# **SearchifyEngine Documentation**

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# Namespace SearchifyEngine

Classes

Config

**Application Constants** 

Utils

Static class housing a number of utility methods

## **Class Config**

**Application Constants** 

Inheritance

System.Object

Config

Inherited Members

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine
Assembly: SearchifyEngine.dll

Syntax

public static class Config

#### **Fields**

#### Codec

Codec for integer compression

Declaration

public static readonly Codec Codec

Field Value

ТУРЕ	DESCRIPTION
Codec	

#### **DatabaseHost**

Dynamo database host

Declaration

public static readonly string DatabaseHost

Field Value

ТҮРЕ	DESCRIPTION
System.String	

#### DatabasePort

Dynamo database port

Declaration

public static readonly int DatabasePort

#### Field Value

ТУРЕ	DESCRIPTION
System.Int32	

### **Class Utils**

Static class housing a number of utility methods

Inheritance

System.Object

Utils

Inherited Members

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine
Assembly: SearchifyEngine.dll

Syntax

public static class Utils

#### Methods

#### CleanText(String)

Converts multiple spaces to one an strips punctuation from text, converts text to lowercase

Declaration

public static string CleanText(string text)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	text	any string value

#### Returns

TYPE	DESCRIPTION
System.String	cleaned text

#### ToDeltaList(List<UInt32>)

Creates a list where elements are replaced by the value of the delta between each element and the previous element

Declaration

public static List<uint> ToDeltaList(List<uint> list)

Parameters

ТҮРЕ	NAME	DESCRIPTION
System.Collections.Generic.List <system.uint32></system.uint32>	list	list of nonnegative integers

ТҮРЕ	DESCRIPTION
System.Collections.Generic.List <system.uint32></system.uint32>	list of delta ulong values

# Namespace SearchifyEngine.Database

Classes

**DbClient** 

Client library for interactions with DynamoDB

## **Class DbClient**

Client library for interactions with DynamoDB

Inheritance

System.Object

DbClient

Inherited Members

System.Object.Equals(System.Object)

System.Object. Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine.Database

Assembly: SearchifyEngine.dll

Syntax

public static class DbClient

#### **Fields**

#### Store

InvertedIndexDynamoDbStore instance associated with the client

Declaration

public static InvertedIndexDynamoDbStore Store

Field Value

TYPE	DESCRIPTION
InvertedIndexDynamoDbStore	

#### Methods

#### CreateClient(Boolean)

Connects to DynamoDB, and instantiates Store value

Declaration

public static bool CreateClient(bool useLocal)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.Boolean	useLocal	set to true if you are using dynamodblocal

ТУРЕ	DESCRIPTION
System.Boolean	status of client creation, true for success, false for failure

#### CreateTables()

Creates necessary database tables if they do not already exist

#### Declaration

#### Returns

ТУРЕ	DESCRIPTION
System.Threading.Tasks.Task	

#### GetTableDescription (String)

Provides TableDescription for table specified. If table doesn't exist, null is returned.

#### Declaration

public static async Task<TableDescription> GetTableDescription(string tableName)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	tableName	table name

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <tabledescription></tabledescription>	table description

## Namespace SearchifyEngine.Indexer

#### Classes

#### ExtractDoc

Indexer Utility class for document download

#### Indexer

Indexer class builds and maintains internal search index

#### **IndexTerm**

Index term representation, stores file delta, frequency and positions of word

#### Index Term Json Converter

Custom converter class to aid the serialization of IndexTerm to JSON string json = JsonConvert.SerializeObject(ReverseIndex, Formatting.None, new IndexTermJsonConverter());

## Class ExtractDoc

Indexer Utility class for document download

Inheritance

System.Object

ExtractDoc

Inherited Members

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine.Indexer

Assembly: SearchifyEngine.dll

Syntax

public class ExtractDoc

#### Methods

#### Delete(String)

Deletes file at specified path if the file exists

Declaration

public static void Delete(string path)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	path	absolute file path

#### Extract(String)

This function downloads a document from a valid url

Declaration

public static string Extract(string url)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String	url	valid document url

ТУРЕ	DESCRIPTION
System.String	filepath to downloaded document

## **Class Indexer**

Indexer class builds and maintains internal search index

Inheritance

System.Object

Indexer

Inherited Members

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

 $System. Object. Reference Equals (System. Object, \, System. Object) \\$ 

System.Object.ToString()

