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

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

\* Version 4.0.2

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\* 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 Index {

private transient long swigCPtr;

protected transient boolean swigCMemOwn;

protected Index(long cPtr, boolean cMemoryOwn) {

swigCMemOwn = cMemoryOwn;

swigCPtr = cPtr;

}

protected static long getCPtr(Index 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\_Index(swigCPtr);

}

swigCPtr = 0;

}

}

public void setD(int value) {

swigfaissJNI.Index\_d\_set(swigCPtr, this, value);

}

public int getD() {

return swigfaissJNI.Index\_d\_get(swigCPtr, this);

}

public void setNtotal(long value) {

swigfaissJNI.Index\_ntotal\_set(swigCPtr, this, value);

}

public long getNtotal() {

return swigfaissJNI.Index\_ntotal\_get(swigCPtr, this);

}

public void setVerbose(boolean value) {

swigfaissJNI.Index\_verbose\_set(swigCPtr, this, value);

}

public boolean getVerbose() {

return swigfaissJNI.Index\_verbose\_get(swigCPtr, this);

}

public void setIs\_trained(boolean value) {

swigfaissJNI.Index\_is\_trained\_set(swigCPtr, this, value);

}

public boolean getIs\_trained() {

return swigfaissJNI.Index\_is\_trained\_get(swigCPtr, this);

}

public void setMetric\_type(MetricType value) {

swigfaissJNI.Index\_metric\_type\_set(swigCPtr, this, value.swigValue());

}

public MetricType getMetric\_type() {

return MetricType.swigToEnum(swigfaissJNI.Index\_metric\_type\_get(swigCPtr, this));

}

public void setMetric\_arg(float value) {

swigfaissJNI.Index\_metric\_arg\_set(swigCPtr, this, value);

}

public float getMetric\_arg() {

return swigfaissJNI.Index\_metric\_arg\_get(swigCPtr, this);

}

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

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

}

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

swigfaissJNI.Index\_add(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x));

}

public void add\_with\_ids(long n, SWIGTYPE\_p\_float x, LongVector xids) {

swigfaissJNI.Index\_add\_with\_ids(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), SWIGTYPE\_p\_long\_long.getCPtr(xids.data()), xids);

}

public void search(long n, SWIGTYPE\_p\_float x, long k, SWIGTYPE\_p\_float distances, LongVector labels) {

swigfaissJNI.Index\_search(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), k, SWIGTYPE\_p\_float.getCPtr(distances), SWIGTYPE\_p\_long\_long.getCPtr(labels.data()), labels);

}

public void range\_search(long n, SWIGTYPE\_p\_float x, float radius, RangeSearchResult result) {

swigfaissJNI.Index\_range\_search(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), radius, RangeSearchResult.getCPtr(result), result);

}

public void assign(long n, SWIGTYPE\_p\_float x, LongVector labels, long k) {

swigfaissJNI.Index\_assign\_\_SWIG\_0(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), SWIGTYPE\_p\_long\_long.getCPtr(labels.data()), labels, k);

}

public void assign(long n, SWIGTYPE\_p\_float x, LongVector labels) {

swigfaissJNI.Index\_assign\_\_SWIG\_1(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), SWIGTYPE\_p\_long\_long.getCPtr(labels.data()), labels);

}

public void reset() {

swigfaissJNI.Index\_reset(swigCPtr, this);

}

public long remove\_ids(IDSelector sel) {

return swigfaissJNI.Index\_remove\_ids(swigCPtr, this, IDSelector.getCPtr(sel), sel);

}

public void reconstruct(long key, SWIGTYPE\_p\_float recons) {

swigfaissJNI.Index\_reconstruct(swigCPtr, this, key, SWIGTYPE\_p\_float.getCPtr(recons));

}

public void reconstruct\_n(long i0, long ni, SWIGTYPE\_p\_float recons) {

swigfaissJNI.Index\_reconstruct\_n(swigCPtr, this, i0, ni, SWIGTYPE\_p\_float.getCPtr(recons));

}

public void search\_and\_reconstruct(long n, SWIGTYPE\_p\_float x, long k, SWIGTYPE\_p\_float distances, LongVector labels, SWIGTYPE\_p\_float recons) {

swigfaissJNI.Index\_search\_and\_reconstruct(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(x), k, SWIGTYPE\_p\_float.getCPtr(distances), SWIGTYPE\_p\_long\_long.getCPtr(labels.data()), labels, SWIGTYPE\_p\_float.getCPtr(recons));

}

public void compute\_residual(SWIGTYPE\_p\_float x, SWIGTYPE\_p\_float residual, long key) {

swigfaissJNI.Index\_compute\_residual(swigCPtr, this, SWIGTYPE\_p\_float.getCPtr(x), SWIGTYPE\_p\_float.getCPtr(residual), key);

}

public void compute\_residual\_n(long n, SWIGTYPE\_p\_float xs, SWIGTYPE\_p\_float residuals, LongVector keys) {

swigfaissJNI.Index\_compute\_residual\_n(swigCPtr, this, n, SWIGTYPE\_p\_float.getCPtr(xs), SWIGTYPE\_p\_float.getCPtr(residuals), SWIGTYPE\_p\_long\_long.getCPtr(keys.data()), keys);

}

public DistanceComputer get\_distance\_computer() {

long cPtr = swigfaissJNI.Index\_get\_distance\_computer(swigCPtr, this);

return (cPtr == 0) ? null : new DistanceComputer(cPtr, false);

}

public long sa\_code\_size() {

return swigfaissJNI.Index\_sa\_code\_size(swigCPtr, this);

}

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

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

}

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

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

}

public IndexIVF toIVF() {

long cPtr = swigfaissJNI.Index\_toIVF(swigCPtr, this);

return (cPtr == 0) ? null : new IndexIVF(cPtr, false);

}

}