# Table: Sensors

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| **Schema:** | SystemSchematicBuilder |
| **Responsible:** | Kurt A Vedros |

Table holds the information on the sensors that are monitoring the system.

Sensor – The part that attempts to read a user desired or programmed reading and its value.

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| **Column Name** | **Data type** | **Description** |
| SensorID | Int | Primary Key to Sensor Table. |
| PartID | Int | Foreign Key to Part Table. |
| Name | String | Name given by the user to Sensor (could be left blank). |

**Procedures (Database functions)**

* sprocGetSensors
  + Returns a list of Sensor objects that are currently stored in the database.
* sprocGetSensor
  + Returns a Sensor object that is currently stored in the database that has the given Sensor ID number.
* sproc\_SensorAdd
  + Stores the given Sensor object into the database and returns its assigned Sensor ID number.
* sproc\_SensorUpdate
  + Changes information of the Sensors Table in the database with the given primary key to the given Sensor class object.
* sproc\_SensorRemove
  + Removes the Sensor from the Sensors Table with the given Sensor ID number.

**DAL (Software Functions)**

* SensorsGetAll()
  + Returns a list of Sensor objects that are currently stored in the database.
* SensorGet(int ID)
  + Returns a Sensor object that is currently stored in the database that has the given Sensor ID number.
* SensorAdd(Sensor Sensor)
  + Stores the given Sensor object into the database and returns its assigned Sensor ID number. Returns -1 if error occurred, otherwise returns null.
* SensorUpdate(Sensor Sensor)
  + Changes a Sensor object that is currently stored in the database with the given Sensor’s Sensor.ID with the Sensor’s information.
* SensorRemove(int ID)
  + Removes the Sensor object stored in the database with the given Sensor ID number. Returns -1 if error occurred, otherwise returns null.