

# Grasshopper Convertor

A black silhouette of a grasshopper is positioned on the right side of the title 'Grasshopper Convertor', appearing to sit on the letter 'r'.

AWT01 - 24/09/2018  
Jalasoft Foundation

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Kevin CSánchez D.

# About me

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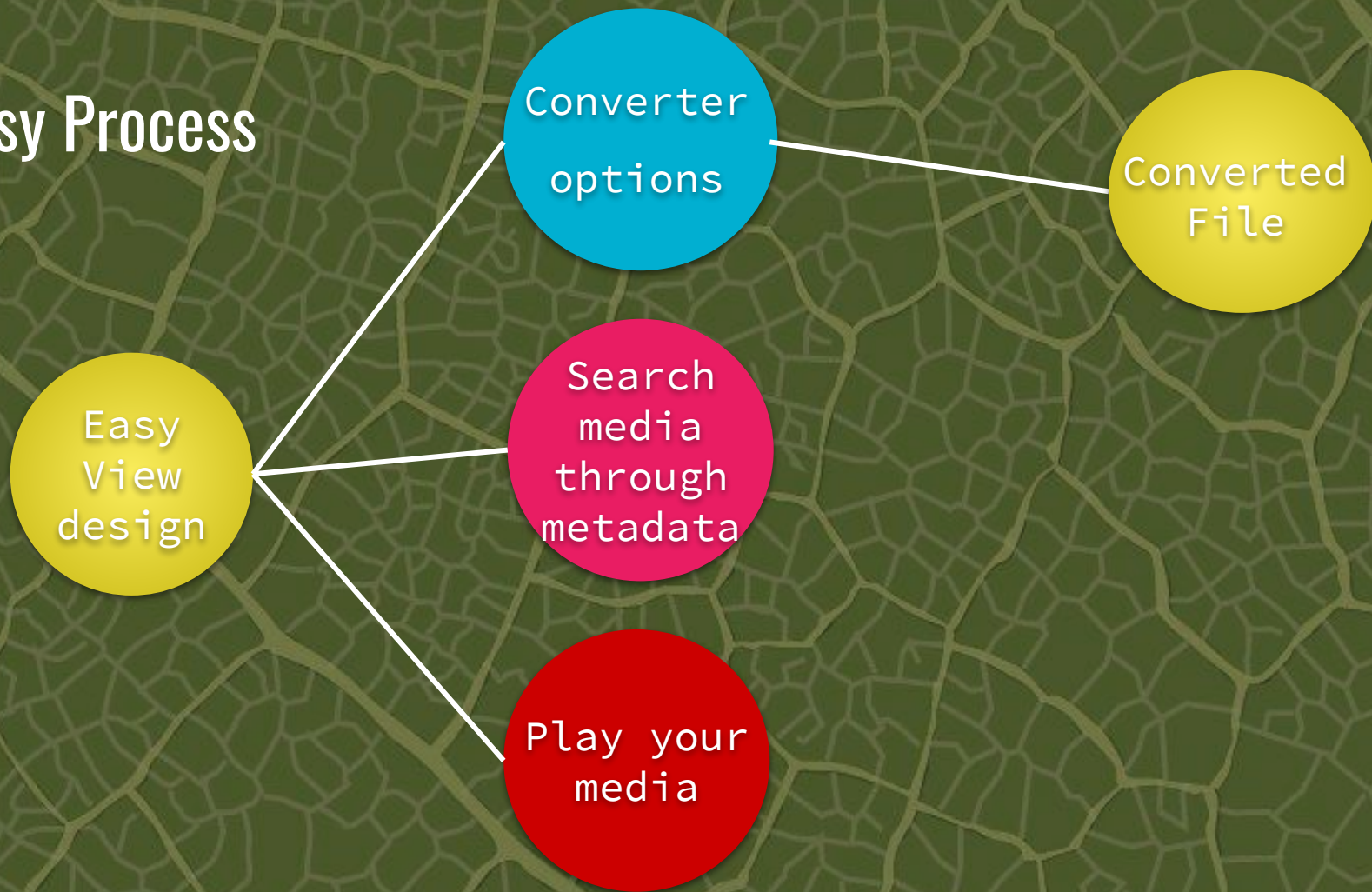
I'll help you convert videos and audio files to the format of your choosing making media management a lot easier.

