

Project 8. Musical mastermind

Simplified Text Representation :

Start of Project

|— Start Block --> {ID: 1642954990391, Position: (300.00, -400.00),
Heading: 0°, Color: 40, Shade: 0, Pen Size: 1, Grey: 50.00}

```
| |— Setturtlelname2
| | |— "test"
| |— Clear
| |— Pen Up (Lifts Pen from Canvas)
| |— Setxy
| |— Show Number: ?
| | |— height: 1292
| | |— media: data
| |— Setxy
| |— Show Number: ?
| | |— media: data
| |— Setxy
| |— Setpensize
| |— Turtleshell
| | |— media: data
| |— Storein
| | |— "active mouse"
| | |— ""
| |— EmptyHeap
| |— Do action --> "push a note"
| |— Do action --> "push a note"
| |— Do action --> "push a note"
| |— Do action --> "push a note"
| |— Listen
| | |— myclick: click1642954990391
| | |— "test action"
| |— Print: ""
| | |— "Select a mouse, then click on a note."
```

|— Note

```
| |— Dispatch
| | |— Action: "broadcast event"
| | | |— "broadcast event"
| | |— turtlelname: ti
| |— Duration --> 1/4 = 0.25
| |— Ifthenelse
| | |— equal: false
| | | |— turtlelname: ti
| | |— "drum"
| | |— Play Drum → hi hat
| | |— Pitch --> Solfege: ?, Octave: 4
| | | |— turtlelname: ti
|— Store Variable "active mouse" → ?
|— If
```

```

|   |   |— Action: "make active"
|   |   |   |— "make active"
|   |   |
|   |   |— greater: true
|   |   |   |— height: 1292
|   |   |— Print: ""
|   |   |   |— "Select a note"
|   |— turtlename: two
|— Storein
|   |— turtlename: two
|— Start Block --> {ID: 1642955104985, Position: (-150.00, -400.00),
Heading: 0°, Color: -10, Shade: 50, Pen Size: 5, Grey: 100.00}
|   |— Setturtlename2
|   |   |— "one"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Do action --> "common events"
|
|— Start Block --> {ID: 1642955106668, Position: (-300.00, 170.00),
Heading: 0°, Color: -10, Shade: 0, Pen Size: 5, Grey: 100.00}
|   |— Setturtlename2
|   |   |— "do"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Listen
|   |   |— myclick: click1642955106668
|   |   |— "broadcast event"
|   |— Do action --> "setup"
|
|— "make active"
|— Listen
|   |— Turtlesshell
|   |   |— Action: "common events"
|   |   |   |— "common events"
|   |   |
|   |   |— media: data
|   |— mycursorover: CursorOver1642957037345
|— Listen
|   |— "do"
|   |— "do action"
|— Listen
|   |— "re"
|   |— "re action"
|— Listen
|   |— "mi"
|   |— "mi action"
|— Listen
|   |— "fa"
|   |— "fa action"
|— Listen
|   |— "sol"
|   |— "sol action"
|— Listen

```

```

|   |— "la"
|   |— "la action"
|— Listen
|   |— "ti"
|   |— "ti action"
|— Listen
|   |— "drum"
|   |— "drum action"
|— Listen
|   |— "test"
|   |— "backup"
|— Start Block --> {ID: 1642955193067, Position: (-50.00, -400.00),
Heading: 0°, Color: -10, Shade: 50, Pen Size: 5, Grey: 100.00}
|   |— Setturtle2name
|   |   |— "two"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Do action --> "common events"
|
|— If
|   |— Action: "do action"
|   |   |— "do action"
|   |
|   |— equal: false
|   |   |— Variable: "active mouse"
|   |— turtle2name: four
|   |— Storein
|   |   |— turtle2name: one
|   |   |— "do"
|— Start Block --> {ID: 1642955681394, Position: (-200.00, 178.00),
Heading: 0°, Color: -10, Shade: 0, Pen Size: 5, Grey: 100.00}
|   |— Setturtle2name
|   |   |— "re"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Listen
|   |   |— myclick: click1642955681394
|   |   |— "broadcast event"
|   |— Do action --> "setup"
|
|— Start Block --> {ID: 1642955682647, Position: (-100.00, 185.00),
Heading: 0°, Color: -10, Shade: 0, Pen Size: 5, Grey: 100.00}
|   |— Setturtle2name
|   |   |— "mi"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Listen
|   |   |— myclick: click1642955682647
|   |   |— "broadcast event"
|   |— Do action --> "setup"
|
|— Start Block --> {ID: 1642955683564, Position: (-1.00, 194.00), Heading:
0°, Color: -10, Shade: 0, Pen Size: 5, Grey: 100.00}