Namespace: SearchifyEngine.Indexer

Assembly: SearchifyEngine.dll

Syntax

public class Indexer

#### Constructors

#### Indexer(IStore)

Declaration

public Indexer(IStore store)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
IStore	store	

#### **Fields**

#### LastId

Last File ID indexed

Declaration

public uint LastId

#### Field Value

ТУРЕ	DESCRIPTION
System.UInt32	

#### ReverseIndex

Declaration

public Dictionary<string, IndexTerm[]> ReverseIndex

Field Value

ТҮРЕ	DESCRIPTION
System.Collections.Generic.Dictionary <system.string, indexterm[]=""></system.string,>	

#### Methods

#### GetIndexTermArray(String)

Returns index list associated with word

Declaration

public async Task<IndexTerm[]> GetIndexTermArray(string word)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	word	any string

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <indexterm[]></indexterm[]>	Index list of word

#### GetLoadedTermList(String)

Declaration

public IndexTerm[] GetLoadedTermList(string term)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
System.String	term	

#### Returns

ТҮРЕ	DESCRIPTION
IndexTerm[]	

#### Index(String, UInt32)

Powerhouse function for indexing documents

Declaration

public async Task Index(string fileUrl, uint fileId)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION

ТҮРЕ	NAME	DESCRIPTION
System.String	fileUrl	a path or link to an indexable document
System.UInt32	fileId	unique integer id for document

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task	

#### LoadInvertedIndex (String[])

#### Declaration

public async Task LoadInvertedIndex(string[] queryTerms)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.String[]	queryTerms	

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task	

## **Class IndexTerm**

Index term representation, stores file delta, frequency and positions of word

Inheritance

System.Object

IndexTerm

Inherited Members

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

 $System. Object. Reference Equals (System. Object, \, System. Object) \\$ 

System.Object.ToString()

Name space: Searchify Engine. Indexer

Assembly: SearchifyEngine.dll

Syntax

public class IndexTerm

#### Constructors

#### IndexTerm(UInt32)

Instantiates a new IndexTerm object

Declaration

public IndexTerm(uint fileDelta)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
System.UInt32	fileDelta	delta value

#### **Fields**

#### FileDelta

File ID delta value

Declaration

public readonly uint FileDelta

#### Field Value

ТУРЕ	DESCRIPTION
System.UInt32	

#### **Properties**

#### Frequency

Number of occurrences of term in document

#### Declaration

nt Frequency { get; }
-----------------------

#### **Property Value**

ТҮРЕ	DESCRIPTION
System.UInt32	

#### **Positions**

Array of positions where term can be found in the document

#### Declaration

```
public uint[] Positions { get; }
```

#### **Property Value**

TYPE	DESCRIPTION
System.UInt32[]	

#### Methods

#### AddPositions(UInt32[])

Sets positions for term

#### Declaration

```
public void AddPositions(uint[] positions)
```

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.UInt32[]	positions	array of positions in delta uint array

## Class IndexTermJsonConverter

Custom converter class to aid the serialization of IndexTerm to JSON string json = JsonConvert.SerializeObject(ReverseIndex, Formatting.None, new IndexTermJsonConverter());

Inheritance

System.Object

IndexTermJsonConverter

Name space: Searchify Engine. Indexer

Assembly: Searchify Engine. dll

Syntax

public class IndexTermJsonConverter : JsonConverter<IndexTerm>

#### Methods

#### ReadJson(JsonReader, Type, IndexTerm, Boolean, JsonSerializer)

Declaration

public override IndexTerm ReadJson(JsonReader reader, Type objectType, IndexTerm existingValue, bool hasExistingValue, JsonSerializer serializer)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
JsonReader	reader	
System.Type	objectType	
IndexTerm	existingValue	
System.Boolean	hasExistingValue	
JsonSerializer	serializer	

#### Returns

ТҮРЕ	DESCRIPTION
IndexTerm	

#### WriteJson(JsonWriter, IndexTerm, JsonSerializer)

Declaration

public override void WriteJson(JsonWriter writer, IndexTerm term, JsonSerializer serializer)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
JsonWriter	writer	
IndexTerm	term	

