**Implementation**

* Spreadsheet Dimensions: Defined rows and cols constants to establish the size of the spreadsheet of 100X100.
* Data Object: Created data object to store cell values.
* getColumnLabel Function: Implemented to generate column labels in alphabetical format (e.g., A, B, C, ..., AA, AB, AC), facilitating easy navigation and reference within the spreadsheet.
* createSpreadsheet Function: Constructed the function to dynamically generate the spreadsheet structure using HTML elements, ensuring scalability and flexibility. This function also initializes event listeners for input changes, ensuring real-time updates to the data object.
* updateCell Function: Developed to update the cell value in the data object when the user inputs data into a cell.
* handleEnterKeyPress Function: Implemented to evaluate formulas when the user presses the Enter key, enhancing user experience by enabling formula calculation with a familiar action.
* evaluateFormula Function: Created to parse and evaluate formulas entered by the user, supporting basic arithmetic operations and functions (e.g., SUM, AVERAGE, MAX, MIN), providing extensive functionality for spreadsheet computation.
* applyOperator Function: Utilized to apply arithmetic operators to operands within formula evaluation, and return the results.
* supportFunction Function: Introduced to support formula functions like SUM, AVERAGE, MAX, and MIN over a specified range of cells which gives startRow,endRow, startCol, endCol than it send to further respective function which iterates and return results
* evaluateSum, evaluateAverage, evaluateMax, evaluateMin Functions: Implemented to calculate the SUM, AVERAGE, MAX, and MIN functions over a range of cells, in the spreadsheet.
* parseCell Function: Developed to parse cell references (e.g., "A1") and convert them into column indices and row numbers, enabling integration of cell references within formulas.
* getColumnIndex Function: Created to convert column labels into corresponding column indices, facilitating efficient navigation and manipulation of spreadsheet data.
* insertData Function: Implemented to insert stored data into cells, ensuring persistence of data between sessions and enabling seamless interaction with the spreadsheet UI.

**Future Implementation**

* Updating A1 would update A3: For this, its need to store the formula reference with the cell if user has typed the formula. Like Dictionary where row, col dimension would be key and the formular would be the value. So, if user change any value than it matches with respective row, col with the dictionary and if it’s existed than the resultant row col value also get change.
* For Bold, Italic, underline functionality: option can be given so on pressing right click, and then it changes that cell value format according to that.