TAZTEXT

New Interfaces for Musical Expression Midterm

Bee Bernard

Algorithm (What will my program consist of)

A program that takes a text input and then each letter is randomly assigned a corresponding sound. The output is a song compiled of the sounds produced by the text input.

Each letter will have 3 different sounds it could correspond to. A random generator with a loop for each letter will be used to assign which sound is played for each letter. This allows for more variety in the song so there are more than just 26 notes or sounds.

- Ignore white space
- NOT case sensitive
- Ignore punctuations and other characters

Steps in the process

1) Planning stage:
    a) Record and collect all the sounds I will be using for my project
    b) Might want to re-order what sounds I have (based on pitch)
2) Design a program that :
    a) Scans a text file input
    b) For each letter in the file, randomly assign it a sound from the collection of 3 for each letter.
    c) Puts the sounds together in order that can be played as an MP4
3) Testing/Recording
    a) Decide what text I want converted to sound
    b) Using different languages

Random assignment of Sounds

A random generator will assign each character a specific sound based on the three sounds that correspond to that character.

26 letters * 3 sounds per letter = 78 unique sounds

26 of the sounds will be black/sharp keys on the piano

22 of the sounds will be custom sounds I record

21 of the sounds will be percussion/drum sounds from Garageband

9 of the sounds will be royalty free sound effects found online

Sharp (black) notes on a piano Garage Band Percussion sound Custom Sound Free Sound Online

Sounds of letters

A- D#6 Wood block Bridget(dog) snore

B-C#6 sleigh bell hitting grill gas tank

C-A#5 shaker timer going off

D-G#5 shekere soda opening fizz

E-F#5 tambourine paper rip

F-D#5 cajon Blue(dog) collar jingle

G-C#6 stomp hitting two of Taz's lights together

H-A#4 clap Ice in bottle shake

I-G#4 jam block bell on keychain gingle

J-F#4 cowbell slapping a book closed

K-D#4 cabasa knock on door

L-C#4 conga lighter flick

M-A#3 bongo closing lotion cap

N-G#3 triangle boing

O-F#3 clave brake squeal

P-D#3 maracas rubber band twang

Q-C#3 timbales doorbell

R-A#2 hi-hat scratch at basket

S-G#2 kick plastic snack bag crinkle

T-F#2 snare putting lid on Taz's tank

U-D#2 cymbal tongue pop

V-C#2 pen click air horn

W-A#1 whistle censor noise

X-G#1 knuckle crack taser buzz

Y-F#1 zipper sound train horn

Z-D#1 car unlock laser zap

What I will need for my project

- My computer
  - Create the program using MAX
  - A program that can record sound bytes
  - Online resource of sound clips
  - Garageband

I will not need to buy any additional hardware as my project will be software based.

Other things for me to consider

- Do I want to organize sounds by pitch?
  - First half of the alphabet be a higher pitch vs second half being lower pitches
- Am I going to be doing all the tests in English?
  - Will a different language input (that uses the same letter system) affect the output?
- Do I want to add sounds for common punctuations?
  - This can add even more variety to the sounds that can be produced.
  - 47 keys on the keyboard that are used for a character
    - Could use this number rather than 26 but I would have to think of more sounds or spread the sounds I have out more