Scope Document

SM Foundation Incorporated Scholarship Tracking System Module 2

# Introduction

The client meeting held last August 13, 2015 with SM Foundation Incorporated (SMFI) introduced many changes to the required functions of the system. The nature of these changes has necessitated the building of an entirely new database, and the subsequent recreation of the web portal. The purpose of this document is to list the requirements of the system as understood by the developers based on the feedback given during the aforementioned client meeting. The requirements listed here shall be the deliverables of the new system. Given the limited amount of time remaining for the project, additional features and functions beyond those listed here will not be included in the third and final iteration.

# Users

|  |  |  |
| --- | --- | --- |
| Username | Access Point | Roles and Permissions |
| Scholar | Frontend website | * View own records * Create own subjects list * Create own grades records * Edit unapproved own subjects list * Edit unapproved own grades records * Upload files * Send messages to SM Foundation Incorporated |
| SM Foundation Accounts   * Linda Atayde * Ling Lansang * Tess Samillano * Greg Baclea-an Jr. * Cath Llarena * Jenn Ocampo | Backend website | * Administrator privileges * Full access to all backend features * Approve scholar-created records * Create, Read, Update, and Delete (CRUD) rights to all records and record types * Exception: allowance table records may only be Read or Updated * Export files |

# Frontend Website Features

* Accessible by the Scholar
* Profile
  + Scholar may view personal details
  + Scholar may view details of own school
* Subject List
  + Scholar may create a record for his/her own Subject List
    - Scholar may enter the following information:
      * Terms
      * Subject Names
      * Subject Units
  + Subjects within the Subject List are primarily grouped by the Term in which they are to be taken
  + Subject List records must be approved by SMFI
    - Records may be edited by the Scholar only until they have been approved
* Records
  + Scholar may view own grades records
  + Scholar may create own grades records
    - Grades records are created based on previously created Subject List
    - Scholar may enter the following information:
      * Raw Grade
      * School Year Start
      * School Year End
  + Grades records must be approved by SMFI
    - Records may be edited by the Scholar only until they have been approved
  + Scholar may submit an explanation for unsatisfactory or failing grades to SMFI
  + Scholar may view own tuition records
  + Scholar may view own eligible allowance amount
  + Scholar may view deduction records charged against him/her
  + Scholar may view incentives credited to him/her
* Forms
  + Scholar may fill up a form to apply for optional work
  + Scholar may view previously submitted forms for optional work
  + Scholar may upload scanned documents
* Contact
  + Scholar may fill up a form to send an email to SMFI

# Backend Website Features

* Accessible by any of the SMFI User Accounts
* School Records
  + Here SMFI can create, view, edit, or delete any and all existing school records
  + Each school record, regardless of which of the above operations is being performed, must contain the following:
    - School ID (PK, auto-increment)
    - School Name
    - School Area
    - School Address
    - School Contact Email(s)
    - School Contact Number(s)
    - School Vendor Code
  + SMFI mustcreate these records, and provide this information individually
* Grade Equivalences
  + Here SMFI can create, view, edit, or delete any and all existing rule records
    - Rule records are grouped by school
  + Each rule record, regardless of which of the above operations is being performed, must contain the following:
    - Rule ID (PK, auto-increment)
    - School ID (FK)
    - Numerical Grade
    - Letter Grade
    - Percentile Equivalent Lower
    - Percentile Equivalent Upper
    - School Rating
    - Foundation Rating
      * PASS
      * FAIL
  + SMFI mustcreate these records, and provide this information individually
  + Existing grade rule records will be displayed by the school they apply to
* Scholar Records
  + Here SMFI can create, view, edit, or delete any and all existing scholar records
    - Scholar records not displayed individually, but by school
  + Scholar records, regardless of which of the above operations is being performed, must contain the following:
    - Scholar ID (PK, auto-increment)
      * The developers will not follow the naming convention of **Surname+First letter of First Name** for the Scholar ID because it allows for two different scholars to have the same ID
        + Example:

Juan Santos (SANTOSJ)

Julian Santos (SANTOSJ)

