**Baines Image Quizzer**

**Installation**

* Plug in USB on your PC or laptop
  + USB contents:
    - ImageQuizzerProject folder which contains:
      * **Image Quizzer Installation.docx** – this document
      * **ImageQuizzerStartup**.bat – starts the Image Quizzer and does cleanup on close
      * **(ImageQuizzerShutdown**.bat – updated when running the quiz; may not exist on install)
      * **ImageQuizzer** folder – holds the module to run the quiz

**BainesImagingSecurity** - an encrypted volume holding the patient data for this study

* + - **VeraCrypt.exe** – an application to mount the encrypted data volume onto your PC
    - **Slicer-4.11.20200930-win-amd64.exe** – application to install the required version of 3D Slicer
* Install 3D Slicer
  + On USB, locate and double click on Slicer-4.11.20200930-win-amd64.exe
    - Accept installation defaults
  + We are using version 4.11.20200930; revision 29402; built 2020-10-02
    - Using any other version of Slicer may have unpredictable behavior for this application
* Install SlicerRT, mpReview extensions
  + Open 3D Slicer
  + Select View > Extension Manager
    - In the Search field (upper right-hand corner) input SlicerRT
    - Click Install
    - There will be a message to say the extension was installed
    - Click on Restart (bottom right-hand corner) and OK
  + Repeat for mpReview
* Connect the Image Quizzer module
  + Open 3D Slicer
  + Select Edit > Application Settings
  + Select Modules in the left-hand panel
  + Click Add in the panel to the right of “Additional module paths:” (may have to click the ‘>>’ button)
  + Search for folder **ImageQuizzer** on this USB
* Update the startup batch file
  + In Notepad edit the file ImageQuizzerStartup.bat located in ImageQuizzerProject folder
    - Update the directory that points to the current installation of Slicer.exe (You may find this in the following dir for a standard installation)
    - C:\Users\*username*\AppData\Local\NA-MIC\Slicer 4.11.20200930\Slicer.exe
* To be added:
  + Veracrypt may need admin privileges to run (UAC)
  + Install pandas? (>cmd (admin); >python -m pip install pandas ) – for convert RTStruct UIDs to original volume
    - Instructions to do this through Slicer interactor to make sure it is added to the right environment
    - Install numpy and pydicom as well? Or are these already in Slicer?
  + Rules about exporting label maps as RTStruct Dicom file
    - If remapping the exported RTStruct to the original image volume, the directory defined that holds the original series must contain only that series. There needs to be a one-to-one mapping of Slicer’s exported dicom series to the original dicom series
  + How to run preprocessor to convert DICOM to nrrd
  + How to run from startup batch file
  + NOTE: Slicer versions prior to v4.11 may need the Sequence extension installed. (This is built-in to v4.11)
* Notes:
  + SlicerRT – required for loading contour (label map) files – (there may be other dependencies)
  + mpReview – required - can be used for preprocessing of dicom series to nrrd format (to speed up read of image volume data) , Quizzer also depends on the mixins functionality that mpReview provides (in DICOMVolumeSequencePlugin.py, UtilsIO)