I'm an open source application which means that the code and the installer is free.

I'm excited to partner with you!



# Easy Process



# VIEW DESIGN



# SEARCH PANEL

The search section allows you to search for multimedia files on the local environment through their metadatas.

\*Current version supports audio and video files search.


Search Criteria

Search Type:

Search Audios

Search Videos

Path:




File Name:


Duration From:

To:


File Ext.:




Frame Rate:




Aspect Ratio:




Resolution:




Video Codec:



Audio Codec:







# RESULT PANEL

This section shows a list of results from the search criteria entered. These files are displayed with all the metadata details specific to the media type.

Making a double click in a file of the list will play the file.

File Name	File Path	Duration	Extension	Frame R...	Aspect R...	Resolution	Video Co...	Audio Co...	Size
23e23e....	C:\Progra...	26.8	mp4	60	4:3	320X240	h264	aac	1 MB
otherSa...	C:\Progra...	5.28	mp4	25	16:9	1280X720	h264	aac	1 MB
drop.avi	C:\Progra...	6.066667	avi	30		256X240	indeo4		675 KB
drop_h2...	C:\Progra...	6.066667	mp4	30		256X240	h264		294 KB
InsideSa...	C:\Progra...	3.6	mkv	25	16:9	1280X720	mpeg4	aac	1 MB
Panason...	C:\Progra...	46.12	avi	25	16:9	1920X10...	mpeg4	mp3	11 MB
Sample ...	C:\Progra...	20.553333	mp4	59,94	16:9	1920X10...	h264	aac	18 MB
Sample....	C:\Progra...	5.28	mp4	25	16:9	1280X720	h264	aac	1 MB
Sample4...	C:\Progra...	30.033333	mp4	30	16:9	480X270	h264	aac	1 MB
SampleV...	C:\Progra...	10.65	mkv	25	16:9	1280X720	mpeg4	aac	2 MB
SampleV...	C:\Progra...	40.666667	3gp	15	4:3	176X144	h263	amr_nb	1 MB
SampleV...	C:\Progra...	26.8	mp4	15	4:3	320X240	h264	aac	2 MB


File Name	File Path	Duration	Extensi...	Audio C...	Sample ...	Bit Depth	Bit Rate	Channels	Size
30Hz.flac	C:\Progr...	60.0	flac	flac	192000	s16	898371	2	6 MB
sample....	C:\Progr...	6.257778	wav	pcm_u8	22050	u8	176456	1	138 KB
Sample...	C:\Progr...	45.3268...	mp3	mp3	44100	fltp	128001	2	725 KB
Sumerti...	C:\Progr...	121.578	wma	wmav2	44100	fltp	129737	2	1 MB
track37...	C:\Progr...	33.4708	mp3	mp3	44100	fltp	127999	2	535 KB

# CONVERSION PANEL

The conversion section gives you the available options to do the conversion of audio files and video files.

Conversion parameters


File to Convert:

Output Path:   New Name:

New Resolution:  ▼ New Audio Codec:  ▼

New Frame Ratio:  ▼ New Format:  ▼

New Video Codec:  ▼

 Convert





# Search Options



# Options available to search video

- Extension.
  - MP4, AVI, FLV, MKV, MOV, 3GP.
- Frame Rate.
  - 24, 25, 29, 29.7, 30, 60.
- Aspect Ratio.
  - 16:9, 16:10, 0:1, 4:3, 40:23.
- Resolution.
  - 1920X1080, 1280X720, 640X480, 640X368, 480X270, 320X240, 256X240, 176X144.
- Video Codec.
  - H264, h263, vp6f, indeo4, mpeg4, flv, avi.
- Audio Codec.
  - Mp3, pcm\_u8, wma2, ogg, flac, aac

