QGIS Application - Bug report #20752
Qgis 3.4.1 crashes when accessing methods of feature
2018-12-07 01:34 PM - Anja Sen

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
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</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>High</td>
</tr>
<tr>
<td>Assignee:</td>
<td></td>
</tr>
<tr>
<td>Category:</td>
<td>Python bindings / sipify</td>
</tr>
<tr>
<td>Affected QGIS version:</td>
<td>3.4.1</td>
</tr>
<tr>
<td>Operating System:</td>
<td></td>
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<tr>
<td>Pull Request or Patch supplied:</td>
<td></td>
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<tr>
<td>Crashes QGIS or corrupt data:</td>
<td>No</td>
</tr>
<tr>
<td>Regression?:</td>
<td>No</td>
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<tr>
<td>Easy fix?:</td>
<td>No</td>
</tr>
<tr>
<td>Resolution:</td>
<td></td>
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<tr>
<td>Copied to github as #:</td>
<td>28572</td>
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</tbody>
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Description

I am trying to implement a method to edit features in different geometry type. To start with, I found following example code from the book "BUILDING MAPPING APPLICATIONS WITH QGIS", but it always crashes when I call the method of self.feature in the function canvasMoveEvent. In function canvasPressEvent, it seems to work fine.

I tried to execute the code in a clean profile, but it still crashes. Then I tried with QGIS 2.18 and it worked there. I have attached the report below.

```python
@class MovePointTool(QgsMapToolIdentify):
    def init(self, mapCanvas, layer):
        QgsMapToolIdentify.__init__(self, mapCanvas)
        self.setCursor(Qt.CrossCursor)
        self.layer = layer
        self.dragging = False
        self.feature = None

def canvasPressEvent(self, event):
    found_features = self.identify(event.x(), event.y(), [self.layer], self.TopDownAll)
    if len(found_features) > 0:
        self.dragging = True
        self.feature = found_features[0].mFeature
        print (self.feature.id())
    else:
        self.dragging = False
        self.feature = None

def canvasMoveEvent(self, event):
    if self.dragging and self.feature:
        point = self.toLayerCoordinates(self.layer, event.pos())
        geometry = QgsGeometry.fromPointXY(point)
        print (self.feature.isValid())
        print (self.feature.id())
        self.layer.changeGeometry(self.feature.id(), geometry)
        self.canvas().refresh()

def canvasReleaseEvent(self, event):
    self.dragging = False
    self.feature = None

tool = MovePointTool(iface.mapCanvas(), iface.activeLayer())
iface.mapCanvas().setMapTool(tool)
```

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Crash Report:

Crash ID: 46eec519cad6876ebf2347eb73a9fc7f3df167fa

Stack Trace

QgsFeature::isValid :
PyInit__core :
PyMethodDef_RawFastCallKeywords :
PyMethodDef_RawFastCallKeywords :
PyEval_EvalFrameDefault :
PyFunction_FastCallDict :
PyMethodDef_RawFastCallDict :
PyObject_Call :
PyInit_sip :
PyInit__gui :
QgsMapCanvas::mouseReleaseEvent :
QWidget::event :
QFrame::event :
QGraphicsView::viewportEvent :
QCoreApplicationPrivate::sendThroughObjectEventFilters :
QApplicationPrivate::notify_helper :
QApplication::notify :
QgsApplication::notify :
QCoreApplication::notifyInternal2 :
QApplicationPrivate::sendMouseEvent :
QSizePolicy::QSizePolicy :
QSizePolicy::QSizePolicy :
QApplicationPrivate::notify_helper :
QApplication::notify :
QgsApplication::notify :
QCoreApplication::notifyInternal2 :
QGuiApplicationPrivate::processMouseEvent :
QWindowSystemInterface::sendWindowSystemEvents :
QEventDispatcherWin32::processEvents :
TranslateMessageEx :
TranslateMessage :
QEventDispatcherWin32::processEvents :
qt_plugin_query_metadata :
QEventLoop::exec :
QCoreApplication::exec :
main :
BaseThreadInitThunk :
RtlUserThreadStart :

QGIS Info
QGIS Version: 3.4.1-Madeira
QGIS code revision: 383851c597
Compiled against Qt: 5.11.2
Running against Qt: 5.11.2
Compiled against GDAL: 2.3.2
Running against GDAL: 2.3.2

System Info
CPU Type: x86_64
Kernel Type: winnt
Kernel Version: 6.1.7601

**History**

### #1 - 2018-12-07 03:56 PM - Giovanni Manghi
- Priority changed from Normal to High
- Category changed from Editing to Python bindings / sipify

### #2 - 2019-01-28 03:40 PM - Hugo Mercier

Reproduced on 3.4.4

I guess this is because you are storing a reference to a QgsFeature that sometimes no longer exist when you use it.

```python
self.feature = found_features[0].mFeature
```

Copying the feature seems to fix the problem

```python
self.feature = QgsFeature(found_features[0].mFeature)
```

### #3 - 2019-01-28 03:40 PM - Hugo Mercier
- Status changed from Open to Closed