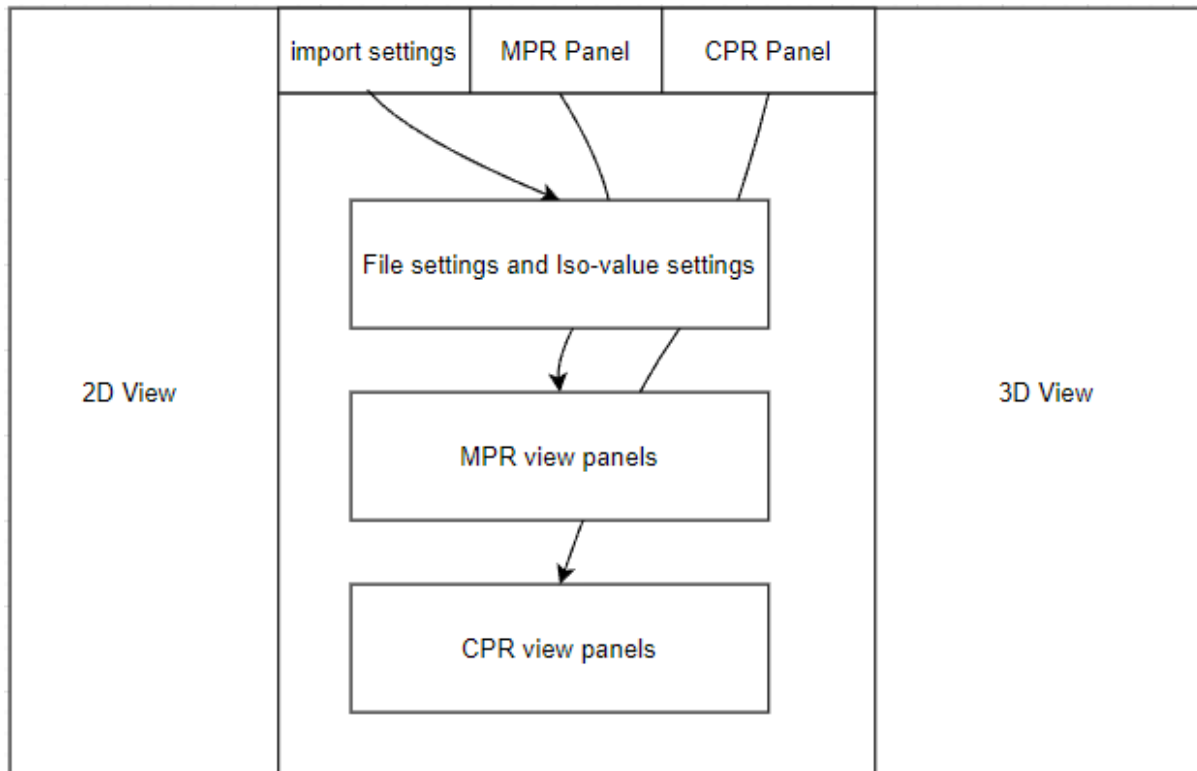The more extensive interface combines multiple viewers, it would be reasonable to hide different parts with the use of Tabviews. Which we believe will make it easier to use when going through the whole pipeline process. In our GUI, there are 3 Tabs in this GUI: **Import Settings**, **MPR** and **CPR** panels.

In the **Import Settings** panel, we implemented several functions:
- Load image data
- Adjust ISO and resolution values of the target object
- Adjust ISO value of the surrounding tissues(background)

By using these functions, the user can easily separate tumor/aorta/… from other surrounding tissues and highlight it with a different color.

The 2D views in three different directions are on the left of the window. And the 3D view is on the right. These two parts will give the users an intuitive impression of the structure.

There are also other possible implementable functions which we consider useful but didn't implement:
- Customize the colors of different part
- Adjust image resample factors
- Adjust the width of threshold interval
- Adjust region growing lower/upper threshold
- A button to show Tumor Distance 3D image
- …

These functions may further improve user experience when using this GUI. The functions related to settings, such as color and threshold may be put in the import setting panel. And for individual functions like distance calculation, there can be an extra panel added. Considering the possibility of more changeable parameters, the computation time will also increase correspondingly. We add the checkbox of auto update and auto load to leave more freedom to the users.

In the **MPR** panel, we implemented the two crucial parts:
- The plane viewer
- SphereDragger

By choosing SoRotateSphericalDragger, it is convenient to drag the sphere around and check the output from different angles. Which is better than pressing Shift and dragging the lines on the plane viewer.

In the **CPR** panel, 4 viewers were included:
- A viewer used to choose CPR path markers
- PathStack viewer
- PathReformat viewer
- 3DPath viewer

Users who want to perform a CPR process can select markers on the up left viewer. Those markers will be used to construct a path, and will be shown in the other 3 viewers. We also added a button "delete all markers" to let users perform another CPR construction.