* + - School ID (FK)
    - Scholar First Name
    - Scholar Middle Name
    - Scholar Last Name
    - Scholar Gender
    - Scholar Address
    - Scholar Course
    - Scholar Graduate Status
      * Graduated
      * Not Graduated (default)
    - Scholar Year Level
    - Scholar email(s)
    - Scholar Contact Number(s)
    - Scholar Cash Card Number
    - Scholar Sponsor
    - Scholar Area Color Coding(shows a color code depending on the scholar’s school area)
    - Scholar Type
      * With Allowance, Tuition Fee, and Incentive
        + SMFI
        + My Scholar A
        + Kabayan Scholar
      * With Tuition Fee and Incentive (No Allowance)
        + My Scholar B
        + ICA Grant Scholar
    - Scholar Vendor Code
  + SMFI mustcreate these records, and provide this information individually
* Subject List
  + SMFI may view any scholar’s Subject List records
  + SMFI may edit any scholar’s Subject List records
  + SMFI may delete any scholar’s Subject List records
  + SMFI may create a record for any scholar’s Subject List
    - SMFI may enter the following information:
      * Scholar ID
      * School ID
      * Subject Term
      * Subject Name
      * Subject Units
      * Subject Taken Status
        + Not Taken
        + Taken
        + Failed
      * Subject Approval Status
        + Not Approved
        + Approved
  + Subject List records must be approved by SMFI
  + Subject List records will be displayed by scholar
* Grades Records
  + Grades records may be viewed in two ways:
    - By school
    - All records
  + SMFI may view existing grades records
  + SMFI may edit existing grades records
  + SMFI may delete existing grades records
  + SMFI may create new grades records
    - SMFI may enter the following information:
      * Scholar ID/Name
      * Subject
      * Term
      * Raw Grade
      * School Year Start
      * School Year End
  + SMFI may approve grades records
    - SMFI may set the following fields during the grades record approval process:
      * Subject Taken Status
        + Not Taken
        + Taken
        + Failed
      * Approval Status
        + Not Approved
        + Approved
* Tuition Records
  + Here SMFI can create, view, edit, or delete any and all existing tuition records
  + Tuition records are grouped by school, but still contain the scholar number, name, type, and sponsor
  + Tuition records must contain the following information:
    - Tuition Number (PK, auto-increment)
    - Scholar Number (FK)
      * It is important to retrieve the following columns from the scholar table:
        + Scholar Name
        + Scholar Type
        + Scholar Sponsor
    - Term
    - School Year Start
    - School Year End
    - Date of Enrollment
    - Tuition Amount
    - Tuition Paid Status
      * Paid
      * Not Paid
    - Date of Payment
  + ***Tuition Creation Process***
    - Tuition records are created by SMFI in batches
    - SMFI first selects a school
      * They should be able to search by school name or by school number
    - SMFI must input the following information:
      * Date of Enrollment
      * Tuition Term
      * Scholar ID
      * School Year Start
      * School Year End
      * Tuition Amount
      * Tuition Paid Status
        + Paid
        + Not Paid
      * Date of Payment
    - If any of the records already have information, then SMFI may edit them at this screen
    - Both edit and create actions should require the pressing of a confirmation button. Upon confirmation, the tuition record is either edited (if existing) or created (if new).
  + Existing tuition records will be displayed by the school the scholars are enrolled in
* Deduction Records
  + SMFI may view existing deduction records
  + SMFI may edit existing deduction records
  + SMFI may delete existing deduction records
  + SMFI may create new deduction records
  + All deduction records contained in the database must be created by SMFI
    - SMFI may enter the following information:
      * Scholar ID/Name
      * Deduction Date
      * Deduction Amount
      * Deduction Remark
  + Existing deduction records will be displayed by the scholar they apply to
* Allowance Amounts
  + This section contains only the following:
    - Allowance amount for NCR scholars
    - Allowance amount for Provincial scholars
  + SMFI may view existing allowance amount per area
  + SMFI may edit the allowance amounts per area
* Allowance Withholding
  + The creation of allowance withholding records fulfills the functionality of the desired ‘HOLD’ button for withholding scholar allowances
  + SMFI must create a new withholding record every time they wish to withhold an allowance
    - This is to ensure accurate historical record keeping
    - SMFI may enter the following information:
      * Scholar ID/Name
