How to create one side rounded and other side flat rectangle using QPainter?

Asked 3 years, 2 months ago   Active 3 years, 2 months ago   Viewed 863 times

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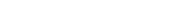I want to achieve something like this using QPainter

I tried using 2 rounded rectangles in QPainter side by side but I was unable to achieve the image above.

```
QPainter painter(this);
painter.setRenderHint(QPainter::Antialiasing);
QRectF leftRect= QRectF(0, 0, 300, 150);
QRectF rightRect= QRectF(300, 0, 300, 150);
painter.fillRect(leftRect, QColor("black"));
painter.drawRoundedRect(leftRect,15,35);
painter.setPen(QPen("white"));
painter.setPen(QPen("black"));
painter.fillRect(rightRect, QColor("white"));
painter.drawRoundedRect(rightRect,15,35);
```

This is what I tried and got this

I tried this with QPainterPath

```
QPainter painter(this);
painter.setRenderHint(QPainter::Antialiasing);
QRectF leftRect= QRectF(0, 0, 300, 150);
QRectF rightRect= QRectF(300, 0, 300, 150);
QPainterPath path;
path.setFillRule(Qt::WindingFill);
path.addRoundedRect(leftRect, 15, 35);
QPen pen(Qt::white, 1);
painter.setPen(pen);
painter.fillPath(path, Qt::black);
painter.drawPath(path);

QPainterPath path2;
```

And got this :

qt   qtwidgets

Share Improve this question Follow   edited Jun 28 '18 at 17:39   asked Jun 28 '18 at 13:08

Rubina
123   1   13

Do you need rounded corners or a half circles on the both sides? – vahancho Jun 28 '18 at 13:19

Yes it is two rectangle side by side . and rounded on one side and flat on other – Rubina Jun 28 '18 at 16:40

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1 Answer

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The best Qt has to offer in this regard is separate x and y rounding radii. So nothing that will do it for you out the box.

It seems like the way to go to get that geometry is to use `QPainterPath` to compose the shape out of several sub-components, in your case an arc for the radius and 3 lines for the rest.

You should be able to translate and mirror the painter to draw the other side. So you fill and outline the left side, then flip the painter and outline the right side.

Also, in case you are drawing something like say a progress bar, there is another course of action. You will draw a regular rounded rectangle and use it as a mask, and then you can fill the amount you want by drawing a regular rectangle, that will be clipped in the desired shape by the mask.

OK, seems like you will need some extra help, here is some working code you can tweak:

```
QPainter painter(this);
painter.setRenderHint(QPainter::Antialiasing);
QPainterPath path;

// compose the "half"
path.moveTo(20, 0);
```

```
// mirror and reposition the painter
QTransform mirror(-1, 0, 0, 0, 1, 0, 0, 0, 1);
painter.setTransform(mirror);
painter.translate(-200, 0);

// draw white half
painter.setBrush(Qt::white);
painter.drawPath(path);
```

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edited Jun 28 '18 at 18:15

answered Jun 28 '18 at 13:40

dtech
44.9k   16   95   166

Could you show sample working code in do so . Because I tried using QPainterPath. It did not render properly – Rubina Jun 28 '18 at 16:41 🖉

Post your code and the result in the question to see what's going wrong. – dtech Jun 28 '18 at 16:44 🖉