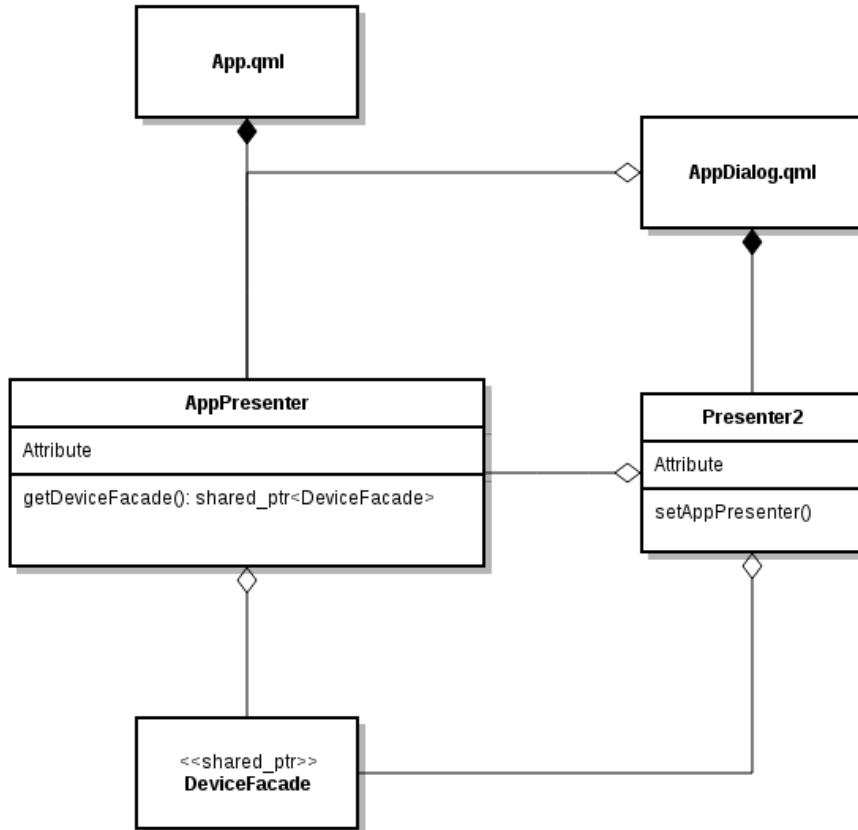# QML Presenter design

Introduction

This document describes our preferred design for a QML-facing presenter that uses Q_PROPERTY declarations to provide data gets and sets to QML objects. We are concerned with ensuring that our objects are robust against the order the QML objects are destroyed.

Presenter Design

Hitherto, we've had QObject* Properties in the App Presenter, and AppDialog would get a raw pointer to Presenter 2 from the AppPresenter. We've changed it to the above design. Each QML object owns its presenter but gives that second presenter a reference to the AppPresenter. Presenter2 can then get a shared pointer to the DeviceFacade from the AppPresenter. Then whatever order the QML objects are destroyed the presenters and facades deal with it.