ТҮРЕ	NAME	DESCRIPTION
JsonSerializer	serializer	

# Namespace SearchifyEngine.Ranker

Classes

Ranker

Maintains and calculates document scores for a query

### Class Ranker

Maintains and calculates document scores for a query

Inheritance

System.Object

Ranker

Inherited Members

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Name space: Searchify Engine. Ranker

Assembly: SearchifyEngine.dll

Syntax

public class Ranker

#### Constructors

#### Ranker(Indexer)

Instantiates a ranker object

Declaration

public Ranker(Indexer indexer)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
Indexer	indexer	an instance of Indexer

#### Methods

#### RankedResultsList()

Returns an ordered array of file ids based on scores

Declaration

public uint[] RankedResultsList()

#### Returns

ТҮРЕ	DESCRIPTION
System.UInt32[]	list of file ids

#### Score(UInt32, List<Pointer>)

Computes and stores file score

#### Declaration

public void Score(uint fieldId, List<Pointer> pointerList)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.UInt32	fieldId	id of file
System.Collections.Generic.List <pointer></pointer>	pointerList	pointer list of query terms that can be found in the file

# Namespace SearchifyEngine.Searcher

#### Classes

#### **Pointer**

Search Pointer object aids the k-way linear merge algorithm by storing the pointer to each index term being iterated reverse index

#### Searcher

Searcher class operates on an indexer

### **Class Pointer**

Search Pointer object aids the k-way linear merge algorithm by storing the pointer to each index term being iterated reverse index

Inheritance

System.Object

Pointer

Implements

System.IComparable

System.IComparable < Pointer >

Inherited Members

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Name space: Searchify Engine. Searcher

Assembly: SearchifyEngine.dll

Syntax

public class Pointer : IComparable, IComparable<Pointer>

#### Constructors

#### Pointer(String, UInt32, UInt32)

Instantiate a Pointer object

Declaration

public Pointer(string term, uint p, uint fileId)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	term	word
System.UInt32	p	current index of IndexTermList iteration
System.UInt32	fileId	file id

#### **Fields**

#### FileId

FileId of Index Term

Declaration

public readonly uint FileId

#### Field Value

ТҮРЕ	DESCRIPTION
System.UInt32	

#### P

Index of current iteration of the Index Term list

Declaration

#### public readonly uint P

#### Field Value

ТҮРЕ	DESCRIPTION
System.UInt32	

#### Term

The key of the reverse index

Declaration

#### public readonly string Term

#### Field Value

ТҮРЕ	DESCRIPTION
System.String	

#### Methods

#### CompareTo(Pointer)

IComparable Pointer implementation

Declaration

#### public int CompareTo(Pointer other)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
Pointer	other	Pointer object for comparison

#### Returns

ТҮРЕ	DESCRIPTION
System.Int32	1 when this.FileId gt other.FileId -1 when this.FileId lt other.FileId 0 otherwise

Exceptions

ТҮРЕ	CONDITION
System.ArgumentException	Raised when comparing with null

#### CompareTo(Object)

IComparable implementation

Declaration

public int CompareTo(object other)

#### Parameters

ТҮРЕ	NAME	DESCRIPTION
System.Object	other	object for comparison

#### Returns

TYPE	DESCRIPTION
System.Int32	1 when this.FileId gt other.FileId -1 when this.FileId lt other.FileId 0 otherwise

#### Exceptions

ТУРЕ	CONDITION
System.ArgumentException	Raised when comparing with null

#### **Implements**

System.IComparable

System.IComparable<T>

### **Class Searcher**

Searcher class operates on an indexer

Inheritance

System.Object

Searcher

Inherited Members

System.Object.Equals(System.Object)

System.Object. Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine.Searcher

Assembly: SearchifyEngine.dll

Syntax

public class Searcher

#### Constructors

#### Searcher(Indexer)

Instantiates a Searcher object

Declaration

public Searcher(Indexer indexer)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
Indexer	indexer	instance of SearchifyEngine.Indexer

#### Methods

#### ExecuteQuery(String)

Returns a ranked array of file ids associated with a query

Declaration

public async Task<uint[]> ExecuteQuery(string query)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	query	any nonempty string value

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.uint32[]></system.uint32[]>	Ranked array of file ids

# Namespace SearchifyEngine.Store

#### Classes

Inverted Index Dynamo Db Store

Inverted Index Store for DynamoDB. Provides methods for CRU operations on the Inverted Index in DynamoDB

