

Changes in trunk/GenericDAOJPA [231:241]

- Files:**
- trunk/GenericDAOJPA/lib/JPA_Hibernate
 - trunk/GenericDAOJPA/nbproject/project.properties (1 diff)
 - trunk/GenericDAOJPA/src/com/tecgraf/dao/IGenericDAOJPA.java (1 diff)
 - trunk/GenericDAOJPA/src/com/tecgraf/dao/GenericDAOJPA.java (2 diffs)
 - trunk/GenericDAOJPA/build
 - trunk/GenericDAOJPA/dist

☐ Unmodified ☒ Added ☐ Removed ☐ Modified ☐ Copied ☐ Moved

trunk/GenericDAOJPA/nbproject/project.properties	
Revision 231	Revision 241
44 javac.deprecation=true	44 javac.deprecation=true
45 javac.source=1.5	45 javac.source=1.5
46 javac.target=1.5	46 javac.target=1.6
47 javac.test.classpath=\	47 javac.test.classpath=\
48 \${javac.classpath}:\	48 \${javac.classpath}:\

trunk/GenericDAOJPA/src/com/tecgraf/dao/IGenericDAOJPA.java	
Revision 231	Revision 241
28 List<T> findAll(Class<T> c);	28 List<T> findAll(Class<T> c);
29	29
30 T makePersistent(T entity);	30 T makePersistent(T entity) throws JPDAOException;
31 boolean deletePersistent(Class<T> c, T entity);	31 boolean deletePersistent(Class<T> c, T entity);
32 boolean updatePersistent(Class<T> c, T entity);	32 boolean updatePersistent(T entity);
33	33
34 public String getEntityClassName();	34 public String getEntityClassName();

trunk/GenericDAOJPA/src/com/tecgraf/dao/GenericDAOJPA.java	
Revision 231	Revision 241
17 import javax.persistence.Query;	17 import javax.persistence.Query;
18	18
19 /**	19 /**
20 /**	20 /**
21 * Class GenericDAOJPA is an implementation of a class that	21 * Class GenericDAOJPA is an implementation of a class that
...	...

```

29  */
30  public abstract class GenericDAOJPA<T extends IEntityDAOJPA<ID>, ID
    extends Number>
31      implements IGenericDAOJPA<T, ID> {
32      //-----
33      // Query methods
34      //-----
35      public List<T> queryPositionalParams( String queryString, final
    Object... positionalParams ) {
36          em =
    facadeJPA.getEntityManagerFactory().createEntityManager();
37
38          Query query = em.createQuery(queryString);
39
39      int i = 0;
40      for( Object p : positionalParams ) {
41          query.setParameter(++i, p);
42      }
43
43      @SuppressWarnings("unchecked")
44      List<T> l = query.getResultList();
45
46      em.close();
47
47      return l;
48  }
49
50      public List<T> queryNamedParams( String queryString, final
    Map<String, Object> namedParams ) {
51          em =
    facadeJPA.getEntityManagerFactory().createEntityManager();
52
53          Query query = em.createQuery(queryString);
54          for( Map.Entry<String, Object> entry :
    namedParams.entrySet() ) {
55              query.setParameter(entry.getKey(), entry.getValue());
56          }

```

```

28  */
29  public abstract class GenericDAOJPA<T extends IEntityDAOJPA<ID>, ID
    extends Number>
30      implements IGenericDAOJPA<T, ID>
31  {
32      //-----
33      // Query methods
34      //-----
35      public List<T> queryPositionalParams(
36          String queryString,
37          final Object... positionalParams
38          )
39      {
40          EntityManager em =
    facadeJPA.getEntityManagerFactory().createEntityManager();
41
42          Query query = em.createQuery( queryString );
43
44      int i = 0;
45      for( Object p : positionalParams )
46      {
47          query.setParameter(++i, p);
48      }
49
50      @SuppressWarnings("unchecked")
51      List<T> l = query.getResultList();
52
53      em.close();
54
55      return l;
56  }
57
58      public List<T> queryNamedParams(
59          String queryString,
60          final Map<String, Object> namedParams
61          )
62      {
63          EntityManager em =
    facadeJPA.getEntityManagerFactory().createEntityManager();
64
65          Query query = em.createQuery( queryString );

