

Proxy Model

Background Info:

- Proxy Model's are used to intercept data coming from a model and modify/transform before submitting it to the view, without changing the model or view.
- A model sees a proxy model as a view whereas a view sees a proxy model as a model
 - The proxy model receives the data stream from the model the same way that a view does
 - The proxy model sends data to a view the same way that a model does
- Proxy models are modular: they can be inserted, moved and removed with no ease and impact on the functionality
- Proxy models can be chained i.e. a model can send to a chain of proxy models before being sent to a view.

Uses manipulates data coming from model and sends it to view:

- Sort
- Filter
- Modify
- Transform
- Augment

NOTE this can all be done in real-time and doesn't require re-configuration from the model

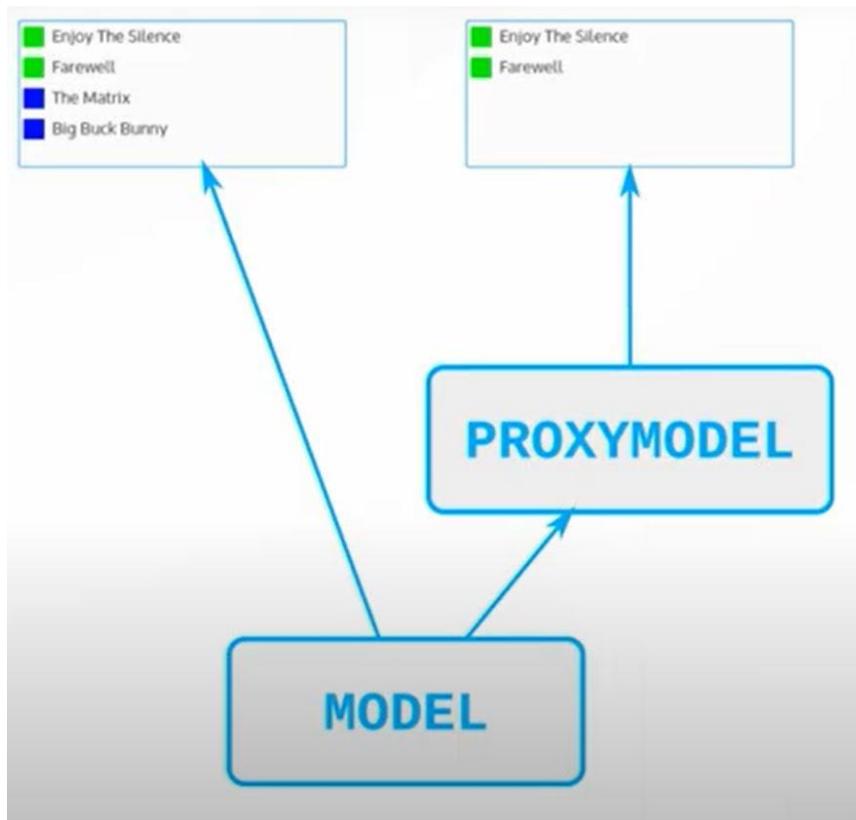
Associated Functions:

- QAbstractProxyModel
- QSortFilterProxyModel
- QIdentityProxyModel
- QTransposeProxyModel

Use in OnkoDICOM

No associated functions identified, could potentially be implemented in ROI selection and filtering for different materials (bone, tissue etc).

Picture – Structure / Flow



- The model sends data about audio and video media
- The proxy model filters out the movie data so only the audio media is output

Links

<https://www.youtube.com/watch?v=ICSiraxBg6k>

- Introduction to Qt/QML – Proxy Model Introduction

<https://www.riverbankcomputing.com/static/Docs/PyQt5/api/qtcore/qabstractproxymodel.html>

- PyQt5 QAbstractProxyModel documentation