

Nesse artigo veremos como realizar a manipulação de dados através do Veloster Framework, ou seja, CRUD e consultas.

## Interface de Manipulação

Java Code

```
br.com.mobilemind.veloster.orm.Veloster<T extends Entity>
```

Através dessa interface executamos insert, update, delete e select no banco de dados. Essa interface já vem preparada com diversos métodos auto-explicativos para uso:

Java Code

```
public interface Veloster<T extends Entity>{

    /**
     * delete entity and put entity like internal entity
     *
     */
    void delete(T entity);

    /**
     * delete internal entity by criteria
     *
     */
    void deleteByCriteria(Criteria<T> criteria);

    /**
     * update entity and put entity like internal entity
     *
     */
    void update(T entity);

    /**
     * save entity and put entity like internal entity
     *
     * @return
     */
    T save(T entity);

    /**
     * load entity by id and put like internal entity
     *
     * @param id
     * @return
     */
    T load(Long id);

    /**
     * reload entity by id and put entity like internal entity
     *
     * @param entity
     * @return
     */
    T load(T entity);

    /**
     * load entity by id and put entity like internal entity
     *
     * @return
     */
    T loadByCriteria(Criteria<T> criteria);

    /**
     * execute select count(*) in data base
     *
     * @return
     */
    int count();

    /**
     * execute select count(*) by criteria in data base
     *
     * @return
     */
    int countByCriteria(Criteria<T> critaria);

    /**
     * list all entities
     *
     * @return
     */
    List<T> list();

    /**
     * list all entities paged
     *
     * @param max max of results
     * @param first first result
     * @return
     */
    List<T> list(int limit, int offset);

    /**
```

```

* list all entities by criteria
*
* @return
*/
List<T> listByCriteria(Criteria<T> critaria);

/**
* list all entities paged by criteria
*
* @param max max of results
* @param first first result
* @return
*/
List<T> listByCriteria(Criteria<T> critaria, int limit, int offset);

/**
* Execute native query
*
* @param query
* @param query parameters
*/
void executeNativeQuery(String query, Object... params);

/**
* Execute native query
*
* @param query
* @param query parameters
*/
List<Object[]> executeNativeSelect(String query, Object... args);

/**
* Execute native query and transform the result at
* <code>classToTransformer</code>
*
* @param query
* @param classToTransformer class to transform result
* @param query parameters
*/
<E> List<E> executeNativeTransformer(String query, Class<E> resultTransformer, Object... params);

/**
* Execute native query and transform the result at
* <code>classToTransformer</code>
*
* @param query
* @param classToTransformer class to transform result
* @param query parameters
*/
<E> E executeNativeSingleTransformer(String query, Class<E> resultTransformer, Object... params);

/**
* executa DDL create table
*
*/
void tableCreate();

/**
* execute DDL update table
*
*/
void tableUpdate();

/**
* executa DDL drop table
*
*/
void tableDelete();

/**
* verify if table exists
*
* @return
*/
boolean tableExists();

/**
* name of table
*
* @return
*/
String tableName();

/**
* run transactional operation
*
*/
void runTrans(Transactionl0peration operation);

/**
* add insert listener
*
* @param listener
*/
void addInsertListener(InsertListener listener);

/**
* remove insert listener
*
* @param listener
*/
void removeInsertListener(InsertListener listener);

```

```

/**
 * add update listener
 *
 * @param listener
 */
void addUpdateListener(UpdateListener listener);

/**
 * remove update listener
 *
 * @param listener
 */
void removeUpdateListener(UpdateListener listener);

/**
 * add delete listener
 *
 * @param listener
 */
void addDeleteListener(DeleteListener listener);

/**
 * remove delete listener
 *
 * @param listener
 */
void removeDeleteListener(DeleteListener listener);

/**
 * add meta data change listener
 *
 * @param listener
 */
void addMetadataUpdateListener(MetadataUpdateListener listener);

/**
 * remove meta data change listener
 *
 * @param listener
 */
void removeMetadataUpdateListener(MetadataUpdateListener listener);

/**
 * create criteria
 *
 * @return
 */
Criteria<T> createCriteria();

/**
 * get class validator
 *
 * @return
 */
EntityValidator getValidator();
}

```

A interface *Veloster* é a porta de comunicação com o framework. O Framework já trás sua implementação padrão para ela:

#### Java Code

```
br.com.mobilemind.veloster.orm.core.VelosterImpl<T extends Entity> implements Veloster<T>
```

Com essa implementação já podemos utilizar todos os recursos oferecidos pelo Framework:

#### Java Code

```
Veloster<PersonGroup> veloster = VelosterRepository.getVeloster(PersonGroup.class);
PersonGroup group = new PersonGroup();
veloster.save(group);
PersonGroup groups = veloster.list();
```