Directory Organization For MINIPIG Collaboration

Separate Raw Image and Experiment Directory Each directory has 3-tier directory hierarchy.

- Project_name (ex: MINIPIG_PRJ__100)
 - Subject_id (ex: 123456789)
 - session_id (ex: 12345678_20090720_30,
 This session_id has to be unique so that it is identifiable by itself without any subject_id or project_id)

\${PROJECT} is a placeholder for project - These need globally unique. There will likely be only one project right now (i.e. MINIPIG_HD_100)

\${SUBJECT} is a placeholder for the subject - These need to be globally unique for all subjects. You MAY NOT re-use a subjectID in multiple projects.

\${SESSION} is a placeholder for the session - These need to be globally unique. The SESSION must uniquely identify this session and this ID may not be re-used in any other project or for any other session.

\${SCANTYPE} is a placeholder for universally applied scan type names. This is a list of short names to easily identify scan types. It does not necessarily match any field in the dicom files. (i.e. T1, T2, PD, FLAIR, FLASH, T1HIGHRES, T1LOWRES)

NOTES: Select subject identifiers so that they begin with a letter, or a number other than 0. Project, Subject, and Session numbers shall ALWAYS be considered strings. "123456789" is really a string NOT a number.

NOTES: Never start a PROJECTID, SUBJECTID, SESSIONID with leading zeros. Microsoft excel and other tools insist on stripping those.

NOTES: If you want to encode dates into the name, ensure that YYYYMMDD format is used 20141009 is "October 9th of 2014"

NOTES: File system paths can NOT have spaces in them.

NOTES: Rigorously following these recommendations will facilitate data processing and will ease script writing in the future.

Example of Raw Image Data Directory:

```
## THE PROJECT LEVEL
$ ls Raw Directory
MINIPIG PRJ 100/ MINIPIG PRJ 200/ MINIPIG PRJ 300/ MINIPIG PRJ 400/
## THE SUBJECT LEVEL
$ ls MINIPIG PRJ 100/ # MINIPIG PRJ 100 is a project name
123456789/ 1111111111/ 22222222/ 333333333/
## THE SESSION LEVEL
$ ls MINIPIG PRJ 100/123456789/ # 123456789 is a subject id
123456789 20090720 30/ 123456789 20100727 30/ 123456789 20110722 30/
## ANONRAW is a directory of anonymized unprocessed converted data.
## Filenames are ${SUBJECT} ${SESSION} ${SCANTYPE}.${EXTENSION}
$ ls /Shared/johnsonhj/TrackOn/MINIPIG PRJ 100/123456789/123456789 20090720 30/ANONRAW/ # 123456789 20090720 30 is a
session id/Unique
123456789 123456789 20090720 30 DWI-36 6.nrrd
                                                123456789 123456789 20090720 30 T1-30 3.xml
123456789 123456789 20090720 30 DWI-36 7.nrrd
                                                123456789 123456789 20090720 30 T2-30 5.mgz
123456789 123456789 20090720 30 T1-30 2.mgz
                                                123456789 123456789 20090720 30 T2-30 5.nii.gz
123456789 123456789 20090720 30 T1-30 2.nii.qz 123456789 123456789 20090720 30 T2-30 5.xml
                                                123456789 123456789 20090720 30 T2-30 9.mqz
123456789 123456789 20090720 30 T1-30 2.xml
123456789 123456789 20090720 30 T1-30 3.mgz
                                                123456789 123456789 20090720 30 T2-30 9.nii.gz
123456789 123456789 20090720 30 T1-30 3.nii.qz 123456789 123456789 20090720 30 T2-30 9.xml
```

Example of Derived (Experiment/Processed) Data Directory :

```
$ ls Experiment 2014 some date
MINIPIG PRJ 100/ MINIPIG PRJ 200/ MINIPIG PRJ 300/ MINIPIG PRJ 400/
 $ 1s Experiment 2014 some date/MINIPIG PRJ 100/ # MINIPIG PRJ 200 is a project name
 123456789/ 111111111/ 22222222/ 333333333/
$ ls Experiment 2014 some date/MINIPIG PRJ 100/123456789/ # 123456789 is a subject id
123456789 \ 20090720 \ 30/ \ 12\overline{3}456789 \ 20100727 \ \overline{30}/ \ 123456789 \ 20110722 \ 30/
 $ 1s Experiment 2014 some date/MINIPIG PRJ 100/123456789/123456789 20090720 30/
ACPCAlign/
 $ 1s Experiment 2014 some date/MINIPIG PRJ 100/123456789/123456789 20090720 30/ACPCAlign/ # ACPCAlign: Result of ACPC
aligned data in this case.
 BCD ACPC Landmarks.fcsv
                                                     BCD Original2ACPC transform.h5
 BCD Branded2DQCimage.png
                                                     Cropped BCD ACPC Aligned.nii.gz
BCD Original.fcsv
                                                     landmarkInitializer atlas to subject transform.h5
```