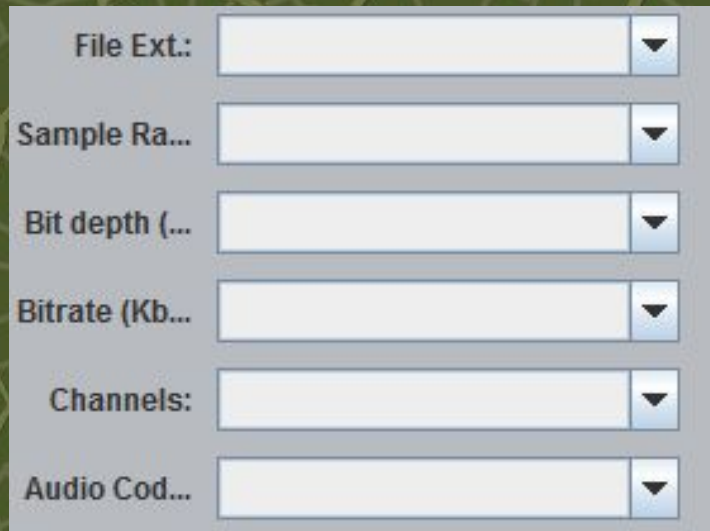


A screenshot of a video search filter interface. It features six horizontal dropdown menus stacked vertically. Each menu has a label to its left and a white input field with a blue downward arrow on the right. The labels are: 'File Ext.', 'Frame Rate', 'Aspect Ratio', 'Resolution', 'Video Codec', and 'Audio Codec'. The background of the interface is a light gray.

File Ext.:	Frame Rate:	Aspect Ratio:	Resolution:	Video Codec:	Audio Codec:

# Options available to search audio

- Extension.
  - MP3, WMA, WAV, OGG, FLAC.
- Sample Rate.
  - 11025, 22050, 44100, 48000.
- Bit Depth.
  - U8, s16, s16p, fltp.
- Bitrate.
  - 24000, 32000, 48000, 64000, 96000, 127999, 128000, 129737, 176456, 838371.
- Channels.
  - 1, 2
- Audio Codec.
  - Mp3, pcm\_u8, wma2, ogg, flac, aac

A screenshot of a software interface for audio search options. It features six horizontal rows, each with a label on the left and a dropdown menu on the right. The labels are 'File Ext:', 'Sample Ra...', 'Bit depth (...', 'Bitrate (Kb...', 'Channels:', and 'Audio Cod...'. The dropdown menus are currently empty, showing only a downward-pointing arrow icon on the right side of each box.

File Ext.:	<input type="text"/>
Sample Ra...	<input type="text"/>
Bit depth (...	<input type="text"/>
Bitrate (Kb...	<input type="text"/>
Channels:	<input type="text"/>
Audio Cod...	<input type="text"/>






# Convertor Options

# Options available to convertor video

- New Name.
- Output Path.
- Format.
  - MP4, AVI, FLV, MKV, MOV, 3GP.
- Frame Rate.
  - 24, 25, 29, 29.7, 30, 60.
- Aspect Ratio.
  - 16:9, 16:10, 0:1, 4:3, 40:23.
- Resolution.
  - 1920X1080, 1280X720, 640X480, 640X368, 480X270, 320X240, 256X240, 176X144.
- Video Codec.
  - H264, h263, vp6f, indeo4, mpeg4, flv, avi.
- Audio Codec.
  - Mp3, pcm\_u8, wma,2, ogg, flac, aac

Conversion parameters


File to Convert:

Output Path:   New Name:

New Resolution:  ▼ New Audio Codec:  ▼

New Frame Ratio:  ▼ New Format:  ▼

New Video Codec:  ▼

 Convert




# Options available to convertor audio

- New Name.
- Output Path.
- Extension.
  - MP3, WMA, WAV, OGG, FLAC.
- Sample Rate.
  - 11025, 22050, 44100, 48000.
- Bit Depth.
  - U8, s16, s16p, fltp.
- Bitrate.
  - 24000, 32000, 48000, 64000, 96000, 127999, 128000, 129737, 176456, 838371.
- Channels.
  - 1, 2
- Audio Codec.
  - Mp3, pcm\_u8, wma2, ogg, flac, aac

