# Recurring Deposit Closure Calculator

Please follow below steps to integrate Recurring 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 Recurring Deposit Closure Calculator:

- RecurringDepositClosureCalculator.html:

```
<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="../Plugin/bootstrap/css/bootstrap.min.css" />

<link rel="stylesheet" href="../CSS/recurringDepositClosureCalculator.css">

<script src="../Plugin/library/jquery-3.6.0.min.js"></script>

<script src="../JS/recurringDepositClosureCalculator.js"></script>

<script src="https://canvasjs.com/assets/script/canvasjs.min.js"></script>

</head>

<body class="container">

<div class="mt-3 calculator">

<center>

<h4 class="mb-2">Recuring Deposit Closure Calculator</h4>

</center>
```

```html
</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 = './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" 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" value="0.5"
id="seniorCitizen"

name="rd">

<label class=" form-check-label" for="seniorCitizen">Senior Citizen</label>

</div>

</div>
```

```html
</div>

<div class="row  mb-2">

<div class="col-8"> <label class="mb-3 " for="rdCrationDate">RD Creation
Date</label></div>

<div class="col-4"> <input class="form-control" type="date"
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">

<div class="flex-nowrap input-group ">

<span class="input-group-text" id="addon-wrapping">₹</span>

<input class="form-control" type="text" id="amountOfDeposite" value="1000"
/>

</div>

</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-select">

<option class="dropdown-item" value="0">0</option>

<option class="dropdown-item" value="0.5">0.5</option>

<option class="dropdown-item" value="1">1</option>
```

```html
        </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"></p> -->

        <input type="text" id="maturitydate" readonly class="form-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%</p> -->

        <input type="text" id="rateOfIntrest" readonly class="form-control
        disabled" value="4.9%">

        <input type="hidden" id="hdnrateOfIntrest" value="4.9">

      </div>

    </div>

    <div class="row mb-2">
```

```html
<div class="col-8">

<label class="" for="matAmount">Maturity Amount</label>

</div>

<div class="col-4">

<!-- <p id="matAmount" class="float-sm-end"></p> -->

<input type="text" id="maturityAmount" readonly 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"></p> -->

<input type="text" id="principleAmount" readonly 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"></p> -->

<input type="text" id="intrestAmount" readonly class="form-control
disabled">

</div>

</div>
```

```html
<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 "></p> -->

<input type="text" id="year" readonly class="form-control 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"></p> -->

<input type="text" id="month" readonly class="form-control 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" name="inlineRadioOptions"
id="graph"
```

```html
                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" name="inlineRadioOptions"
                id="table"

                value="option2" checked>

                <label class="form-check-label" 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">

                    <tbody id="bodyshowTable">

                    </tbody>

                </table>

            </div>

            <div id="dvChartResult" class="d-none">

                <div id="chartContainer"></div>

            </div>

        </div>

    </div>

    </div>

    </div>

    </body>

</html>
```

