

User story List Based on V0.4 Prototype V1.0

1. A User wants to do some research on cells, so he/she decides to use our Napari plugins to segment the cell images.
2. User opens the code base and runs the new server locally.
3. User opens another terminal and input the command line argument 'napari'.
4. User opens the plugin menu on the top left.
5. Firstly users use the Auto-segmentation plugin and the button shows on the right side menu.
6. Then the user opens the Load Image Widget, clicks the open file and selects the cell image.
7. The user clicks the select button and then the image will be displayed on the screen.
8. The user clicks the auto-segmentation button and Napari will auto-segment the cell.
9. The user sees different layers on the cell images by auto-segmentation.
10. The user finds that the accuracy of auto-segmentation is a bit low. And then he/she uses box-segmentation to choose the cells that have been wrongly segmented.
11. The user clicks on the box-segmentation button in the plugin list of Napari, and the box-segmentation right widget is opened.
12. The user clicks on the Bounding box button on the left widget, and uses the draw box button on the top left of the window to draw the box.
13. After the user draws the box on the image, he/she clicks overwrite on the right widget inside the box-segmentation widget, and then clicks on BOX SEGMENT button, he/she finds that two cells have been segmented into one.
14. The user still does not get what he/she wants, then the user clicks the Prompt Points on the left widget.
15. The user clicks the 'add-point' button so that the plugin can automatically add new points and segments itself. Then it will separate those two cells with points.
16. The user clicks the different mask and is able to only display specific layers of cells.
17. The user is able to click on the 'seen/unseen' button on the left of each mask.
18. The user is able to see only a few masks that what he/she wants.
19. The user selects a different image and auto-segmented the image again.
20. The user gets the results and closes the Napari.