Inverted Index Memory Store

Interfaces

**IStore** 

Defines methods that must be possessed by an Inverted Index Store

## Class InvertedIndexDynamoDbStore

Inverted Index Store for DynamoDB. Provides methods for CRU operations on the Inverted Index in DynamoDB

Inheritance

System.Object

Inverted Index Dynamo Db Store

**Implements** 

**IStore** 

**Inherited Members** 

System.Object.Equals(System.Object)

System.Object. Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Name space: Searchify Engine. Store

Assembly: SearchifyEngine.dll

Syntax

public class InvertedIndexDynamoDbStore : IStore

#### Constructors

#### Inverted Index Dynamo Db Store (Amazon Dynamo DB Client)

Instantiates a new InvertedIndexDynamoDbStore object

Declaration

public InvertedIndexDynamoDbStore(AmazonDynamoDBClient client)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
AmazonDynamoDBClient	client	dynamodb client

#### Methods

#### AppendIndexTerm(String, IndexTerm)

Appends to list of index terms for a particular term. If the term has not been indexed yet, a new list is instantiated and the term is then appended

Declaration

public async Task<HttpStatusCode> AppendIndexTerm(string term, IndexTerm indexTerm)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION

ТУРЕ	NAME	DESCRIPTION
System.String	term	term
IndexTerm	indexTerm	IndexTerm object

#### Returns

TY	YPE	DESCRIPTION
Sy	rstem.Threading.Tasks.Task <system.net.httpstatuscode></system.net.httpstatuscode>	status code of operation

#### CheckTermIndexed(String)

Checks if a term has been indexed

Declaration

public async Task<bool> CheckTermIndexed(string term)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	term	term

#### Returns

ТУРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.boolean></system.boolean>	true if term has been indexed, else false

#### GetIndexTermList(String)

Returns index term list for a particular term. An empty list is returned if the term has not been indexed

Declaration

public async Task<List<IndexTerm>> GetIndexTermList(string term)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	term	term

ТҮРЕ	DESCRIPTION

ТҮРЕ	DESCRIPTION	
System.Threading.Tasks.Task <system.collections.generic.list<indexterm>&gt;</system.collections.generic.list<indexterm>	list of IndexTerm objects	

#### GetLastId()

Returns the id of last file indexed, zero if no file was indexed.

#### Declaration

public async Task<uint> GetLastId()

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.uint32></system.uint32>	id of last file indexed

#### SetLastId(UInt32)

Sets the value of the last document indexed

#### Declaration

public async Task<HttpStatusCode> SetLastId(uint lastId)

#### **Parameters**

ТҮРЕ	NAME	DESCRIPTION
System.UInt32	lastId	document id

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.net.httpstatuscode></system.net.httpstatuscode>	status code for operation

#### **Implements**

**IStore** 

## ${\bf Class\ Inverted Index Memory Store}$

Inheritance

System.Object

Inverted Index Memory Store

Implements

#### **IStore**

**Inherited Members** 

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine.Store
Assembly: SearchifyEngine.dll

Syntax

public class InvertedIndexMemoryStore : IStore

#### Methods

#### AppendIndexTerm(String, IndexTerm)

Appends to list of index terms for a particular term. If the term has not been indexed yet, a new list is instantiated and the term is then appended

Declaration

public async Task<HttpStatusCode> AppendIndexTerm(string term, IndexTerm indexTerm)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	term	term
IndexTerm	indexTerm	IndexTerm object

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.net.httpstatuscode></system.net.httpstatuscode>	status code of operation

#### CheckTermIndexed(String)

Checks if a term has been indexed

Declaration

public async Task<bool> CheckTermIndexed(string term)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	term	term

#### Returns

ТУРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.boolean></system.boolean>	true if term has been indexed, else false

#### GetIndexTermList(String)

Returns index term list for a particular term. An empty list is returned if the term has not been indexed

#### Declaration

public async Task<List<IndexTerm>> GetIndexTermList(string term)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	term	term

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.collections.generic.list<indexterm>&gt;</system.collections.generic.list<indexterm>	list of IndexTerm objects

#### GetLastId()

Returns the id of last file indexed, zero if no file was indexed.

