**Data Definitions**

The following list enumerates all the entity types that exist within the SPMS’ DBMS. The data type and description for each attribute is given for each entity.

**ACCOUNT**

* ID (integer):Used for identifying unique instances of any account.
* Name (string): states the first and last name of the account owner.
* Address (multivalued string): Used to determine the user’s area of domicile.
* Contact number (multivalued string): Used for contacting the person over phone.

**STUDENT ACCOUNT**

* ID (string): Will inherit from the account entity.
* Cgpa (float): decimal representation of their Current Grade Point Average.
* Major (String): states the student’s major of choice.
* admissionDate: (Time) states the date on which the student was admitted into the university.
* potentialGraduationYear: (Integer) Used for estimating the time until which the student will remain academically involved in the course.

**ADMIN ACCOUNT**

* ID (string): Will inherit from the account entity.
* roles (multivalued string): A high-level list of roles of a specific admin instance.
* Task (multivalued string): A low-level list of tasks currently assigned to a specific admin instance.
* Work hours (multivalued time): States the hours during which the admin is expected to be online and/or active.

**ACCREDITOR ACCOUNT**

* ID (string): Will inherit from the account entity.
* Institution (string): States the institution which the accreditor represents.
* Role (multivalued string): Lists the roles that the accreditor plays in the system.

**EMPLOYEE ACCOUNT**

* departmentName (string): States the department that the employee works under
* dateHired (time): States the time when the employee was hired.
* employeeType (string): states whether the employee is a department Head, Faculty, Department Office Staff, Top Management, Registrar’s Office staff or an Admin.
* Specialization (string): States the name of the field in which the faculty specializes in.
* yearsWorked (integer): State the number of years that the faculty has been employed at the university.

**SCHOOL**

* schoolName: The unique name for the school (e.g. “School of Engineering and Computer Science”)
* Location (optional string): Used for locating where the school is located on campus.
* deanInCharge: states the ID of the dean in charge of the school.

**ACCREDITATION MANUAL**

* documentID (integer), season(string), year(integer): Used to uniquely identify a specific instance of an accreditation manual for a specific semester.
* documentTitle (string): Used for commonly referring to a specific accreditation manual instance.
* documentFile (string): Stores the download link for the hardcopy of an accreditation manual.
* uploadDate (time), uploadTime (time) : Used for tracking the time of document upload.
* uploaderID: Used to track the person responsible for entering the document into the system.

**DEPARTMENT**

* deptID (integer): Used for uniquely identifying an instance of a department.
* Name (string): Used for commonly referring to the department.
* Location (optional string): Used for locating the department’s base of operations within the campus
* departmentHeadID (string): Used for uniquely identifying the head of this department.

**DEGREE PROGRAM**

* degreeID (integer): Used for uniquely identifying an instance of a Degree Program.
* degreeTitle (string) : Used for commonly referring to the degree.

**COURSE**

* courseID (integer): Used for uniquely identifying an instance of a Course.
* courseName (string): Used for commonly referring to a course instance.
* courseDescription (string): Describes the goal of the course.
* creditHour (integer): States the number of credit hours to be awarded upon completion of a course instance.
* coordID (integer): states the employee ID of the faculty member coordinating the class.

**OFFERED COURSE**

* instID (integer): states the ID of the instructor(s) teaching the class.
* Season (string), year (integer): states the semester during which the course was offered.

**PREREQUISITE** (Associative Entity): Represents the prerequisite relationship between courses.

* thisCourseID (integer): states the courseID of the course whose prerequisites are in question.
* prerequisiteCourseID (integer): states the courseID of the course that is a prerequisite of thisCourseID.

**COURSE OUTCOME**

* COID (integer), courseID(integer): Used for uniquely identifying a specific course outcome of a specific course.
* Description (string): Provides information about the
* Domain (string): states the skill domain (e.g. cognitive) targeted by the course outcome.
* Level (integer): states the numerical level of learning taxonomy associated with a course outcome.
* thresholdPercentage (float): states the minimum amount of marks to be obtained in a question in order to achieve a course outcome.

**PROGRAM LEARNING OUTCOME**

* PLOID (integer): Used for uniquely identifying a PLO instance.
* PLOtitle (string): Used for commonly referring to a PLO instance.
* PLOdescription (string): Provides more information about a PLO instance.

**PROGRAM EDUCATIONAL OUTCOME**

* PEOID (integer): Used for uniquely identifying a PEO instance.
* PEOtitle (string): Used for commonly referring to a PEO instance.
* PEOdescription (string): Provides more information about a PEO instance.

**EVALUATION:** A question in a coordinated examination session, assigned by a faculty member to a course.

* **courseID** (integer): uniquely identifies the course which the evaluation belongs to.
* **evaluationType** (string): specifies whether the evaluation is a quiz, exam, project or assignment.
* **evaluationNo**(integer): used for numerically sorting all the evaluation instances within a course.
* **questionNo (**integer): uniquely identifies a question instance within a given examination.
* fullMarks (float): the maximum number of points achievable in a question instance.
* Description (string): Description of the question itself.

**COURSE ASSESSMENT:** Used to summarize the expected and obtained performance of a particular course during a particular semester.

* **courseID** (string): used for uniquely identifying a course instance.
* **season** (string): used for uniquely identifying one of the three seasons of a given year.
* **Year** (integer): Used for uniquely identifying a year.
* knowledgeProfile (string): Provides more information about the CO-PLO relationships within a particular course.

**GRADE DISTRIBUTION:** Provides statistical data about students’ ability to meet certain course outcomes within a certain offered course.

* studentsAttempted (integer): states the number of students that attempted to achieve a course outcome.
* studentsPassed (integer): states the number of students that successfully achieved a course outcome.

**SEMESTER**

* season (string), year (string): used for uniquely identifying a semester instance.
* startDate (time), endDate (time): used for determining the period during which a semester is ongoing.

**MAPPING TAXONOMY**

* Serial (integer): Used for numerically sorting a particular CO-PLO tuple.
* learningLevel (integer): Specifies the level of learning associated with the achievement of a particular course outcome.
* Keyword (string): A word that most relevantly describes the skill set associated with a particular CO-PLO tuple.

**SECTION:** Exists (i.e. is “opened”) based on a specific offered course of a specific semester.

* sectionNo (integer): Used to uniquely identify a section of a known course offering.
* startTime (time), endTime(time): Used to determine the activity period of a section.
* roomNumber (string): States the room where the section is to take place for the semester.