</label>
```

```
</div>
              <div class="col-4">
                <!-- <p id="intrestAmount" class="float-sm-end"> -->
                <input type="text" id="intrestAmount" readonly</pre>
class="form-control disabled">
              </div>
            </div>
            <div class="row mb-2">
              <h6>Tenure</h6>
            </div>
            <div class="row mb-2">
              <div class="col-8">
                 <label class="" for="year">Years</label>
              </div>
              <div class="col-4">
                <!-- <p id="year" class="float-sm-end "> -->
                <input type="text" id="year" readonly class="form-control</pre>
disabled">
              </div>
            </div>
            <div class="row mb-2">
              <div class="col-8">
                <label class="" for="month">Month</label>
              </div>
              <div class="col-4">
                <!-- <p id="month" class="float-sm-end"> -->
                <input type="text" id="month" readonly class="form-control</pre>
disabled">
              </div>
            </div>
```

```
</div>
         <!-- table -->
         <div class="col-lg-6 mx-4">
           <div class=" ">
             <div class="form-check form-check-inline">
                <input class="form-check-input" type="radio"</pre>
name="inlineRadioOptions" id="graph"
                  value="option1">
               <label class="form-check-label" for="inlineRadio1">
Graph</label>
             </div>
             <div class="form-check form-check-inline">
                <input class="form-check-input" type="radio"</pre>
name="inlineRadioOptions" id="table"
                  value="option2" checked>
               <label class="form-check-label"</pre>
for="inlineRadio2">Table</label>
             </div>
           </div>
           <div class=" ">
           <div id="dvTableResult" class="d-block w-50">
             <table id="showTable" class="table table-bordered border-
primary w-auto">
               </div>
```

Step 3: Create a JavaScript file for Fixed Deposit Closure Calculator:

a) FDclosureCalculator.js

```
$(function showGraphTable() {
    $("#graph").click(function () {
     $("#dvChartResult").removeClass('d-none');
     $("#dvTableResult").addClass('d-none');
});

$("#table").click(function () {
    $("#dvChartResult").addClass('d-none');
    $("#dvTableResult").removeClass('d-none');
});

});
```

```
$(function() {
 //calculating Maturity Amount
 $("#penaltyRate").change(function () {
  var penaltyRate = $("#penaltyRate :selected").val();
  var customerType = $("#rd").val(); //p
  var rdCreationDate = new Date($("#rdCrationDate").val()); //i
  var timePeriod = $("#timePeriod").val(); //n
  var amountOfDeposite = $("#amountOfDeposite").val();
  var past date = new Date(rdCreationDate);
  var current date = new Date();
  var difference =
   current date.getFullYear() * 12 +
   current_date.getMonth() -
   (past date.getFullYear() * 12 + past date.getMonth());
  console.log(difference);
  $("#month").text(difference.toFixed(0));
  var yearDiff = difference / 12;
  $("#year").text(yearDiff.toFixed(1));
  console.log(yearDiff.toFixed(1));
  var timePeriod = yearDiff + difference / 12;
  if (penaltyRate == 0) {
   $("#rateOfIntrest").html(4.9+"%");
   (e = Math.pow(1 + 4.9 / 1200, timePeriod / 12)),
    (d = Math.pow(1 + 4.9 / 1200, -1 / 12));
   console.log("12");
   console.log(maturityAmout);
  } else if (penaltyRate == 0.5) {
```

```
$("#rateOfIntrest").html(4.4+"%");
   (e = Math.pow(1 + 4.4 / 1200, timePeriod / 12)),
    (d = Math.pow(1 + 4.4 / 1200, -1 / 12));
  } else if (penaltyRate == 1) {
   $("#rateOfIntrest").html(3.9+"%");
  (e = Math.pow(1 + 3.9 / 1200, timePeriod) / 12),
    (d = Math.pow(1 + 3.9 / 1200, -1 / 12));
  }
 var maturityAmout = (amountOfDeposite * (e - 1)) / (1 - d);
 $("#matAmount").text("Rs." + maturityAmout.toFixed(0));
 $("#intrestAmount").text(
   "Rs." + (maturityAmout - amountOfDeposite * timePeriod).toFixed(0)
 );
 // table value
 $("#finacialYear").text("FY." + rdCreationDate.getFullYear());
 $("#intrest").text(
  (maturityAmout - amountOfDeposite * timePeriod).toFixed(0)
 );
if (document.getElementById("graph").checked) {
   var chart = new CanvasJS.Chart("chartContainer", {
    animationEnabled: true,
    theme: "light2", // "light1", "light2", "dark1", "dark2"
    data: [
      type: "column",
```

```
dataPoints: [
        { y: 10, label: "0" },
        { y: 20, label: "1" },
        { y: 30, label: "2" },
      ],
      },
    ],
   });
   chart.render();
  }
 });
});
$( document ).ready(function() {
//$("#penaltyRate").trigger( "change" );
 calculateFD();
function MonthDifference(d1, d2) {
 var months;
 months = (d2.getFullYear() - d1.getFullYear()) * 12;
 months -= d1.getMonth();
 months += d2.getMonth();
 return months \leq 0? 0: months;
function YearDifference(d1, d2) {
 var yr = [];
 for (var i=d1.getFullYear(); i<=d2.getFullYear(); i++) {
   yr.push( i );
```

