

# **Loan Calculator Requirements Specification**

**Version 1.0**

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# 1. Executive Summary

## 1.1 Project Overview

The project requires you to come with a loan calculator, which takes the inputs from the user and calculates the monthly payment, the total interest and the total interest.

## 2. Requirements:

Following is the mockup of what is expected:

| Enter Loan Data:                                                      |                      | Loan Balance, Cumulative Equity, and Interest Payments |
|-----------------------------------------------------------------------|----------------------|--------------------------------------------------------|
| Amount of the loan (\$):                                              | <input type="text"/> |                                                        |
| Annual interest (%):                                                  | <input type="text"/> |                                                        |
| Repayment period (years):                                             | <input type="text"/> |                                                        |
| Zipcode (to find lenders):                                            | <input type="text"/> |                                                        |
| <b>Approximate Payments:</b> <input type="button" value="Calculate"/> |                      |                                                        |
| Monthly payment:                                                      | \$                   |                                                        |
| Total payment:                                                        | \$                   |                                                        |
| Total interest:                                                       | \$                   |                                                        |
| <b>Sponsors:</b>                                                      |                      | Apply for your loan with one of these fine lenders:    |

The requirement is that you take the inputs and do all the validations you deem necessary and write a dummy service, which you call through the AJAX and get the sponsors if the user has entered the ZIPCode.

So you need the write the following functions:

Function Calculate

```
/*  
    * This script defines the calculate() function called by the event handlers  
    * in HTML above. The function reads values from <input> elements, calculates  
    * loan payment information, displays the results in <span> elements. It also  
    * saves the user's data, displays links to lenders, and draws a chart.  
    */
```

All the validations should be either on the tab out or through input filtering.

The other function is the getLenders function:

```
// Pass the user's input to a server-side script which can (in theory) return
// a list of links to local lenders interested in making loans. This example
// does not actually include a working implementation of such a lender-finding
// service. But if the service existed, this function would work with it.
function getLenders(amount, apr, years, zipcode) {}
```

**The last optional feature is if you can include the graph in the page:**

```
// Chart monthly loan balance, interest and equity in an HTML <canvas> element.
// If called with no arguments then just erase any previously drawn chart.
function chart(principal, interest, monthly, payments) {}
```