



POLITECNICO
MILANO 1863

DòReMino

melodic game

HOW TO PLAY

basic infos

Change Set

1:12

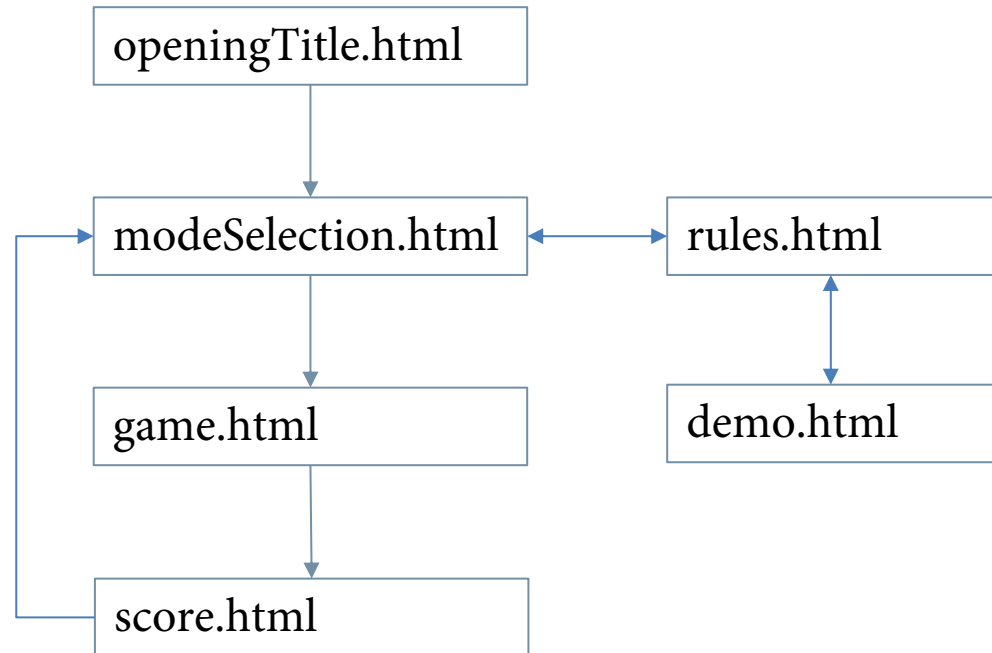
Finish Game

TONIC

AUDIO: SHIFT + left-click
ROTATE: double left-click
COPY: ALT + left-click

PROJECT STRUCTURE

HTML pages



PROJECT STRUCTURE

Parcel

melodyEvaluator.js

table.js

sound.js

timer.js



modules

AUDIO FEATURES

Tone.js

```
export const synth = new Tone.Synth().toDestination();
const poly = new Tone.PolySynth().toDestination();
const pluck = new Tone.PluckSynth().toDestination();
const membrane = new Tone.MembraneSynth().toDestination();
const metal = new Tone.MetalSynth().toDestination();
```

- triggerAttackRelease
- creation of synths for ambient sounds

sound.js

```
export function play_melody(result){
  let time = 0;
  const now = Tone.now()
  for(let i=0 ; i<result.length; i++){
    let grade = result[i];
    let index = searchForNote[0].indexOf(grade);
    let note = searchForNote[1][index];
    synth.triggerAttackRelease(note, "8n", now + time);
    time += 0.5;
  }
}
```

```
export const searchForNote = [[-6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12],
["F#3", "G3", "G#3", "A3", "A#3", "B3", "C4", "C#4", "D4", "D#4", "E4", "F4", "F#4", "G4", "G#4", "A4", "A#4", "B4", "C5"]];
```


THE GAME

before starting

1

MODES:

Ionian ▲

Ionian

Dorian

Phrygian

Lydian

Myxolydian

Aeolian

Locrian

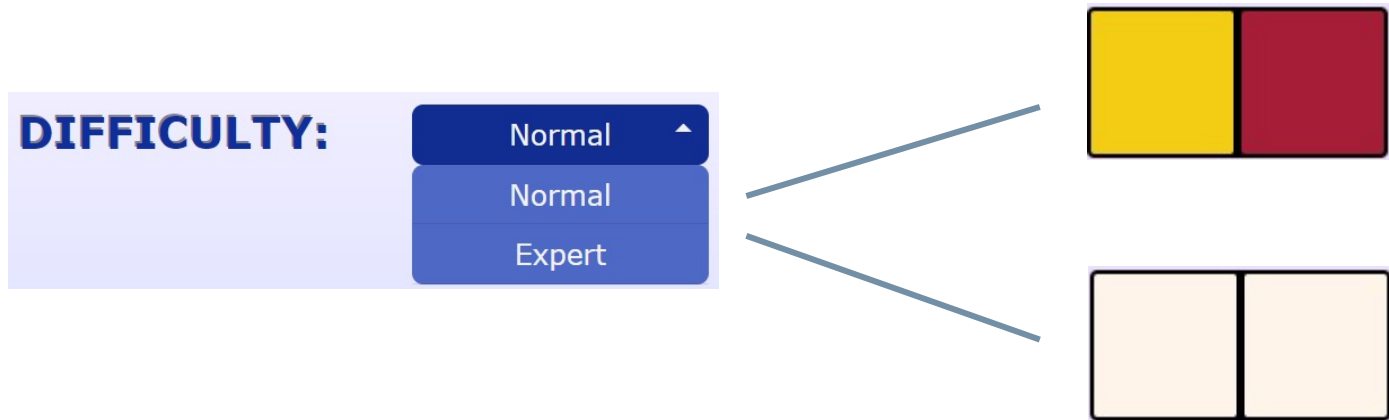


```
switch(mode){  
  case "Ionian":  
    grades = [-5,-3,-1,0,2,4,5,7,9,11,12]  
    break;  
  case "Dorian":  
    grades = [-5,-3,-2,0,2,3,5,7,9,10,12]  
    break;  
  case "Phrygian":  
    grades = [-6,-4,-2,-0,1,3,5,7,8,10,12]  
    break;  
  case "Lydian":  
    grades = [-5,-3,-1,0,2,4,6,7,9,11,12]  
  case "Myxolydian":  
    grades = [-5,-3,-2,0,2,4,5,7,9,10,12]  
  case "Aeolian":  
    grades = [-5,-4,-2,0,2,3,5,7,8,10,12]  
  case "Locrian":  
    grades = [-6,-4,-2,0,1,3,5,6,8,10,12]  
}
```