Conversion parameters

File to Convert: C:\Program Files\aw01\Grasshopper Multimedia Converter\samples\audio\_files\SumertimeBlues.wma

Output Path:  

New Name:

Sample Rate (Hz):  ▼


New Audio Codec:  ▼

Bit depth (bits):  ▼

New Format:  ▼

Bitrate (Kbps)  ▼

Channels:  ▼

 Convert

# STRUCTURE OF THE PROGRAM





# MVC

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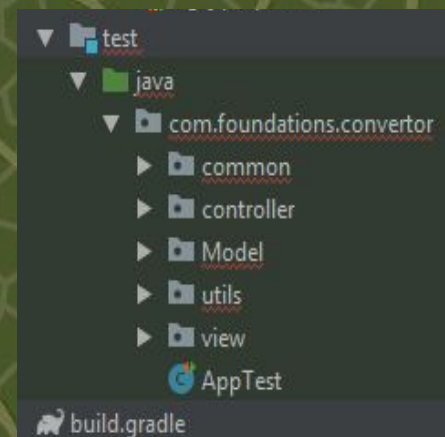
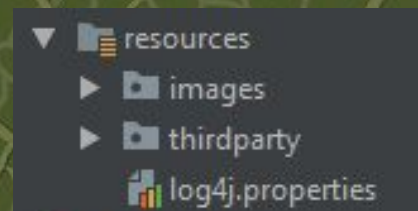
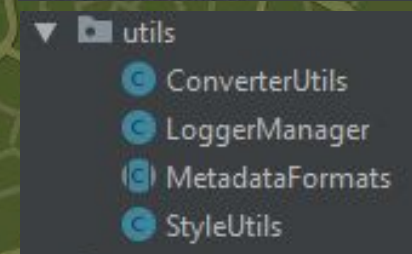
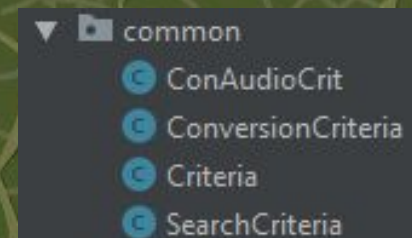
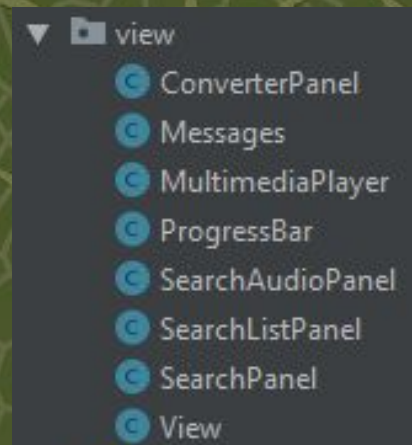
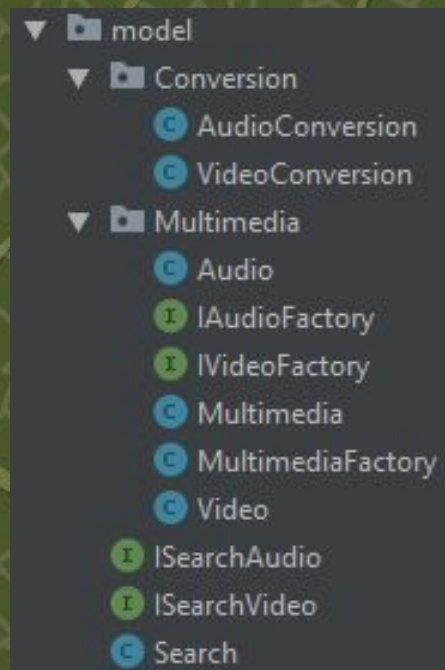
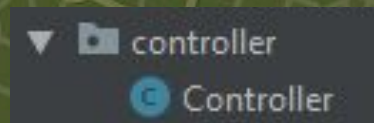
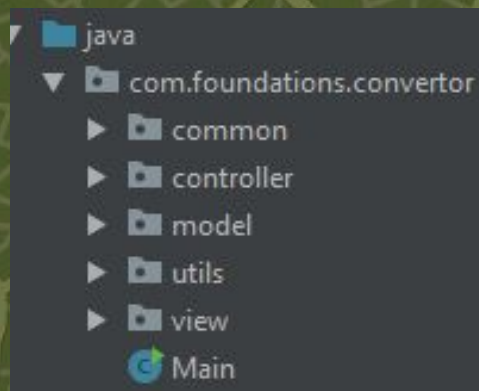
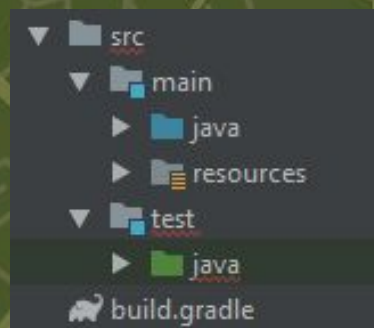
- Model
- View
- Controller



