Criterion B—Mock IA

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1 Systems Flow Chart

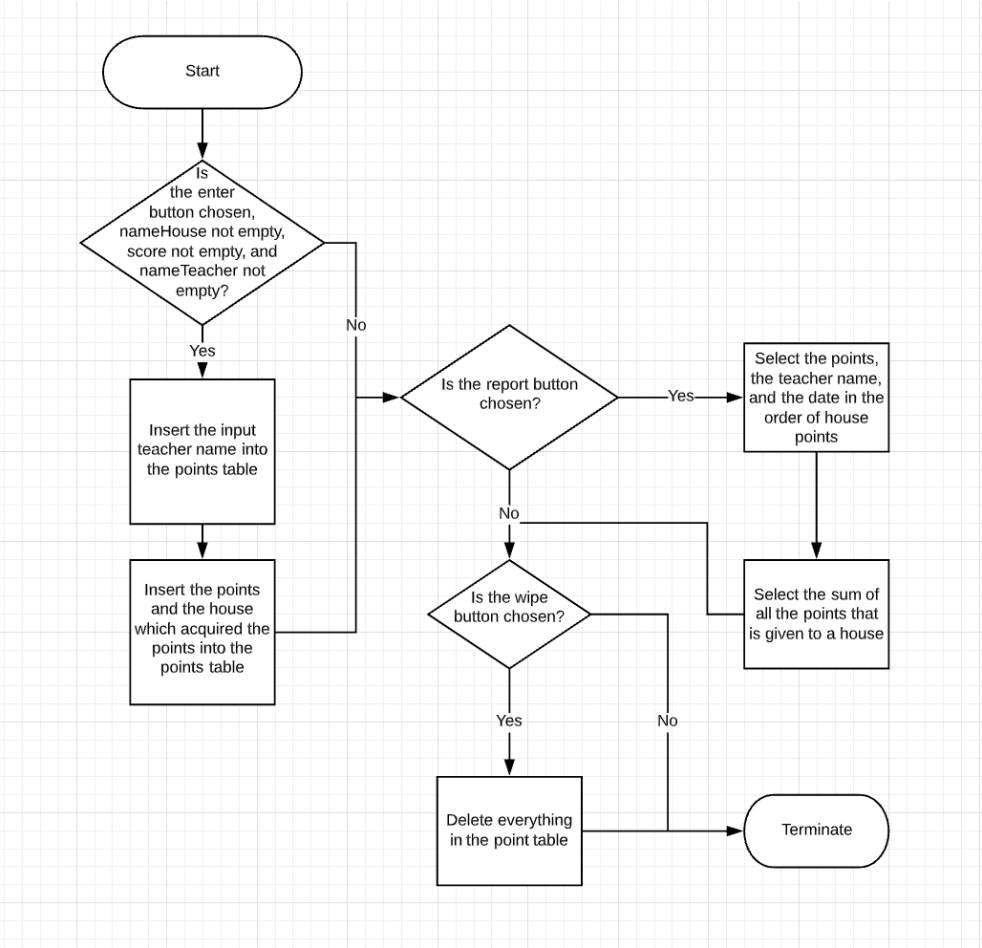

Figure 1: System flow chart

2 User Interface Design

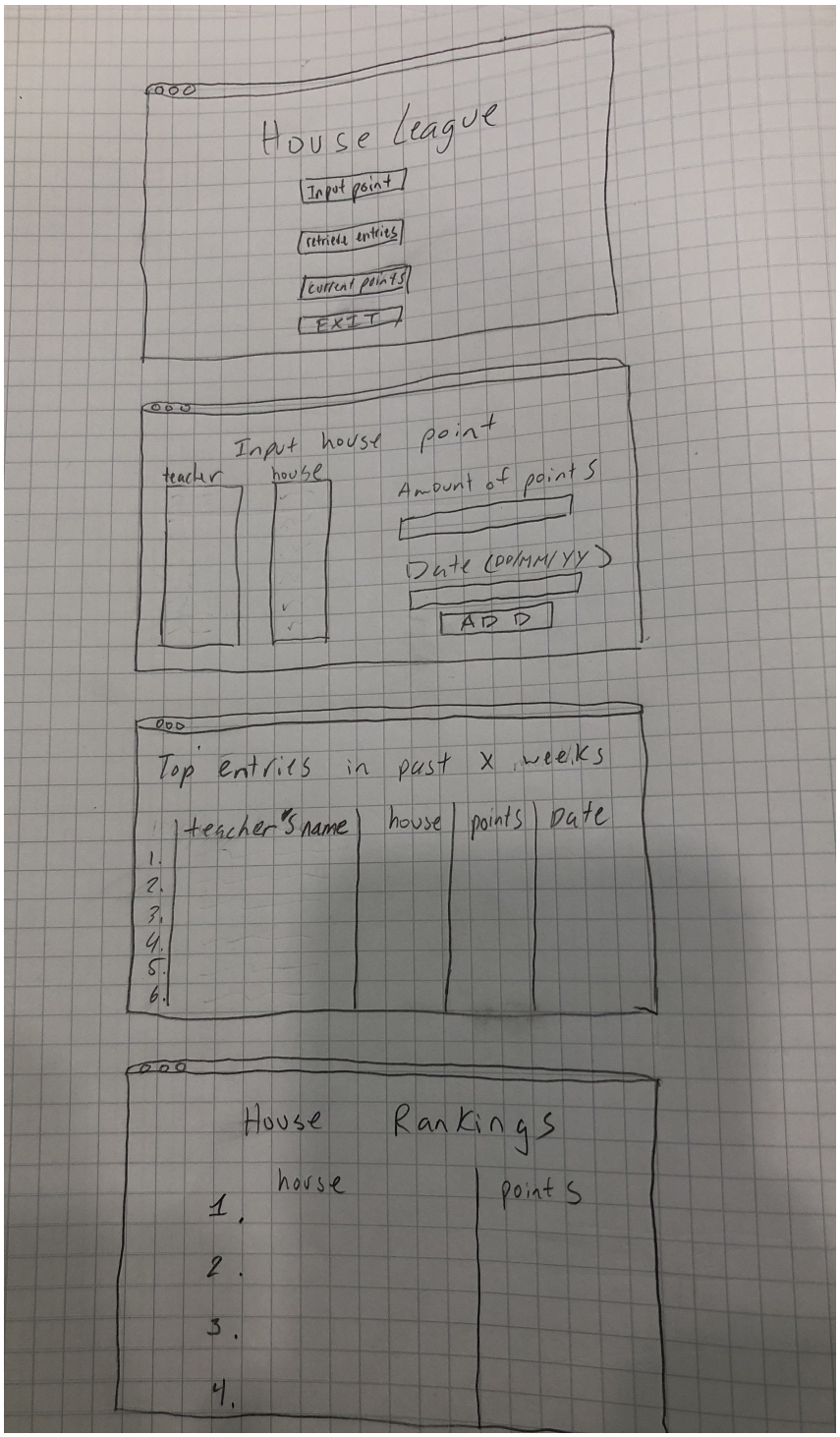

Figure 2: User Interface Design

3 Data Design

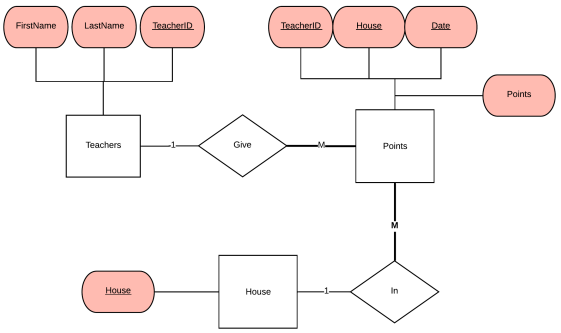

Figure 3: ERD

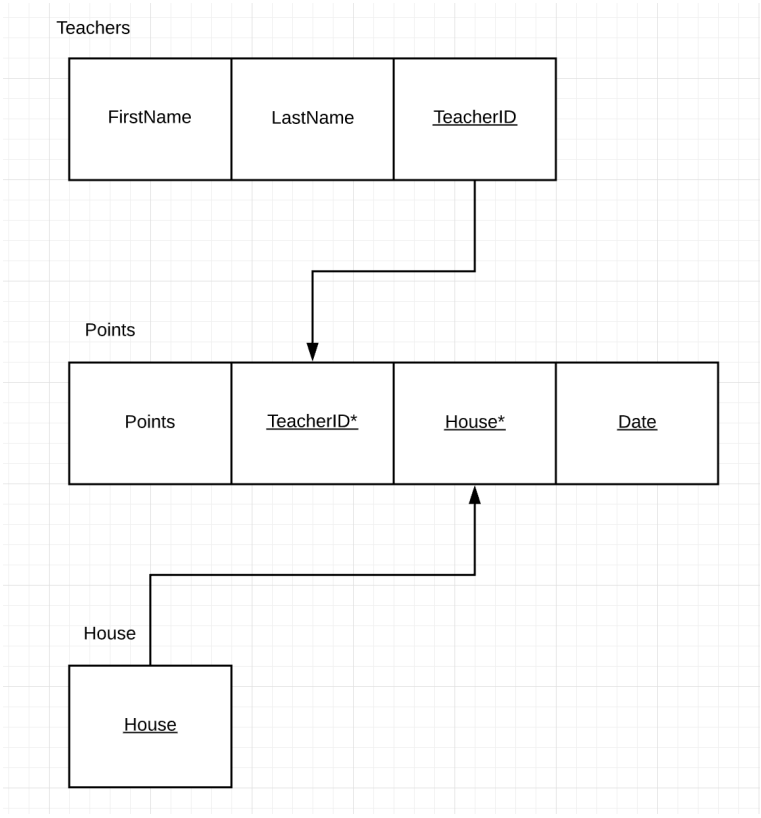

Figure 4: Relational Map

4 Algorithm Design

Assuming all teachers have all been input into the Teachers table
The name of the teacher input is taken as a variable nameTeacher
The name of the house input is taken as a variable nameHouse in which is taken from a dropdown box that has all the house name taken from the House table from the database
The score input is taken as a variable score
The enter button will be referred to as enter
The report button will be referred to as button
The reset button will be referred to as wipe

```
if enter and !(nameHouse is.Empty) and !(score is.Empty)
and !(nameTeacher is.Empty):

    SQL INSERT INTO Points (TeacherID) SELECT
    Teacher ID FROM Teachers WHERE
    Teachers.TeacherName == nameTeacher

    SQL INSERT INTO Points (House, Points)
    VALUES (nameHouse, score)

