/\* ----------------------------------------------------------------------------

\* This file was automatically generated by SWIG (http://www.swig.org).

\* Version 4.0.2

\*

\* Do not make changes to this file unless you know what you are doing--modify

\* the SWIG interface file instead.

\* ----------------------------------------------------------------------------- \*/

package com.twitter.ann.faiss;

public class IndexIVFScalarQuantizer extends IndexIVF {

private transient long swigCPtr;

protected IndexIVFScalarQuantizer(long cPtr, boolean cMemoryOwn) {

super(swigfaissJNI.IndexIVFScalarQuantizer\_SWIGUpcast(cPtr), cMemoryOwn);

swigCPtr = cPtr;

}

protected static long getCPtr(IndexIVFScalarQuantizer obj) {

return (obj == null) ? 0 : obj.swigCPtr;

}

@SuppressWarnings("deprecation")

protected void finalize() {

delete();

}

public synchronized void delete() {

if (swigCPtr != 0) {

if (swigCMemOwn) {

swigCMemOwn = false;

swigfaissJNI.delete\_IndexIVFScalarQuantizer(swigCPtr);

}

swigCPtr = 0;

}

super.delete();

}

public void setSq(SWIGTYPE\_p\_ScalarQuantizer value) {

swigfaissJNI.IndexIVFScalarQuantizer\_sq\_set(swigCPtr, this, SWIGTYPE\_p\_ScalarQuantizer.getCPtr(value));

}

public SWIGTYPE\_p\_ScalarQuantizer getSq() {

return new SWIGTYPE\_p\_ScalarQuantizer(swigfaissJNI.IndexIVFScalarQuantizer\_sq\_get(swigCPtr, this), true);

}

public void setBy\_residual(boolean value) {

swigfaissJNI.IndexIVFScalarQuantizer\_by\_residual\_set(swigCPtr, this, value);

}

public boolean getBy\_residual() {

return swigfaissJNI.IndexIVFScalarQuantizer\_by\_residual\_get(swigCPtr, this);

}

public IndexIVFScalarQuantizer(Index quantizer, long d, long nlist, SWIGTYPE\_p\_ScalarQuantizer\_\_QuantizerType qtype, MetricType metric, boolean encode\_residual) {

this(swigfaissJNI.new\_IndexIVFScalarQuantizer\_\_SWIG\_0(Index.getCPtr(quantizer), quantizer, d, nlist, SWIGTYPE\_p\_ScalarQuantizer\_\_QuantizerType.getCPtr(qtype), metric.swigValue(), encode\_residual), true);

}

public IndexIVFScalarQuantizer(Index quantizer, long d, long nlist, SWIGTYPE\_p\_ScalarQuantizer\_\_QuantizerType qtype, MetricType metric) {

this(swigfaissJNI.new\_IndexIVFScalarQuantizer\_\_SWIG\_1(Index.getCPtr(quantizer), quantizer, d, nlist, SWIGTYPE\_p\_ScalarQuantizer\_\_QuantizerType.getCPtr(qtype), metric.swigValue()), true);

}

public IndexIVFScalarQuantizer(Index quantizer, long d, long nlist, SWIGTYPE\_p\_ScalarQuantizer\_\_QuantizerType qtype) {

this(swigfaissJNI.new\_IndexIVFScalarQuantizer\_\_SWIG\_2(Index.getCPtr(quantizer), quantizer, d, nlist, SWIGTYPE\_p\_ScalarQuantizer\_\_QuantizerType.getCPtr(qtype)), true);

}

public IndexIVFScalarQuantizer() {

this(swigfaissJNI.new\_IndexIVFScalarQuantizer\_\_SWIG\_3(), true);

}

public void train\_residual(long n, SWIGTYPE\_p\_float x) {

swigfaissJNI.IndexIVFScalarQuantizer\_train\_residual(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x));

}

public void encode\_vectors(long n, SWIGTYPE\_p\_float x, LongVector list\_nos, SWIGTYPE\_p\_unsigned\_char codes, boolean include\_listnos) {

swigfaissJNI.IndexIVFScalarQuantizer\_encode\_vectors\_\_SWIG\_0(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), SWIGTYPE\_p\_long\_long.getCPtr(list\_nos.data()), list\_nos, SWIGTYPE\_p\_unsigned\_char.getCPtr(codes), include\_listnos);

}

public void encode\_vectors(long n, SWIGTYPE\_p\_float x, LongVector list\_nos, SWIGTYPE\_p\_unsigned\_char codes) {

swigfaissJNI.IndexIVFScalarQuantizer\_encode\_vectors\_\_SWIG\_1(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), SWIGTYPE\_p\_long\_long.getCPtr(list\_nos.data()), list\_nos, SWIGTYPE\_p\_unsigned\_char.getCPtr(codes));

}

public void add\_core(long n, SWIGTYPE\_p\_float x, LongVector xids, LongVector precomputed\_idx) {

swigfaissJNI.IndexIVFScalarQuantizer\_add\_core(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), SWIGTYPE\_p\_long\_long.getCPtr(xids.data()), xids, SWIGTYPE\_p\_long\_long.getCPtr(precomputed\_idx.data()), precomputed\_idx);

}

public SWIGTYPE\_p\_faiss\_\_InvertedListScanner get\_InvertedListScanner(boolean store\_pairs) {

long cPtr = swigfaissJNI.IndexIVFScalarQuantizer\_get\_InvertedListScanner(swigCPtr, this, store\_pairs);

return (cPtr == 0) ? null : new SWIGTYPE\_p\_faiss\_\_InvertedListScanner(cPtr, false);

}

public void reconstruct\_from\_offset(long list\_no, long offset, SWIGTYPE\_p\_float recons) {

swigfaissJNI.IndexIVFScalarQuantizer\_reconstruct\_from\_offset(swigCPtr, this, list\_no, offset, SWIGTYPE\_p\_float.getCPtr(recons));

}

public void sa\_decode(long n, SWIGTYPE\_p\_unsigned\_char bytes, SWIGTYPE\_p\_float x) {

swigfaissJNI.IndexIVFScalarQuantizer\_sa\_decode(swigCPtr, this, n, SWIGTYPE\_p\_unsigned\_char.getCPtr(bytes), SWIGTYPE\_p\_float.getCPtr(x));

}

}