Using Qt Mobility to get metadata from media files

Description

With the `QMediaObject::availableMetaData()` and `QMediaObject::metaData()` functions we can retrieve the metadata in a media file (audio/video). The metadata information can be only retrieved while the file is playing.

Qt Mobility APIs are included in the Qt SDK.

Solution

Define the QtMobility/Multimedia configuration in the **.pro** file:

```
CONFIG += mobility
MOBILITY = multimedia
```

Header files:

```
#include <QMediaPlayer>
#include <qtmedianamespace.h>
```

Implementation:

```
// Use QMediaPlayer as a class member
QMediaPlayer *player;

// create the player and start playback
player = new QMediaPlayer(this);
player->setMedia(QUrl::fromLocalFile("C:\\Data\\sample.mp3"));
player->setVolume( 25 );
player->play();
```

A method to get the metadata of the media file:

```
void MediaMetaDataExample::GetMetaData()
{
  // Get the list of keys there is metadata available for
  QList<QtMediaServices::MetaData> metadatalist = player->availableMetaData();

  // Get the size of the list
  int list_size = metadatalist.size();

  // Define variables to store metadata key and value
  QtMediaServices::MetaData metadata_key;
  QVariant var_data;

  for (int indx = 0; indx < list_size; indx++) {
    // Get the key from the list
    metadata_key = metadatalist.at(indx);

    // Get the value for the key
    var_data = player->metaData(metadata_key);

    switch(metadata_key) {
      case QtMediaServices::Title:
        // Retrieve title (using var_data.toString())
        break;
      case QtMediaServices::SubTitle:
        // Retrieve subtitle
        break;
      case QtMediaServices::Author:
        // Retrieve author
        break;

      // ... see QtMediaServices for rest of the values

      default:
        break;
    }
  }
}
```

A method to get the extended metadata of the media file:

```
void MediaMetaDataExample::GetExtendedMetaData()
{
  // Retrieve extended metadata key list
  QStringList extn_metadata = player->availableExtendedMetaData();
  int count_extn = extn_metadata.count();
  QString extn_metadata_key;
  QVariant extn_metadata_value;
  for( int indx = 0; indx < count_extn; indx++ )
    {
    extn_metadata_key = extn_metadata.at(indx);
    extn_metadata_value = player->extendedMetaData(extn_metadata_key);
```


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```
        // Process extended metadata here
        // Need to convert QVariant into proper type
        }
    }
```


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