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

a) RecurringDepositClosureCalculator.js

```javascript
//Showing Graph and Table using add and remove class

$(function showGraphTable() {

  $("#graph").click(function () {

    $("#dvChartResult").removeClass("d-none");

    $("#dvTableResult").addClass("d-none");

  });

  $("#table").click(function () {

    $("#dvChartResult").addClass("d-none");

    $("#dvTableResult").removeClass("d-none");

  });

});

//Appling events for input fields and dropdowns for using non-typeable keys

(function ($) {

  $.fn.inputFilter = function (inputFilter) {

    return this.on(

      "input keydown keyup mousedown mouseup select contextmenu drop",

      function () {

        if (inputFilter(this.value)) {

          this.oldValue = this.value;

          this.oldSelectionStart = this.selectionStart;

          this.oldSelectionEnd = this.selectionEnd;

        } else if (this.hasOwnProperty("oldValue")) {

          this.value = this.oldValue;

          this.setSelectionRange(this.oldSelectionStart, this.oldSelectionEnd);

        } else {

          this.value = "";
```

```javascript
        }

      }

    );

  };

})(jQuery);


$(document).ready(function () {

  $("input[type=text]").inputFilter(function (value) {

    return /^\d*$/.test(value);

  });


  //$("#penaltyRate").trigger( "change" );

  calculateRD();

  //calculate Month difference

  function MonthDifference(d1, d2) {

    var months;

    months = (d2.getFullYear() - d1.getFullYear()) * 12;

    months -= d1.getMonth();

    months += d2.getMonth();

    return months <= 0 ? 0 : months;

  }

  //calculate year difference


  function YearDifference(d1, d2) {

    var yr = [];


    for (var i = d1.getFullYear(); i <= d2.getFullYear(); i++) {

      yr.push(i);
```

```javascript
  }


  return yr.length - 1;

}

//Calculate Maturity Amount,Intrest Amount,Principle Amount


function calculateRD() {

  var rateofintrest = 4.9;

  var arraydataPoints = [];

  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 p = $("#amountOfDeposite").val(),

    n = MonthDifference(rdCreationDate, current_date),

    y = YearDifference(rdCreationDate, current_date);

  (e = Math.pow(1 + i / 400, n / 3)),

    (d = Math.pow(1 + i / 400, -1 / 3)),

    (m = (p * (e - 1)) / (1 - d));
```

```
$("#hdnrateOfIntrest").val(i.toFixed(1));

$("#rateOfIntrest").val(i.toFixed(1));

$("#month").val(n);

$("#year").val(y);


//Displays maturity Amount, Intrest Amount,Principle Amount, Show table

$("#maturityAmount").val(m.toFixed(2));

$("#intrestAmount").val((m - p * n).toFixed(2));

$("#principleAmount").val((p * n).toFixed(2));

$("#maturitydate").val(getTodayDate());

$("#bodyshowTable").empty();

$("#bodyshowTable").append(

  '<tr> <td colspan="2">Financial Year Wise Interest Amount</td> </tr> <tr><td
class="w-auto col-1">Financial Year</td><td class="col-1">Interest</td></tr>'

);


debugger;

var tempintrestAmount = 0;

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)

  );


  if (newdate > current_date) {
```

```javascript
      newdate = current_date;

  }

  var p = $("#amountOfDeposite").val();

  n = MonthDifference(rdCreationDate, newdate);

  y = YearDifference(rdCreationDate, newdate);

  e = Math.pow(1 + i / 400, n / 3);

  d = Math.pow(1 + i / 400, -1 / 3);

  m = (p * (e - 1)) / (1 - d);

  maturityAmount = parseInt(m.toFixed(0));

  intrestAmount = parseInt((m - p * n).toFixed(0));

  principleAmount = parseInt(p * n.toFixed(0));

  temprdCreationDate = newdate;


  $("#bodyshowTable").append(
    "<tr><td> FY. " +
      newdate.getFullYear() +
      "</td> <td>" +
      (intrestAmount - tempintrestAmount) +
      "</td> </tr>"
  );

  var datapointobject = {
    y: intrestAmount - tempintrestAmount,
    label: newdate.getFullYear(),
  };

  arraydataPoints.push(datapointobject);

  tempintrestAmount = intrestAmount;

}
```

```javascript
  //bar chart

  var chart = new CanvasJS.Chart("chartContainer", {

    animationEnabled: true,

    theme: "light2", // "light1", "light2", "dark1", "dark2"


    data: [

      {

        type: "column",


        dataPoints: arraydataPoints,

      },

    ],

  });

  chart.render();

}

//To get Today's date

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;

}
```
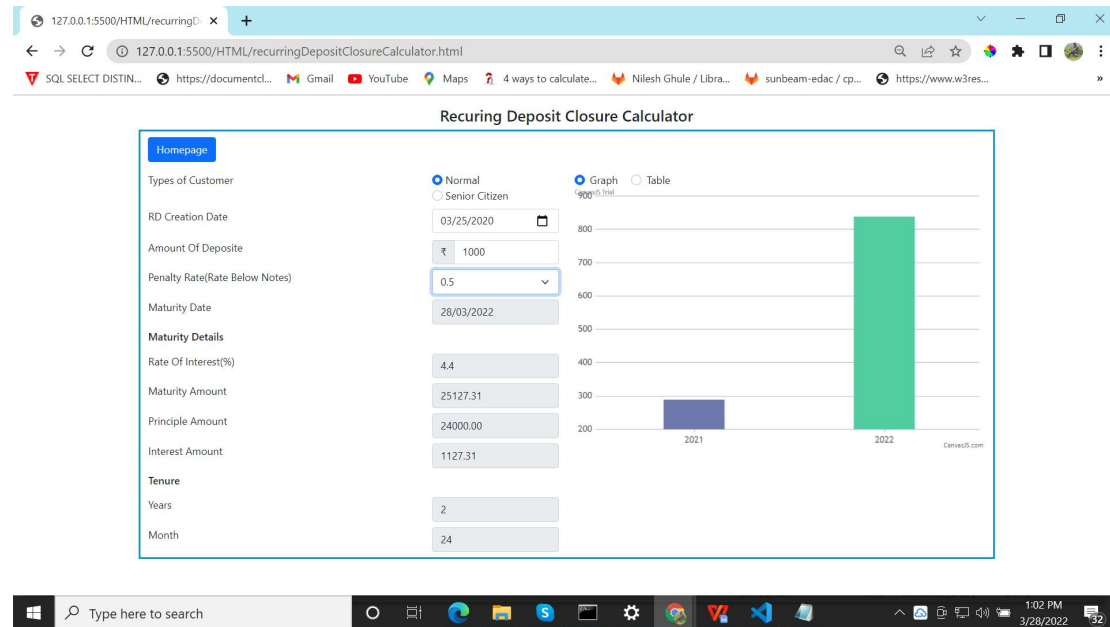
```javascript
  $("#amountOfDeposite").on("keyup", function () {

    calculateRD();

  });


  $("#penaltyRate").change(function () {

    calculateRD();

  });

  $("#rdCrationDate").change(function () {

    calculateRD();

  });


  $('input[name="rd"]').change(function () {

    calculateRD();

  });

});
```

Step 4: Results:

Resultant Graph for Recurring Deposit Closure Calculator:



Resultant Table for Recurring Deposit Closure Calculator: