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Summary: Nested | Field | Constr | Method   Detail: Field | Constr | Method

com.mobvcasting.mjpegparser

Class HTTPAuthenticator

java.lang.Object
    java.net.Authenticator
        com.mobvcasting.mjpegparser.HTTPAuthenticator

```
public class HTTPAuthenticator
extends java.net.Authenticator
```

From http://www.walking-productions.com/notslop/2010/04/20/motion-jpeg-in-flash-and-java/

Nested Class Summary

Nested classes/interfaces inherited from class java.net.Authenticator

java.net.Authenticator.RequestorType

Constructor Summary

Constructors

Constructor and Description
HTTPAuthenticator(java.lang.String user, java.lang.String pass)

Method Summary

Methods

Modifier and Type	Method and Description
protected java.net.PasswordAuthentication	**getPasswordAuthentication**()

Methods inherited from class java.net.Authenticator

getRequestingHost, getRequestingPort, getRequestingPrompt, getRequestingProtocol, getRequestingScheme, getRequestingSite, getRequestingURL, getRequestorType, requestPasswordAuthentication, requestPasswordAuthentication, requestPasswordAuthentication, setDefault

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

HTTPAuthenticator

```
public HTTPAuthenticator(java.lang.String user,
                java.lang.String pass)
```

Method Detail

getPasswordAuthentication

```
protected java.net.PasswordAuthentication getPasswordAuthentication()
```

Overrides:

```
Overrides:
    getPasswordAuthentication in class java.net.Authenticator
```

Overview   Package   Class   Use   Tree   Deprecated   Index   Help

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com.charliemouse.cambozola.shared

Class Base64

java.lang.Object
        com.charliemouse.cambozola.shared.Base64

```
public class Base64
extends java.lang.Object
```

com/charliemouse/cambozola/shared/CamStream.java
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See Also:

CamStream for more information.

Constructor Summary

Constructors
Constructor and Description
Base64()

Method Summary

Methods	
Modifier and Type	**Method and Description**
static java.lang.String	**encode**(byte[] data) Returns base64 representation of specified byte array.
static java.lang.String	**encode**(byte[] data, int off, int len) Returns base64 representation of specified byte array.

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

Base64

```
public Base64()
```

Method Detail

encode

```
public static java.lang.String encode(byte[] data)
```

Returns base64 representation of specified byte array.

Parameters:

    `data` - The data to be encoded

Returns:

    The base64 encoded data

---

encode

```
public static java.lang.String encode(byte[] data,
                       int off,
                       int len)
```

Returns base64 representation of specified byte array.

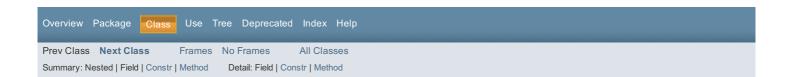**Parameters:**

    `data` - The data to be encoded

    `off` - The offset within the data at which to start encoding

    `len` - The length of the data to encode

Returns:

    The base64 encoded data

Overview   Package   Class   Use   Tree   Deprecated   Index   Help

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com.charliemouse.cambozola.shared

Class CamStream

java.lang.Object
    java.lang.Thread
        com.charliemouse.cambozola.shared.CamStream

All Implemented Interfaces:

    java.lang.Runnable

```
public class CamStream
extends java.lang.Thread
```

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A few minor modifications to reduce latency have been made by Kevin Parker These modifications are intended to improve the speed/performance of MJPEG reading (latency has been reduced on my machine by another 10-20 ms; this is per-frame, so there are hundreds of ms of "waiting" reduced away. There are probably more changes that can still be made to greatly improve performance.)

I (Kevin Parker) made several changes to the following code. These include the following. I made the JPEG data stream pipe directly into the parser, rather than loading the whole image into a buffer before parsing. I made a couple of minor changes, one of which was reducing some of the sleep lengths. I also did some minor code auto-cleanup. Finally, I added several comments and javadocs. (I also altered m_retryDelay and removed some unused member variables).

This is not the full version of the Cambozola code, and it has many modifications to make it better suit the needs of a fast-paced FRC tournament. I also changed or removed unneeded pieces of these files.

