# Table: Readings

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

Table holds the information on the Reading part.

Reading – The name of the individual reading the sensor or part is trying to retrieve. For example, it could be voltage, flow rate or PSI.

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| **Column Name** | **Data type** | **Description** |
| ReadingID | Int | Primary Key of Reading Table. |
| Name | String | Name of the desired reading. Use United States mechanical, electrical and plumbing artisanry names. |

**Procedures (Database functions)**

* sprocGetReadings
  + Returns a list of Reading objects that are currently stored in the database.
* sprocGetReading
  + Returns a Reading object that is currently stored in the database that has the given Reading ID number.
* sproc\_ReadingAdd
  + Stores the given Reading object into the database and returns its assigned Reading ID number.
* sproc\_ReadingUpdate
  + Changes information of the Readings Table in the database with the given primary key to the given Reading class object.
* sproc\_ReadingRemove
  + Removes the Reading from the Readings Table with the given Reading ID number.

**DAL (Software Functions)**

* ReadingsGetAll()
  + Returns a list of Reading objects that are currently stored in the database.
* ReadingGet(int ID)
  + Returns a Reading object that is currently stored in the database that has the given Reading ID number.
* ReadingAdd(Reading Reading)
  + Stores the given Reading object into the database and returns its assigned Reading ID number. Returns -1 if error occurred, otherwise returns null.
* ReadingUpdate(Reading Reading)
  + Changes a Reading object that is currently stored in the database with the given Reading’s Reading.ID with the Reading’s information.
* ReadingRemove(int ID)
  + Removes the Reading object stored in the database with the given Reading ID number. Returns -1 if error occurred, otherwise returns null.