#### Declaration

public async Task<uint> GetLastId()

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.uint32></system.uint32>	id of last file indexed

#### SetLastId(UInt32)

Sets the value of the last document indexed

#### Declaration

public async Task<HttpStatusCode> SetLastId(uint lastId)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.UInt32	lastId	document id

#### Returns

ТҮРЕ		DESCRIPTION
System.Thread	ing.Tasks.Task <system.net.httpstatuscode></system.net.httpstatuscode>	status code for operation

#### **Implements**

IStore

## **Interface IStore**

Defines methods that must be possessed by an Inverted Index Store

Namespace: SearchifyEngine.Store
Assembly: SearchifyEngine.dll

Syntax

public interface IStore

#### Methods

#### AppendIndexTerm(String, IndexTerm)

Appends to list of index terms for a particular term. If the term has not been indexed yet, a new list is instantiated and the term is then appended

Declaration

Task<HttpStatusCode> AppendIndexTerm(string term, IndexTerm indexTerm)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	term	term
IndexTerm	indexTerm	IndexTerm object

#### Returns

TY	YPE	DESCRIPTION
Sys	rstem.Threading.Tasks.Task <system.net.httpstatuscode></system.net.httpstatuscode>	status code of operation

#### CheckTermIndexed(String)

Checks if a term has been indexed

Declaration

Task<bool> CheckTermIndexed(string term)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	term	term

ТҮРЕ	DESCRIPTION

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.boolean></system.boolean>	true if term has been indexed, else false

#### GetIndexTermList(String)

Returns index term list for a particular term. An empty list is returned if the term has not been indexed

#### Declaration

Task<List<IndexTerm>> GetIndexTermList(string term)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	term	term

#### Returns

ТУРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.collections.generic.list<indexterm>&gt;</system.collections.generic.list<indexterm>	list of IndexTerm objects

#### GetLastId()

Returns the id of last file indexed, zero if no file was indexed.

#### Declaration

Task<uint> GetLastId()

#### Returns

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.uint32></system.uint32>	id of last file indexed

#### SetLastId(UInt32)

Sets the value of the last document indexed

#### Declaration

Task<HttpStatusCode> SetLastId(uint lastId)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.UInt32	lastId	document id

ТҮРЕ	DESCRIPTION
System.Threading.Tasks.Task <system.net.httpstatuscode></system.net.httpstatuscode>	status code for operation

# Namespace SearchifyEngine.Tokenizer

Classes

Stemmer

Porter Stemmer Class

**Stopwords** 

Stopwords class

**Tokenizer** 

Static class that houses tokenization logic

## **Class Stemmer**

Porter	Stemmer	Class
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Inheritance

System.Object

Stemmer

**Inherited Members** 

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine.Tokenizer

Assembly: SearchifyEngine.dll

Syntax

public class Stemmer

#### Methods

#### StemWord(String)

Stem the passed in word.

Declaration

public string StemWord(string word)

#### Parameters

ТУРЕ	NAME	DESCRIPTION
System.String	word	Word to evaluate

ТҮРЕ	DESCRIPTION
System.String	

## **Class Stopwords**

Stopwords class

Inheritance

System.Object

Stopwords

**Inherited Members** 

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine.Tokenizer

Assembly: SearchifyEngine.dll

Syntax

public static class Stopwords

#### Methods

#### LoadStopWords()

returns set of English stopwords

Declaration

public static HashSet<string> LoadStopWords()

ТҮРЕ	DESCRIPTION
System.Collections.Generic.HashSet <system.string></system.string>	a set of stopwords

## **Class Tokenizer**

Static class that houses tokenization logic

Inheritance

System.Object

Tokenizer

Inherited Members

System.Object.Equals(System.Object)

System.Object.Equals(System.Object, System.Object)

System.Object.GetHashCode()

System.Object.GetType()

System.Object.MemberwiseClone()

System.Object.ReferenceEquals(System.Object, System.Object)

System.Object.ToString()

Namespace: SearchifyEngine.Tokenizer

Assembly: SearchifyEngine.dll

Syntax

public static class Tokenizer

#### Methods

#### Tokenize(String)

Tokenizes text

Declaration

public static string[] Tokenize(string text)

#### **Parameters**

ТУРЕ	NAME	DESCRIPTION
System.String	text	any string value

ТҮРЕ	DESCRIPTION
System.String[]	array of stemmed words with stopwords filtered out