Chart > note time in ms

note > rail (1-4) rail > board/play field > draw/camera

board/play field would likely do the accuracy calculations for notes hit/missed

Note

+startTime : int : (ms)

+endTime : int : (ms)

+active : bool : (if timer >= start time & <=endTime)

+rail : int : (0-3)

+noteGraphic : graphic : (quad and texture)

Song

-songTitle : string : loaded from file

-songDifficulty : int : loaded from file

-notes[] : Note : loaded from file

-songTime : int : (ms)

PlayField

+static timer : float

-rail[4] : Rail

-scoreManager : ScoreManager

+PlayField(song : Song)

-CreateRails(notes[] : Note) : void

+Update(dt)

+CheckPlayerHit(railHit : int) : void

UPDATE METHOD:

Update delta time;

Update songtimer;

checkNoteSpawn for each rail;

playerInput;

checkPlayerHit (checks what rail they are interacting with, if CheckNoteSpawn returned true and if it did calculate accuracy;

CheckGameOver();

CheckSongEnd();

ScoreManager

\_notesTotal : int

\_notesHit : int

\_combo : int

\_score : int

-health : int

\_percentageNotesHit : float

-notesMissed : int

+ScoreManager(int : notesTotal)

+IncrementNotesHit() : void

+GetNotesHit() : int

+IncrementCombo(): void

+ResetCombo() : void

+GetScore() : int

+GetPercentage() : float

+IncrementNotesMissed() : void

+CheckSongEnd() : bool

+Accuracy(accuracy : int) : void (method calls changes score based on accuracy and combo)

+CheckGameOver() : bool

+decrementHealth() : void

Rail

-notes[] : Note

-nextNoteToPlay : int : (used to access the correct note in array)

+Rail()

+AddNoteToRail(note : Note) : void

+CheckNoteSpawn(timer : float) : void (sets note to active)