if report:

    SQL SELECT Points, TeacherName, Date FROM Teachers
    JOIN Points WHERE Teachers.TeacherID = Points.TeacherID
    ORDER BY Points DESC

   \\ House points
   SQL SELECT SUM(Points), House.House FROM
   House JOIN Points WHERE House.House = Points.House

if wipe:
    SQL DELETE FROM Points
```

5 Record of Tasks

Task number	Planned Action	Planned Outcome	Date Completed (dd/mm/yy)	Criterion
1	First meeting with client	Collect information on given task	03/04/2020	A
2	Work on criteria A	Finished writing the scenario, solution rationale, and success criteria	15/04/2020	A
3	Contact with Client	Discuss criteria A progress	15/04/2020	A
4	Work on criteria B	Finished making systems flow chart, user interface design, data design, algorithm design, record of task table, and test plan	17/04/2020	B

6 Test Plan

Test Type	Nature of Test	Example
The main screen should display on startup	All four buttons should display on the main screen at startup	user should be able to see and click on buttons to proceed
Add entry button	Should allow client to add new entry	Client can click on add entry button and can add new entry to the database. Should return client to main screen data entry.
Display entries button	Should allow client to retrieve previous entries	This function should retrieve most recent entries and display the top few with the highest point given
Display total house points button	All the house point should be added up and displayed	user should be able to view the house and the total amount of points
exit button	The program should complete close down when exit button is pressed	Anytime the user wants to close the program, the exit button should close down without error
Inputting entry	Check whether the inputting screen shows the correct list and places for user to input data	When inputting entries, the user should be able to choose from a list of teachers and house, and also be able to input amount of points and date
Inputted entry stored in database	New entry should be saved in database	After inputting the new entry, all the information should be stored in the database can be viewed when data is retrieved
Should allow multiple entries and retrieval	All button functions besides exit, should be able to run multiple times	Data entry, retrieval of entry, and total house points should be able to run multiple times