THE GAME

domino tile

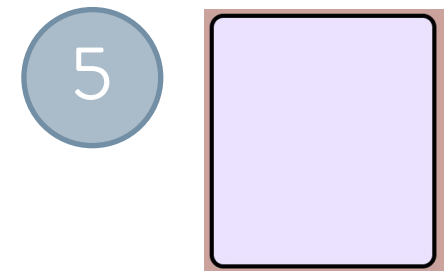
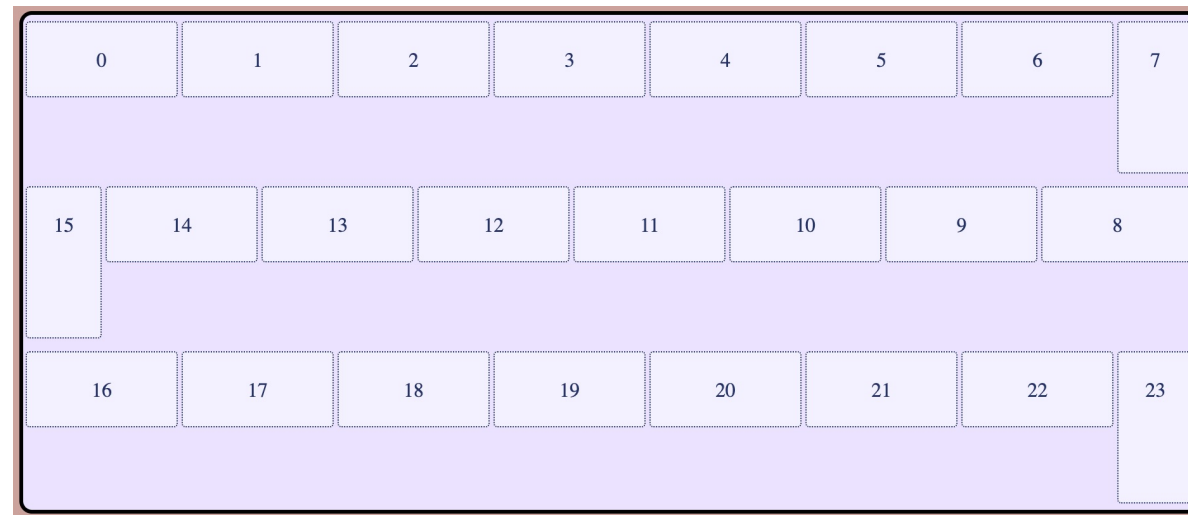
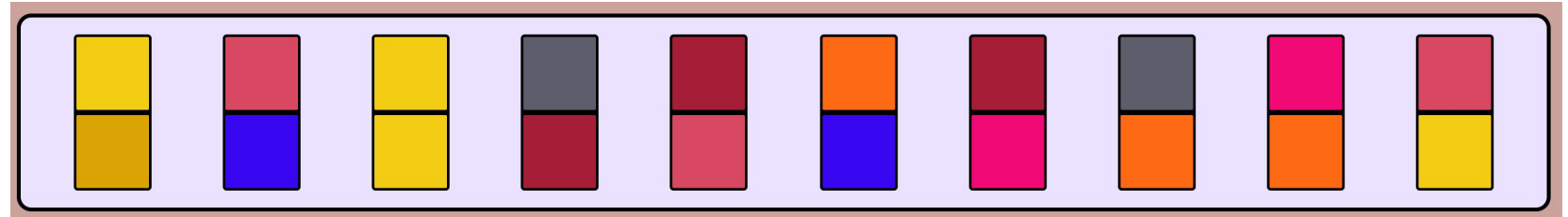
2



- The domino tile has two parts, called upper and lower tile;
- A **grade** is randomly associated to each part;
- To each grade are associated a color and a note;
- A dictionary is created for each tile.

THE GAME

dominos set



Arrays of dictionaries

Drag & drop

Rotate

Result

THE GAME

Tips in game – final scoring

6

- advise when an action is not permitted
- provide tips to create a nicer melody

Remember you can rotate the tile!

7

- receive "result"
- evaluation system of the melody ("finalEvaluateMelody" function)
- gives a % score
- provides comments on the melody
- allows to play the melody



Repository: <https://github.com/Giemme13/DoReMino.git>

Game link: <https://giemme13.github.io/DoReMino/openingTitle.html>

Demo video: <https://youtu.be/DPyeD5LiCds>

DEMO