```
return yr.length-1;
function calculateFD(){
 var rateofintrest=5.2;
 var rdCreationDate = new Date($("#rdCrationDate").val());
 var current date = new Date();
 var maturityAmount=0,intrestAmount=0,principleAmount=0;
 var temprdCreationDate= new Date($("#rdCrationDate").val());
 var temp1= new Date($("#rdCrationDate").val());
var i=(rateofintrest-
$('#penaltyRate').val())+parseFloat($('input[name="rd"]:checked').val());
var arraydataPoints= [];
var p = $("#amountOfDeposite").val(),
  n = MonthDifference(rdCreationDate, current date),
  y=YearDifference(rdCreationDate,current date);
  var maturity=p*Math.pow((1+((i/100)/(n/3))), (n/3)*y);
$('#hdnrateOfIntrest').val(i.toFixed(1));
$('#rateOfIntrest').val(i.toFixed(1));
$('#month').val(n);
$('#year').val(y);
$('#maturityAmount').val(maturity.toFixed(2));
$('#intrestAmount').val((maturity-p).toFixed(2));
$('#principleAmount').val((p));
$('#maturitydate').val(getTodayDate());
```

```
$('#bodyshowTable').empty();
$('#bodyshowTable').append(' Financial Year Wise
Interest Amountclass="w-auto col-1">Financial
YearInterest');
var temprdCreationDate= new Date($("#rdCrationDate").val());
var yeardiff=YearDifference(new
Date($("#rdCrationDate").val()),current date);
for(var j=0;j<yeardiff;j++){
 var newdate= new
Date(temprdCreationDate.setFullYear(temprdCreationDate.getFullYear()+1));
var yearwiseintrest=parseFloat(((maturity-p)/yeardiff).toFixed(2));
  $('#bodyshowTable').append('FY. '+ newdate.getFullYear()
+' '+ ((maturity-p)/yeardiff).toFixed(2) +' ');
  var datapointobject={
   //y: parseFloat(((maturity-p)/2)).toFixed(2), label: newdate.getFullYear()
   y: yearwiseintrest, label: newdate.getFullYear()
  arraydataPoints.push(datapointobject);
var chart = new CanvasJS.Chart("chartContainer", {
 animationEnabled: true,
 theme: "light2", // "light1", "light2", "dark1", "dark2"
 data: [
   type: "column",
   dataPoints: arraydataPoints,
```

```
},
 ],
});
chart.render();
}
function getTodayDate(){
 const today = new Date();
 const yyyy = today.getFullYear();
 let mm = today.getMonth() + 1; // Months start at 0!
 let dd = today.getDate();
 if (dd < 10) dd = '0' + dd;
 if (mm < 10) mm = '0' + mm;
 return dd + '/' + mm + '/' + yyyy;
$("#amountOfDeposite").on('keyup', function(){
 calculateFD();
});
$("#penaltyRate").change(function() {
 calculateFD();
});
$('#rdCrationDate').change(function(){calculateFD();})
$('input[name="rd"]').change(function(){calculateFD();})
```

```
});
```

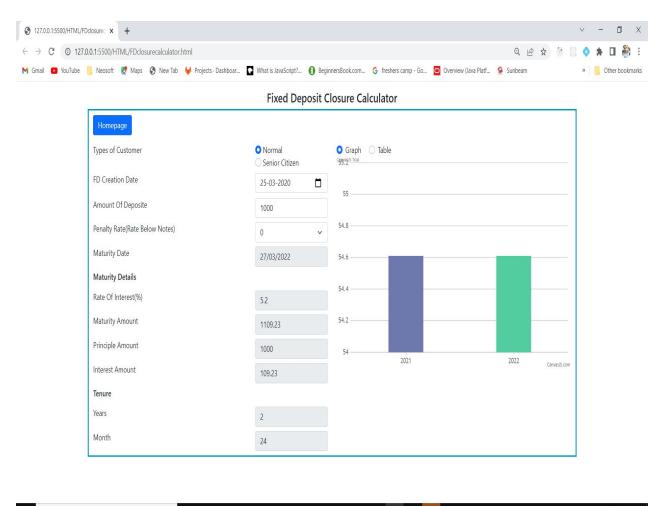
Step 4: Create a JavaScript file for Fixed Deposit Closure Calculator:

a) FDclosurecalculator.css

```
.div{
    height: 100%;
    border: 2px solid rgb(17, 171, 223);
    margin-left: 20px;
    margin: 0 auto;
}
h4{
    margin-left: 20px;
    margin: 0 auto;
    width:fit-content;
}
table, td, tr{
    text-align: center;
}
```

Step 5: Results:

Resultant Graph for fixedDepositClosureCalculator





Resultant Table for fixedDepositClosureCalculator

