Update Log - Oklahoma Fishery Analysis Validation Application

1. 3/29/2019 – Dan
   1. Problem: Ashley found some older gears used different numbers for effort and she felt it would be better to allow any value of effort >0 as acceptable rather than > 24 | Effort < 0.1
   2. Solution: changed this in the code (but commented old code out so it could be reinstituted if we want to in the future after all old data have been validated and added).
2. 12/30/2020 – Dan
   1. Problem: App was not catching “.” in station field as missing station despite having sampleData$nullStation[sampleData$Station=="."] <- TRUE code (and I also tried adding sampleData$Station[sampleData$Station=="."] <- NA prior to line that creates the nullStation field (checks for NA’s) and this did not work.
   2. Solution: added sampleData$Station[sampleData$Station=="."] <- NA to code where app reads in the sampleData file. This still allows for checking for blanks instead of “.” in fields that are allowed to be blank (I think ODWC wanted to require this to make sure the blank is intentional), but prevents a file from being validated without a station.
   3. Other changes made: Reformatted UI for validation app so file upload of both SSP and Age tabsto make the template download less prominent and instead put the upload button front and center.
3. 3/2/2020 – Dan
   1. Problem: update of shiny app software broke renderDataTable function. Research into this indicates this function is being depreciated and the same function from the DT package is to be used instead
   2. Solution: added DT package to the app and specifically call DT::renderDataTable to make tables
4. 3/2/2020 – Dan
   1. Problem: ODWC wanted app to work such that people need to add something to blank cells to ensure they are not accidentally left blank
   2. Solution: Added explicit check for blank cells. Unfortunately, R will automatically convert blank cells to NA in cases of numeric or logical data types…making it impossible to tell an NA from a blank. As such, we had to institute a rule that all blank cells should be marked with a period. I recoded app so that blanks and NA’s are converted to NA when the csv file is read in, but “.” Is left. I then check for NA’s in all fields and add a row to the error report indicating if any NA’s were found (tells user to use periods instead). Then as the file is downloaded, the periods are turned into NA’s.
5. 3/2/2020 – Dan
   1. Added table to display uploaded age data. We had already done this for the sample data verification tab, but apparently never did this for the age verification tab
6. 1/31/2022 – Dan
   1. Add several validation checks. All but Wr and Station checks (which only occurs on sample data) were made on both sample data and age data. Changes were as follows:
      1. Test for abnormally large or small individuals (using table ODWC gave with min and max sizes as thresholds)…these are quite conservative and will flag a lot of data, so may need adjusting.
      2. Explicit test for column names and order (will allow additional columns to be added to SSP database, but only as approved and in right order with right names)
      3. Test if month, day, year make an actual date
      4. Tightened up range for acceptable Wr from 20-200 to 60-120 (was ODWC’s idea for finding abnormally light or heavy fish)
      5. Check if number of different Station codes and number of time codes match…prevents using same station code for more than one sample.
   2. Added code that disables download button unless all validations are “Okay” with the exception of abnormally large/small fish and Wr as these could have exceptions. This was done on both sample and age validation tabs.
   3. Added a datatable at the bottom of the age validation tab to display data with row numbers to make it easier to see what the validation problem might be.