```

		66	
		67	for(Map.Entry<String, Object> entry :
		68	namedParams.entrySet())
		69	{
		70	query.setParameter(entry.getKey(), entry.getValue());
		71	}
57	@SuppressWarnings("unchecked")	72	@SuppressWarnings("unchecked")
58	List<T> l = query.getResultList();	73	List<T> l = query.getResultList();
59		74	
60	em.close();	75	em.close();
		76	
61	return l;	77	return l;
62	}	78	}
		79	
63	//-----	80	//-----
64	// CRUD methods	81	// CRUD methods
65	//-----	82	//-----
66	public T findById(Class<T> c, ID primaryKey) {	83	public T findById(Class<T> c, ID primaryKey)
		84	{
67	Logger.getLogger(getEntityClassName()).	85	Logger.getLogger(getEntityClassName()).
68	log(Level.FINE, "lookdig for object id=" +	86	log(Level.FINE, "lookdig for object id=" +
69	primaryKey + " of class: " + c.getName());	87	primaryKey + " of class: " + c.getName());
70	em =	88	EntityManager em =
	facadeJPA.getEntityManagerFactory().createEntityManager();		facadeJPA.getEntityManagerFactory().createEntityManager();
71		89	
72	T entity = em.find(c, primaryKey);	90	T entity = em.find(c, primaryKey);
73		91	
74	em.close();	92	em.close();
		93	
75	return entity;	94	return entity;
76	}	95	}
77		96	
78	public List<T> findAll(Class<T> c) {	97	public List<T> findAll(Class<T> c)
		98	{
79	Logger.getLogger(getEntityClassName()).	99	Logger.getLogger(getEntityClassName()).
80	log(Level.FINE, "finding all objects of	100	log(Level.FINE, "finding all objects of
81	class: " + c.getName());	101	class: " + c.getName());
82	entityName =	102	entityName = c.getName().substring(
	c.getName().substring(c.getName().lastIndexOf('.') + 1);		c.getName().lastIndexOf('.') + 1);
83		103	
84	return queryPositionalParams("SELECT e FROM " +	104	return queryPositionalParams("SELECT e FROM " +
	getEntityName() + " e");		getEntityName() + " e");

```
85     }
86
87     public T makePersistent( T entity ) {
88         em =
89         facadeJPA.getEntityManagerFactory().createEntityManager();
89
90         Logger.getLogger(getEntityClassName()).
91             log(Level.FINE, "persisting object: " +
92             entity);
93         em.persist(entity);
94
94         return entity;
95     }
96
97     public boolean deletePersistent( Class<T> c, T entity ) {
98         em =
99         facadeJPA.getEntityManagerFactory().createEntityManager();
```

```
105     }
106
107     public T makePersistent(T entity) throws JPADOException
108     {
109
110         Logger.getLogger(getEntityClassName()).
111             log(Level.FINE, "persisting object: " +
112             entity);
113         EntityManager em =
114         facadeJPA.getEntityManagerFactory().createEntityManager();
115
116         EntityTransaction tx = em.getTransaction();
117
118         try
119         {
120             tx.begin();
121             em.persist( entity );
122             tx.commit();
123         }
124         catch(Exception ex)
125         {
126             if ( null != tx && tx.isActive() )
127             {
128                 tx.rollback();
129             }
130
131             em.close();
132
133             Logger.getLogger(getEntityClassName()).log(
134             Level.SEVERE, null, ex );
135
136             throw new JPADOException( "error while persisting
137             object " + entity, ex );
138         }
139
140         em.close();
141
142         return entity;
143     }
144
145     public boolean deletePersistent(Class<T> c, T entity)
146     {
```