# STRUCTURE OF PACKAGES

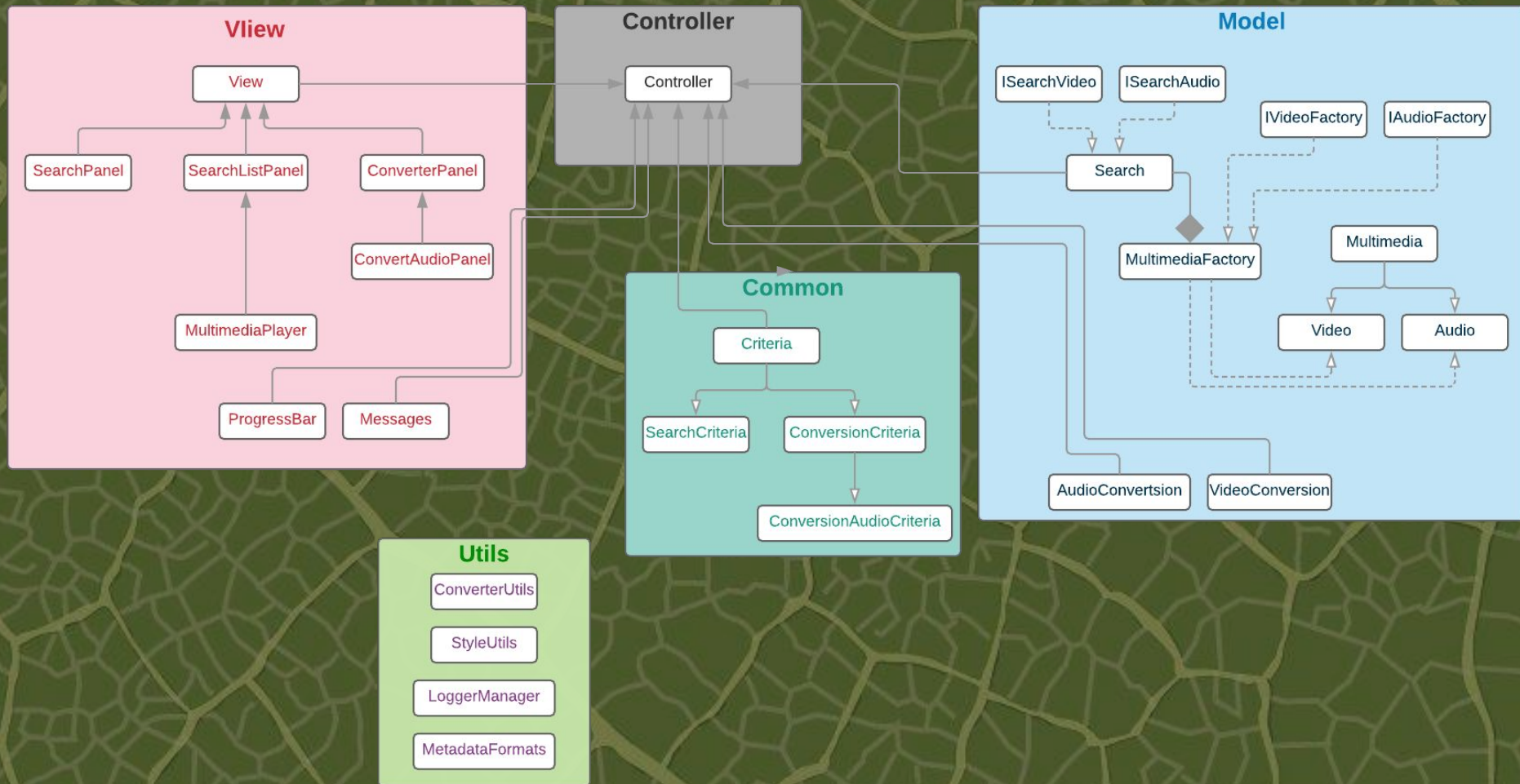


# Gradle Build



# DIAGRAM OF CLASSES





The image features a dark green background with a complex, cracked, and marbled texture. A solid, bright yellow horizontal band runs across the center of the image. The text "CODE COVERAGE" is centered within this yellow band in a white, bold, sans-serif font.

# CODE COVERAGE



# Code Coverage - IntelliJ

↑ 94% classes, 85% lines covered in package 'com-foundations'			
Element	Class, %	Method, %	Line, %
📁 convertor	94% (37/39)	84% (255/303)	85% (1576/1833)

main

▼ java 94% classes, 85% lines covered

▼ com-foundations.convertor 94% classes, 85% lines covered

▼ common 100% classes, 79% lines covered

● ConversionAudioCriteria 100% methods, 100% lines covered

● ConversionVideoCriteria 66% methods, 60% lines covered

● Criteria 93% methods, 91% lines covered

● SearchCriteria 73% methods, 72% lines covered

▼ controller 100% classes, 81% lines covered

● Controller 100% methods, 81% lines covered

▶ model 88% classes, 74% lines covered

▶ utils 100% classes, 47% lines covered

▼ view 95% classes, 94% lines covered

● ConverterPanel 93% methods, 99% lines covered

● Messages 66% methods, 79% lines covered

● MediaPlayer 77% methods, 86% lines covered

● ProgressBar 100% methods, 96% lines covered

● SearchAudioPanel 92% methods, 98% lines covered

● SearchListPanel 100% methods, 97% lines covered

