



Systemstate Editor Pre-Alpha v1.0.0

v1.0.0-pre-alpha

Types of Classes

There are three types of classes: element classes, item classes and user interface classes.

An element class is the smallest unit of the user interface, which corresponds to one HTML element at the browser side and corresponds to one attribute of one tuple at the database side. **SSSelector** and **SSKey** are examples of element classes.

An item class consists of all the elements whose attributes make up the tuple involved at the database side; hence it corresponds to one tuple at the database side. **SSObject**, **SSGroup**, **SSLink** and **SSProperty** are the four item classes that are available.

A user interface class consists of all the items on the screen, which corresponds to all the tuples required to form a coherent whole that the user can think of as one concept when using the Systemstate Editor. **SSEditor**, **SSAliase**, and **SSStory** are examples of user interface classes.

Types of Identifiers

There are two types of identifiers: keys and identity strings.

Keys are used to identify items. They are eight-character-long alphanumeric strings. Each **SSObject**, **SSLink** and **SSProperty** has one key (its `_uuid` attribute); hence one key is sufficient to identify them. But each **SSGroup** has two keys (its `_uuid` attribute and its `_parent` attribute), hence two keys are required to identify them.

Identity strings are used to identify **SSSelectors**. They work mostly like keys, except for **SSGroups**, where they will instead consist of the two keys of the **SSGroup** joined, with an underscore as the delimiter. This way, one identity string is always sufficient to identify the

SSSelector. Also, since the **SSAdd** element and the **SSRemove** element also have their own **SSSelectors**, they can also be identified with identity strings consisting of the keys followed by an underscore, and then either "add" or "remove".

Structure of User Interface Classes

Element classes and item classes are more fundamental components that are supposed to be managed internally by the Systemstate Editor, while user interface classes are more flexible interfaces that are supposed to be managed by the user of the Systemstate Editor. So it is important for users to understand the structure of a user interface class.

There are six important parts of each user interface class instance: the head, the validate function and the four CRUD functions (called add, load, save and remove).

The head of a class instance is the key that the class instance will work around. The four CRUD functions, under the hood, manage various items according to those item's relations with this key. Meanwhile, the validate function can be used to validate whether the class instance is valid or not.