Nested Class Summary

Nested classes/interfaces inherited from class java.lang.Thread

java.lang.Thread.State, java.lang.Thread.UncaughtExceptionHandler

Field Summary

Fields

Modifier and Type	Field and Description
static int	CONNECT_STYLE_HTTP
static int	CONNECT_STYLE_SOCKET

Fields inherited from class java.lang.Thread

MAX_PRIORITY, MIN_PRIORITY, NORM_PRIORITY

Constructor Summary

Constructors

Constructor and Description
CamStream(java.net.URL strm, java.lang.String app, java.net.URL docBase, int retryCount, int retryDelay, java.util.logging.Logger logger, boolean debug)

Method Summary

Methods

Modifier and Type	Method and Description
void	**finalize**()
java.awt.image.BufferedImage	**getCurrent**()
double	**getFPS**()
int	**getIndex**()
java.net.URL	**getStreamURL**()
java.lang.String	**getType**()
void	**run**()
void	**unhook**()

Methods inherited from class java.lang.Thread

activeCount, checkAccess, clone, countStackFrames, currentThread, destroy, dumpStack, enumerate, getAllStackTraces, getContextClassLoader, getDefaultUncaughtExceptionHandler, getId, getName, getPriority, getStackTrace, getState, getThreadGroup, getUncaughtExceptionHandler, holdsLock, interrupt, interrupted, isAlive, isDaemon, isInterrupted, join, join, join, resume, setContextClassLoader, setDaemon, setDefaultUncaughtExceptionHandler, setName, setPriority, setUncaughtExceptionHandler, sleep, sleep, start, stop, stop, suspend, toString, yield

Methods inherited from class java.lang.Object

equals, getClass, hashCode, notify, notifyAll, wait, wait, wait

Field Detail

CONNECT_STYLE_HTTP

```
public static final int CONNECT_STYLE_HTTP
```

See Also:

Constant Field Values

CONNECT_STYLE_SOCKET

```
public static final int CONNECT_STYLE_SOCKET
```

See Also:

Constant Field Values

Constructor Detail

CamStream

```
public CamStream(java.net.URL strm,
        java.lang.String app,
        java.net.URL docBase,
        int retryCount,
        int retryDelay,
        java.util.logging.Logger logger,
        boolean debug)
```

Method Detail

finalize

```
public void finalize()
            throws java.lang.Throwable
```

```
throws java.lang.Throwable
```

Overrides:

> `finalize` in class `java.lang.Object`

Throws:

> `java.lang.Throwable`

getCurrent

```
public java.awt.image.BufferedImage getCurrent()
```

getFPS

```
public double getFPS()
```

getIndex

```
public int getIndex()
```

getStreamURL

```
public java.net.URL getStreamURL()
```

getType

```
public java.lang.String getType()
```

run

```
public void run()
```

Specified by:

> `run` in interface `java.lang.Runnable`

Overrides:

> `run` in class `java.lang.Thread`

unhook

```
public void unhook()
```

Overview   Package   Class   Use   Tree   Deprecated   Index   Help

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com.charliemouse.cambozola.shared

Class StreamSplit

java.lang.Object
      com.charliemouse.cambozola.shared.StreamSplit

```
public class StreamSplit
extends java.lang.Object
```

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See Also:

    CamStream for more information.

Field Summary

Fields

Modifier and Type	Field and Description
static java.lang.String	**BOUNDARY_MARKER_PREFIX**
static java.lang.String	**BOUNDARY_MARKER_TERM**
protected java.io.DataInputStream	**m_dis**

Constructor Summary

Constructors

Constructor and Description
StreamSplit(java.io.DataInputStream dis)

Method Summary

Methods

Modifier and Type	Method and Description
protected static void	**addPropValue**(java.lang.String response, java.util.Hashtable ht)
java.io.InputStream	**getStreamToReadToBoundary**(java.lang.String boundary)
boolean	**isAtStreamEnd**()
java.util.Hashtable	**readHeaders**()
static java.util.Hashtable	**readHeaders**(java.net.URLConnection conn)
void	**skipToBoundary**(java.lang.String boundary)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Field Detail

BOUNDARY_MARKER_PREFIX

public static final java.lang.String BOUNDARY_MARKER_PREFIX

See Also:

Constant Field Values

BOUNDARY_MARKER_TERM

public static final java.lang.String BOUNDARY_MARKER_TERM

See Also:

Constant Field Values

m_dis

protected java.io.DataInputStream m_dis

Constructor Detail

StreamSplit

public StreamSplit(java.io.DataInputStream dis)

Method Detail

readHeaders

public java.util.Hashtable readHeaders()
                                  throws java.io.IOException

Throws:

java.io.IOException

addPropValue

protected static void addPropValue(java.lang.String response,
            java.util.Hashtable ht)

readHeaders

public static java.util.Hashtable readHeaders(java.net.URLConnection conn)

skipToBoundary

public void skipToBoundary(java.lang.String boundary)
                  throws java.io.IOException

Throws:

java.io.IOException

getStreamToReadToBoundary

public java.io.InputStream getStreamToReadToBoundary(java.lang.String boundary)
                                            throws java.io.IOException

Throws:

```
        java.io.IOException
```

isAtStreamEnd

```
public boolean isAtStreamEnd()
```