

Development Template

Taqi

```
# Bach score file path
bach_spline <- "../scores/bach_C_notes.krn"
bach <- piece_df(v = bach_spline, instruments = c("Piano"))

piece_df <- function(v, instruments){
  len <- length(v)
  c <- vector()
  master_colnames <- c("key", "meter", "measure", "rhythm", "name", "value")
  first <- T
  for(i in 1:len){
    Ai <- kern2df(v[i])
    if(first){piece <- Ai} else{piece <- cbind(piece, Ai[, -(1:3)])}
    max_notes <- (ncol(Ai)-3)/3
    for(k in 1:max_notes){
      if(first){col_names <- master_colnames} else{col_names <- master_colnames[3:6]}
      c_i <- vector()
      for(j in 1:length(cols)){
        c_i[j] <- paste(instruments[i], "_", cols[j], k, sep = "", collapse="")
      }
      c <- c(c, c_i)
      first <- F
    }
  }
  colnames(piece) <- c
  piece
}
```

Old implementation

```
piece_df <- function(v, instruments){
  len <- length(v)
  c <- vector()
  first <- T
  for(i in 1:len){
    Ai <- kern2df(v[i])
    if(first){
      piece <- Ai
    }
    if(!first){
      piece <- cbind(piece, Ai[, -(1:3)])
    }
    max_notes <- (ncol(Ai)-3)/4
    for(k in 1:max_notes){
```

```

    if(first){cols <- c("key","meter","measure","r.v","n.o","n.n","n.v")}
    if(!first){cols <- c("r.v","n.o","n.n","n.v")}
    c_i <- vector()
    for(j in 1:length(cols)){
      c_i[j] <- paste(instruments[i],"_",cols[j],k,sep = "",collapse="")
    }
    c <- c(c,c_i)
    first <- F
  }
}
colnames(piece) <- c
piece
}

```