Playing Media Resources

Multimedia playback in Android is handled by the MediaPlayer class. You can play back media stored as application resources, local files, or from a network URI.

To play a media resource, create a new Media Player instance, and assign it a media source to play using the setDataSource method. Before you can start playback, you need to call prepare, as shown in the following code snippet:

```
String MEDIA_FILE_PATH = Settings.System.DEFAULT_RINGTONE_URI.toString();
MediaPlayer mpFile = new MediaPlayer();
try {
mpFile.setDataSource(MEDIA_FILE_PATH);
mpFile.prepare();
mpFile.start();
}
catch (IllegalArgumentException e) {}
catch (IllegalStateException e) {}
catch (IOException e) {}
```

Alternatively, the static create methods work as shortcuts, accepting media resources as a parameter and preparing them for playback, as shown in the following example, which plays back an application resource:

```
MediaPlayer mpRes = MediaPlayer.create(context, R.raw.my_sound);
```

Note that if you use a create method to generate your MediaPlayer object, prepare is called for you. Once a Media Player is prepared, call start as shown below to begin playback of the associated media resource.

```
mpRes.start();
mpFile.start();
```

The Android Emulator simulates audio playback using the audio output of your development platform. The Media Player includes stop, pause, and seek methods to control playback, as well as methods to find the duration, position, and image size of the associated media.

To loop or repeat playback, use the setLooping method.

When playing video resources, getFrame *will take a screen grab of video media at the specifi ed frame and return a bitmap resource.*

Once you've fi nished with the Media Player, be sure to call release to free the associated resources, as shown below:

```
mpRes.release();
mpFile.release();
```

Since Android only supports a limited number of simultaneous Media Player objects, not releasing them can cause runtime exceptions.

On Android devices, the Media Player always plays audio using the standard output device — the speaker or connected Bluetooth headset. It's not currently possible to play audio into a phone conversation.