● SearchPanel 85% methods, 91% lines covered

● View 100% methods, 100% lines covered

● Main 50% methods, 75% lines covered

7

8 public class ConversionVideoCriteria {

9

10

11 @Test

12 public void convertVideo() {

13 ConversionVideoCriteria mockedConversionCriteria = new ConversionVideoCriteria();

14 assertEquals(mockedConversionCriteria, ConversionVideoCriteria.getInstance());

15 }

16

17 @Test

18 public void setOutput() {

19 ConversionVideoCriteria mockedConversionCriteria = new ConversionVideoCriteria();

20 mockedConversionCriteria.setOutput("output");

21 assertEquals(mockedConversionCriteria, ConversionVideoCriteria.getInstance());

22 }

23

24 @Test

25 public void getOutput() {

26 ConversionVideoCriteria mockedConversionCriteria = new ConversionVideoCriteria();

27 mockedConversionCriteria.setOutput("output");

28 assertEquals(mockedConversionCriteria, ConversionVideoCriteria.getInstance());

29 }

30 }

ConversionVideoCriteriaTest

↑ 94% classes, 85% lines covered in package 'com-foundations.convertor'

Element	Class, %	Method, %	Line, %
📁 common	100% (4/4)	85% (36/42)	79% (63/79)
📁 controller	100% (1/1)	100% (15/15)	81% (146/180)
📁 model	88% (8/9)	83% (55/66)	74% (254/339)
📁 utils	100% (4/4)	54% (12/22)	47% (53/111)
📁 view	95% (19/20)	87% (136/156)	94% (1057/1111)
● Main	100% (1/1)	50% (1/2)	75% (3/4)



**Demo**



# Contact

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