# msaSDK Module

## .db.crud.\_sqlmodel

#### **Attributes**

\_\_version\_\_ (module-attribute)

```
__version__ = '0.1.1'
```

# 

```
sql_operator_map: Dict[str, str] = {
    "=": "__eq__",
    "<": "__le__",
    "<": "__gt__",
    ">=": "__ge__",
    "!": "__ne__",
    "!=": "__ne__",
    "<": "__ne__",
    "*": "in__",
    "!*": "in__",
    "!*": "not_in",
    "~": "like",
    "!~": "not_like",
    "-": "between",
}</pre>
```

### sql\_operator\_pattern module-attribute

```
sql_operator_pattern: Pattern = re.compile(
    "^\\[(=|<=|<|>|>=|!|!=|<>|\\*|!\\*|~|!~|-)]"
)
```

## Classes

# **MSASQLModelCrud**

```
Bases: MSABaseCrud, MSASQLModelSelector
Attributes
create_fields class-attribute
  create_fields: List[SQLModelField] = []
db [instance-attribute]
  db = (
      AsyncDatabase(self.engine)
      if isinstance(self.engine, AsyncEngine)
      else Database(self.engine)
engine instance-attribute
  engine = engine or self.engine
list_filter class-attribute
  list_filter: List[SQLModelListField] = []
readonly_fields class-attribute
  readonly_fields: List[SQLModelListField] = []
update_fields class-attribute
  update_fields: List[SQLModelListField] = []
Functions
__init__
  __init__(
      model: Type[SQLModel],
      engine: Union[Engine, AsyncEngine],
      fields: List[SQLModelListField] = None,
      router: APIRouter = None,
  ) -> None
```

```
on_create_pre async
 on_create_pre(
     request: Request, obj: BaseModel, **kwargs
  ) -> Dict[str, Any]
on_filter_pre async
 on_filter_pre(
     request: Request, obj: BaseModel, **kwargs
  ) -> Dict[str, Any]
on_update_pre async
  on_update_pre(
     request: Request,
     obj: BaseModel,
     item_id: Union[List[str], List[int]],
      **kwargs
  ) -> Dict[str, Any]
route_create property
  route_create() -> Callable
route_delete property
  route_delete() -> Callable
route_list property
  route_list() -> Callable
route_read property
  route_read() -> Callable
route_update property
  route_update() -> Callable
schema_name_prefix property
```

```
schema_name_prefix()
```

## MSASQLModelSelector

SQLModel Selector

PARAMETER	DESCRIPTION	
model	The SQLModel to use  TYPE: Type[SQLModel]	DEFAULT: None
fields	List of the SQIModelListFields  TYPE: List[SQLModelListField]	DEFAULT: None

#### **Attributes**

exclude class-attribute

```
exclude: List[SQLModelListField] = []
```

Excluded fields list. A list of fields to exclude from the current model.

Supports current SQLModel model fields, current model database table field names Default: []

fields instance-attribute

```
fields = list(
    filter(
        lambda x: x
        not in self.parser.filter_insfield(self.exclude),
        self.parser.filter_insfield(self.fields),
)
)
```

link\_models class-attribute

```
link_models: Dict[
    str, Tuple[Type[Table], Column, Column]
] = {}
```

Dictionary of link models. More complex, detailed parsing to be done.

model instance-attribute

```
model = model or self.model
```

ordering class-attribute

```
ordering: List[
    Union[SQLModelListField, UnaryExpression]
] = []
```

List of fields sorted by selector. Default: []

parser instance-attribute

```
parser = MSASQLModelFieldParser(self.model)
```

pk instance-attribute

```
pk: InstrumentedAttribute = self.model.__dict__[
    self.pk_name
]
```

pk\_name [instance-attribute]

```
pk_name: str = (
    self.pk_name
    or self.model.__table__.primary_key.columns.keys()[0]
)
```

#### **Functions**

\_\_init\_\_

```
__init__(
   model: Type[SQLModel] = None,
   fields: List[SQLModelListField] = None,
) -> None
```

calc\_filter\_clause

```
calc_filter_clause(
    data: Dict[str, Any]
) -> List[BinaryExpression]
```

get\_link\_clause async

```
get_link_clause(
    request: Request,
    link_model: str = None,
    link_item_id: Union[int, str] = Query(
        None,
        title="pk",
        example="1,2,3",
        description="Link Model Primary key or list of primary keys",
        ),
) -> Optional[Any]
```

get\_select async

```
get_select(request: Request) -> Select
```

### **Functions**

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