99	<code>T e = em.find(c, entity.getId()); // brings entity to the PersistenceContext</code>	142	<code>EntityManager em = facadeJPA.getEntityManagerFactory().createEntityManager();</code>
		143	
		144	<code>/* brings entity to the PersistenceContext */</code>
		145	<code>T e = em.find(c, entity.getId());</code>
		146	
100	<code>EntityTransaction tx = null;</code>	147	<code>EntityTransaction tx = null;</code>
101	<code>boolean objDeleted = false;</code>	148	<code>boolean objDeleted = false;</code>
102	<code>if(e != null) {</code>	149	
		150	<code>if(e != null)</code>
		151	<code>{</code>
		152	<code> Logger.getLogger(getEntityClassName()).</code>
		153	<code> log(Level.FINE, "deleting object: " +</code>
		154	<code>e);</code>
103	<code> tx = em.getTransaction();</code>	155	<code> tx = em.getTransaction();</code>
104	<code> tx.begin();</code>	156	<code> tx.begin();</code>
105	<code> Logger.getLogger(getEntityClassName()).</code>	157	
106	<code> log(Level.FINE, "deleting object: " +</code>	158	<code>try</code>
107	<code>e);</code>	159	<code>{</code>
	<code> try {</code>	160	<code> em.remove(e);</code>
108	<code> em.remove(e);</code>	161	<code> tx.commit();</code>
109	<code> tx.commit();</code>	162	<code> objDeleted = true;</code>
110	<code> objDeleted = true;</code>	163	<code> }</code>
111	<code> } catch(RuntimeException ex) {</code>	164	<code> catch(RuntimeException ex)</code>
112	<code> if(tx != null && tx.isActive()) {</code>	165	<code> {</code>
113	<code> tx.rollback();</code>	166	<code> if(tx != null && tx.isActive())</code>
		167	<code> {</code>
		168	<code> tx.rollback();</code>
114	<code> }</code>	169	<code> }</code>
115	<code> }</code>	170	
	<code> Logger.getLogger(getEntityClassName()).log(Level.SEVERE, null, ex);</code>	171	<code> Logger.getLogger(getEntityClassName()).log(Level.SEVERE, null, ex);</code>
116	<code> objDeleted = false;</code>	172	<code> objDeleted = false;</code>
117	<code> } finally {</code>	173	<code> }</code>
		174	<code> finally</code>
		175	<code> {</code>
118	<code> em.close();</code>	176	<code> em.close();</code>
119	<code> }</code>	177	<code> }</code>
120	<code> } else {</code>	178	<code> }</code>
		179	<code> else</code>
		180	<code> {</code>

```

121         em.close();
122     }

123     return objDeleted;
124 }

125
126 public boolean updatePersistent( Class<T> c, T entity ) {
127     em =
facadeJPA.getEntityManagerFactory().createEntityManager();
128     T e = findById(c, entity.getId()); // brings entity to the
PersistenceContext
129
130     Logger.getLogger(getEntityClassName()).
131         log(Level.FINE, "updating object: " +
entity);
132
133     em.flush();
134
135     em.close();

```

```

181         em.close();
182     }

183
184     return objDeleted;
185 }

186
187 public boolean updatePersistent(T entity)
188 {
189     @SuppressWarnings("unchecked")
190     Class<T> c = (Class<T>) entity.getClass();
191
192     if ( null == findById(c, entity.getId() ) )
193     {
194         return ( false );
195     }
196
197     Logger.getLogger(getEntityClassName()).
198         log(Level.FINE, "updating object: " +
entity);
199
200     EntityManager em =
facadeJPA.getEntityManagerFactory().createEntityManager();
201     EntityTransaction tx = em.getTransaction();
202
203     try
204     {
205         tx.begin();
206         /* brings entity to the PersistenceContext */
207         em.merge( entity );
208         em.flush();
209         tx.commit();
210     }
211     catch(Exception ex)
212     {
213         if ( null != tx && tx.isActive() )
214         {
215             tx.rollback();
216         }
217
218         Logger.getLogger(getEntityClassName()).log(Level.SEVERE,
null, ex);
219
220         em.close();

```

		221	
		222	return false;
		223	}
		224	
		225	em.close();
		226	
136	return true;	227	return true;
137	}	228	}
138		229	
139	public String getEntityClassName() {	230	public String getEntityClassName()
		231	{
140	return entityClassName;	232	return entityClassName;
141	}	233	}
142		234	
143	public String getEntityName() {	235	public String getEntityName()
		236	{
144	return entityName;	237	return entityName;
145	}	238	}
		239	
146	//-----	240	//-----
147	// Protected constructor	241	// Protected constructor
148	//-----	242	//-----
149	protected GenericDAOJPA(Class<T> c, FacadeJPA f) {	243	protected GenericDAOJPA(Class<T> c, FacadeJPA f)
		244	{
150	this.facadeJPA = f;	245	this.facadeJPA = f;
151	entityClassName = c.getName();	246	entityClassName = c.getName();
152	entityName =	247	entityName =
	entityClassName.substring(entityClassName.lastIndexOf('.') + 1);		entityClassName.substring(entityClassName.lastIndexOf('.') + 1);
153	}	248	}
		249	
154	private String entityClassName;	250	private String entityClassName;
155	private String entityName;	251	private String entityName;
156	protected FacadeJPA facadeJPA;	252	protected FacadeJPA facadeJPA;
157	protected EntityManager em;	253	
158	}	254	}