LABORATORY 14

1. Add a multiple undo functionality for the operations "add", "remove", "update" in your repository. Implement this functionality using **inheritance and polymorphism.** You will have an "Undo" button on your GUI, or a key combination to undo the operations.

2. Create a new window which presents the contents of your:
   - adoption list
   - movie watch list
   - shopping basket
   - tutorial watch list

This window will contain a list view/table view will all the elements in your list. You must use Qt View/Model components (QListView/QTableView). Create your own model – a class which inherits from QAbstractListModel or QAbstractTableModel.

This window will be opened from your GUI main window.

Extra requirements (for bonus: 0.1)

Solve **any** of the following requirements to get the 0.1 bonus (you can solve all of them if you want, but you will get the bonus even if you only solve one of them):

1. Add a multiple undo functionality for your adoption list/movie watch list/shopping basket/tutorial watch list. We have to be able to test it using your GUI application.
2. Add a multiple redo functionality for your repository. We have to be able to test it using your GUI application.
3. Use custom delegates in Qt. In one of the columns of the Qt table view that shows the elements in your adoption list/movie watch list/shopping basket/tutorial watch list, display an image of the dog/trench coat (for problems 1 and 3), or a play button (for problems 2 and 4) – which can play the movie trailer or the tutorial. Please see two examples on the following page.

Example – Lecture 11

TableView | TreeView | ListView | TableView - Paginated | TableWithPictures

Gene name	Organism name	Gene function
ABO		Determinant of blood type (ABO)
ALB		The most abundant protein in human blood plasma
accD		enzyme; Fatty acid and phosphatidic acid biosynthesis
BCL2		The prototype anti-apoptotic protein

Example – Seminar 6

File

Songs | Editable Songs | BarChart | List

Artist	Title	Duration	Source	Play
Ed Sheeran	I see fire	4:54	https://www.youtube.com/watch?v=2fngvQS_PmQ	
The Proclaimers	I would walk 500 miles	3:37	https://www.youtube.com/watch?v=otXGqU4LBEI	
Hozier	Take me to church	4:2	https://www.youtube.com/watch?v=MYSVMgRr6pw&index=30&list=PLb5DqBOB_Gn7CfN91JAI39ZWX4lwqcBBz	
Two Steps From Hell	Heart of Courage	8:12	https://www.youtube.com/watch?v=XYKUeZQbMF0	
Two Steps From Hell	Protectors of the Earth	2:50	https://www.youtube.com/watch?v=ASj81daun5Q	
John Dreamer	Becoming A Legend	3:36	https://www.youtube.com/watch?v=toPm-L7Ib44	
Pink Martini	Splendour in the Grass	3:47	https://www.youtube.com/watch?v=6L-_DiZlrUI	
Pink Martini	Pana cand nu te iubeam	4:40	https://www.youtube.com/watch?v=admIEqRuPf0	
Two Steps From Hell	Strength of a Thousand Men	6:38	https://www.youtube.com/watch?v=N2RK6OGNMCY&list=PL28C0A27C5F5E5D3A	