**D:\Work\RoboOfficeNXT\Artwork\RoboOfficeNXT.pngRoboOfficeNXT ERP System Design**

**Student progress report specification**

Design Goal:

* Courses have specific report formats.
* Set of courses C uses one report format R. (courses and report are many-to-one relationship)
* Extreme condition will be, each C maps to one report format.

Report format:

* Contains a list of scores for different criteria. Maximum score for each report is the same, for clarity and simplicity.
* Criteria are categorized by sections
* Contains a comment section for teacher’s feedback

EER diagram design (Three tables)

* PROGRESS\_REPORT\_TYPE:

Stores maximum score of the report, and words for each section, and 3 criteria within it.

type\_id, max\_score, section1, criterion1, criterion2, criterion3, section2…

* PROGRESS\_SCORE

Stores student’s score, in general format: 3+3+3

* PARENT\_REPORT\_METADATA

Stores the sentences for converting PROGRESS\_REPORT to PARENT\_REPORT, in the form of a matrix of max\_score \* 9 columns, each cell stores a sentence description of that score for that criterion. Each matrix is identified with a progress type\_id.

**To create a progress report type for a course:**

* First fill out the maximum score for each criterion, then fill out the word description of each criterion, then fill out the word description for each column.
* Next, start write sentences for each score of each criterion, for the parent report.
* Click finish, then two new rows are create, in PROGRESS\_REPORT\_TYPE AND PARENT\_REPORT\_METADATA

**To write a progress report by teacher:**

* System loads the student’s courseID, and then finds the progress report type, display it.
* Teacher fills out the score + comment, then click save.

**To generate a report for parent:**

* Get a list of student’s progress reports, by class records.
* Form a report structure for every lesson, using the student’s courseID of each class record. Add project name on the top
* Populate each report with pre-set sentences, converted from progress score. Add comment if there is any.