      * Date Withheld
      * Remark
      * Date Released (initially empty)
  + SMFI may view existing withholding records
  + SMFI may edit existing withholding records
    - SMFI must edit a previously created withholding record with a date released when releasing a scholar’s allowance
  + SMFI may delete existing withholding records
  + Existing withholding records will be displayed by the scholar they apply to
* Incentive Records
  + SMFI may view existing incentive records
  + SMFI may edit existing incentive records
  + SMFI may delete existing incentive records
  + SMFI may create new incentive records
  + All incentive records contained in the database must be created by SMFI individually
    - SMFI may enter the following information:
      * Scholar ID/Name
      * School ID/Name
      * Incentive Date
      * Incentive Amount
      * Incentive Remark
  + Existing incentive records will be displayed by the scholar they apply to
* View Uploads
  + SMFI may view existing uploads
  + SMFI may edit existing uploads
  + SMFI may delete existing uploads
  + SMFI may upload new files
  + Existing uploads will be displayed by the scholar they apply to
* Optional Work
  + SMFI may create a record for a scholar’s optional work
  + SMFI may view previously submitted forms for optional work
* Calendar
  + SMFI may mark dates on the calendar
  + SMFI may create events on the calendar
  + SMFI may view previously entered calendar events
  + All events on the calendar can be seen by all SMFI accounts
    - This is implemented because all SMFI accounts share similar roles
* Reports
  + The following reports will be included:
    - GPA Report
      * Generates grade equivalencies and calculated GPA
      * Criteria:
        + By Scholar
        + By School Year
        + By Term
        + By Foundation Rating
    - Deduction Report
      * Generates total deductions
      * Criteria:
        + By Scholar
        + By Month
    - Graduates Report
      * Generates a list of graduated scholars
      * No criteria
    - Masterlist of Scholars
      * Generates a list of all scholars
      * Criteria:
        + By year level
    - Tuition Fees Report
      * Generates a list of tuition fee record
      * Criteria:
        + By School year
        + By Term
    - Allowance Report
      * System is not capable of duplicating given format
      * Allowance report will generate the following columns of data
        + Area
        + Number of SMFI scholars
        + Number of SMFI scholars with withheld allowance
        + Number of SMFI scholars with released allowance
        + Number of My Scholar As
        + Number of My Scholar As with withheld allowance
        + Number of My Scholar As with released allowance
        + Number of My Scholar Bs
        + Number of Kabayan scholars
        + Number of Kabayan scholars with withheld allowance
        + Number of Kabayan scholars with released allowance
        + Number of Rufus scholars
        + Number of Rufus scholars with withheld allowance
        + Number of Rufus scholars with released allowance
        + Number of ICA scholars
      * The following information will be displayed beneath the columns:
        + Total number of scholars
        + Total allowance amount (no deductions/additions)
        + Total amount withheld
        + Total amount released
        + Net total amount
      * Criteria:
        + By Month [required]
        + By School Year [required]
        + By Area
* Interface Files
  + Interface files to be generated based on given format
  + Interface files shall be available as exportable reports
    - As reports, they will follow the column format, with the desired totals beneath each column
    - ‘Hash Totals’ is understood to be merely a sum total of the values of the column
    - ‘Doc Type’ is understood to be merely another column labelling records
    - ‘Export’ button does not connect to SAP, it merely generates a downloadable CSV file
  + Types:
    - Scholars’ Allowance
      * Doc type – invoice
    - Deductions
      * Doc type - CM
    - Payment to schools for tuition
      * Doc type - invoice
    - Other payments to scholars: Incentives/Refunds
      * Doc type – invoice
  + All Interface file criteria require input
    - If no input is detected, the system will not generate the file and instead error

# Recommendations

* Add graphs and data analytics to the reports
* Add additional reports
* Make calendar automatically generate events
  + Example: payments due
  + Make the system automatically generate email notifications for these events
  + This task requires the restructuring of the website to include background processes in order to monitor dates and records
* Integrate with modules 1 and 3
* Add import from csv functionality