### System overview

The system is composed of various pages, each with their own dynamic implementations. Essentially the system handles the user details, contact relations, meetings and targets. For each page I have implemented appropriate browsing interfaces. In addition, each page may display differently depending on input values. Each page has its role explained and the objectives each general scenario aims to fulfil.

# LoginPage

Inputs:

UserLogin - user's login account name. Input string box.

UserPassword - user's login password. Input string box.

UserType - type of user. Multiple-choice selection.

UserLogin is used to find the user's login account from the respective user type's table. UserPassword is used to find the user's login password from the respective user type's table. UserType denotes the type of user, used to query the correct user table. If returned from ProcessLoginPage, any variable set for UserLogin is displayed in case of typing errors.

### ProcessLoginPage

No user interface - just checking if the input details from the previous page matches the table being queried. If successful, save details to session variables and redirect to LoggedInPage. If unsuccessful, return to LoginPage with value for UserLogin.

#### LoggedInPage

Details of the user are output to the screen. Name, ID and user type are mandatory. Email address and phone number may be displayed if they exist. Students also have a form group which is displayed. The user is able to link to ViewMeetingPage, ViewContactPage and LogoutPage. The table being queried is one of the following: StudentTable, ParentTable or MentorTable.

#### ViewMeetingPage

Details of any meetings are output in a table for a given student. If there is only one student this will be the only student concerning meetings. If the user is a parent or a mentor and has several students then each student is treated separately. If no meetings exist for the student then the user viewing the meetings are informed of this. Mentors are suggested to add a meeting if none exist yet. Mentors also have the option to add a meeting.

#### AddMeetingPage

Page for mentors only.

Inputs: day, month and StudentID

day - used to assign a day of the meeting. Must be an actual day within the specified month. Input number.

month - used to assign a month of the meeting. Option box.

StudentID - used to assign a meeting to a particular student. Option box.

Adds meeting to MeetingTable.

EditMeetingPage

Page for mentors only.

Inputs: day, month and StudentID

day - used to assign a day of the meeting. Must be an actual day within the specified

month. Input number.

month - used to assign a month of the meeting. Option box.

StudentID - used to assign a meeting to a particular student. Option box.

Edits existing meeting in MeetingTable.

# DeleteMeetingPage

Page for mentors only.

Meeting's details are output to the screen. The user is prompted with confirmation to delete current meeting from MeetingTable. If permitted, the current meeting is deleted from MeetingTable.

### ViewTargetPage

Details of targets are displayed. Users may choose to add, edit or delete any comments of their own for each target. If no targets are displayed then a message is displayed to alert the user that no targets currently exist for the current meeting. Mentors are suggested to add a target. Mentors may add a target to a meeting at any time.

### AddTargetPage

Page for mentors only.

Inputs: TargetUserType, UserTarget, day, month, MentorComment

TargetUserType - a number is assigned to distinguish whether the parent, student or mentor is set the target. Option box.

UserTarget - string entered into input box.

day - two-figure number. Must be an actual day within the specified month. Must not be earlier than current day if target is due in for the same month as current month.

month - two-figure number. Cannot be earlier than current month in academic year.

MentorComment - string text input box for the mentor to input text into.

This page enables the mentor to add a meeting to TargetTable if all data is valid.

#### EditTargetPage

Page for mentors only.

Inputs: TargetUserType, UserTarget, day, month, MentorComment, TargetMetYet TargetUserType - a number is assigned to distinguish whether the parent, student or mentor is set the target. Option box.

UserTarget - string entered into input box.

day - two-figure number. Must be an actual day within the specified month. Must not be earlier than current day if target is due in for the same month as current month.

month - two-figure number. Cannot be earlier than current month in academic year.

MentorComment - string text input box for the mentor to input text into.

TargetMetYet - sets whether the target has been met.

This page enables the mentor to edit an existing meeting from TargetTable.

#### DeleteTargetPage

Page for mentors only.

Displays target details. Shows all users' comments for current target.

This page enables the user to confirm that they wish to delete the target. If the user permits the system to delete the record, it is deleted from TargetTable.

### CommentPage

This page enables the user to add a comment of their own. If their comment already exists for a given target then it is replaced with a new one as the user enters. Apostrophes cannot be used and any comments using these will be discarded and the original comment is rendered unchanged. The user has the option to delete their comment if they wish. Adding or editing a comment updates TargetTable with the respective user comment. Deleting a comment also updates TargetTable, but sets the respective user comment to a NULL value (blank).

### ViewContactPage

When this page is loaded, each of the user's current contacts (users the user is connected to) is listed here. For a student, their parent and mentor are displayed, while parents and mentors will first be presented with a student and then their other connected user. If the parent/mentor has several students, each student will be listed with a mentor following the student description. If there is a particular user type absent, the user (student, parent or mentor) is notified. There are also requests displayed here. These can be sent to other users or received from other users. If the user sent a request, they may cancel it if sent by mistake. If the user is sent one from someone else, they have the option to accept it or decline it. If the user is missing a connection with another user and has no requests they may find their parent and mentor (student), or their student(s) (parent/mentor).

### SearchContactPage

Inputs: RequestedUserFirstName, RequestedUserSurname, RequestedUserType, RequestedUserID, firstnamefind, surnamefind, idfind.

RequestedUserFirstName - this is the first name/part of the first name which is used to search the user type to request

RequestedUserSurname - this is the surname/part of the surname which is used to search the user type to request

RequestedUserID - this is the ID of the user type being searched.

RequestedUserType - this is the type of user being searched.

firstnamefind - this is used to set how the input text field for RequestedUserFirstName should be searched (text beginning with/ending with/containing what is input). surnamefind - this is used to set how the input text field for RequestedUserSurname should be searched (text beginning with/ending with/containing what is input). idfind - this is used to set how the input integer field for RequestedUserID should be searched (ID exactly matching/containing what is input).

The current user can find another user to send a request for. They may be required to select which user type they send it to but has the option to specify who they are looking for in particular. The name and ID of the other user are input to narrow the search down. If no options are set and the user type is not set, the user is required to search again. If a user type is set but no other fields are specified then all possible users within the specified user type are searched for, each of whom the user may add a request for. Students can only be requested if they have no ID entry for the user type of the parent/mentor (parents may only add a student request for students without a

ParentID and mentors may only add a student request for students without a MentorID).

### AddRequestPage

This page, named as it is, does perform addition of requests, but also deletes them if instructed. After a user chooses to add a request through SearchContactPage, a request is added to RequestTable. If a user cancels or rejects a request then the request concerned is deleted from RequestTable.

# AddContactPage

This page performs the addition of a parent/mentor ID in StudentTable. The request, along with all the other requests related between the individual student and the parent/mentor user type (same type as one being added), are deleted from RequestTable.

### LogoutPage

This page eliminates the session. The user is redirected to LoginPage.

The tables in the database are StudentTable, ParentTable, MentorTable, MeetingTable, TargetTable and RequestTable. The table StudentTable is used to store information on students. It also stores information on which parent and mentor each student is connected with, if at all. ParentTable stores information on parents and MentorTable stores information on mentors. The table MeetingTable stores information on all the meetings added from within the system and their targets are stored in TargetTable. The table RequestTable is necessary in the system as it stores information on any requests to be accepted/rejected before any new addition is made to the StudentTable entry. RequestTable essentially contains information on who made the request and who the request is for.