```

```

|   |— Setturtlelname2
|   |   |— "fa"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Listen
|   |   |— myclick: click1642955683564
|   |   |— "broadcast event"
|   |— Do action --> "setup"
|
|— Start Block --> {ID: 1642955684337, Position: (100.00, 202.00),
Heading: 0°, Color: -10, Shade: 0, Pen Size: 5, Grey: 100.00}
|   |— Setturtlelname2
|   |   |— "sol"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Listen
|   |   |— myclick: click1642955684337
|   |   |— "broadcast event"
|   |— Do action --> "setup"
|
|— Start Block --> {ID: 1642955685803, Position: (200.00, 210.00),
Heading: 0°, Color: -10, Shade: 0, Pen Size: 5, Grey: 100.00}
|   |— Setturtlelname2
|   |   |— "la"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Listen
|   |   |— myclick: click1642955685803
|   |   |— "broadcast event"
|   |— Do action --> "setup"
|
|— Start Block --> {ID: 1642955687994, Position: (300.00, 220.00),
Heading: 0°, Color: -10, Shade: 0, Pen Size: 5, Grey: 100.00}
|   |— Setturtlelname2
|   |   |— "ti"
|   |— Pen Up (Lifts Pen from Canvas)
|   |— Setxy
|   |— Listen
|   |   |— myclick: click1642955687994
|   |   |— "broadcast event"
|   |— Do action --> "setup"
|
|— x: 360
|— Increment --> Color: ?, Amount: 15
|   |— Show Number: ?
|       |— Setxy
|           |— Storein
|               |— Increment --> Color: ?, Amount: -15
|                   |— Setshade
|                       |— Ifthenelse
|                           |— Action: "setup"
|                               |— "setup"

```

```

| | | | | | | | | equal: true
| | | | | | | | | | turtlename: drum
| | | | | | | | | | "drum"
| | | | | | | | | | Turtleshell
| | | | | | | | | | | media: data
| | | | | | | | | | Turtleshell
| | | | | | | | | | | media: data
| | | | | | | | | | x: 375
| | | | | | | | | | | turtlename: drum
| | | | | | | | | | | y: 194
| | | | | | | | | | | x: 360
| | | | | | | | | | | turtlename: drum
| | | | | | | | | | Setxy
| | | | | | | | | | | x: 375
| | | | | | | | | | | Box
| | | | | | | | | | | turtlename: drum
| | | | | | | | | | Action: "ti action"
| | | | | | | | | | | "ti action"
| | | | | | | | | | | If
| | | | | | | | | | | | equal: false
| | | | | | | | | | | | | Variable: "active mouse"
| | | | | | | | | | | | turtlename: four
| | | | | | | | | | | | Storein
| | | | | | | | | | | | | turtlename: two
| | | | | | | | | | | | | "ti"
| | | | | | | | | | Action: "la action"
| | | | | | | | | | | "la action"
| | | | | | | | | | | If
| | | | | | | | | | | | equal: false
| | | | | | | | | | | | | Variable: "active mouse"
| | | | | | | | | | | | turtlename: four
| | | | | | | | | | | | Storein
| | | | | | | | | | | | | turtlename: three
| | | | | | | | | | | | | "la"
| | | | | | | | | | Action: "sol action"
| | | | | | | | | | | "sol action"
| | | | | | | | | | | If
| | | | | | | | | | | | equal: false
| | | | | | | | | | | | | Variable: "active mouse"
| | | | | | | | | | | | turtlename: four
| | | | | | | | | | | | Storein
| | | | | | | | | | | | | turtlename: two
| | | | | | | | | | | | | "sol"
| | | | | | | | | | Action: "fa action"
| | | | | | | | | | | "fa action"
| | | | | | | | | | | If
| | | | | | | | | | | | equal: false
| | | | | | | | | | | | | Variable: "active mouse"
| | | | | | | | | | | | turtlename: four
| | | | | | | | | | | | Storein

```

```

| | | |— turtlename: three
| | | |— "fa"
|— Action: "mi action"
| |— "mi action"
| |— If
| | |— equal: false
| | | |— Variable: "active mouse"
| | |— turtlename: four
| | |— Storein
| | | |— turtlename: one
| | | |— "mi"
|— Action: "re action"
| |— "re action"
| |— If
| | |— equal: false
| | | |— Variable: "active mouse"
| | |— turtlename: four
| | |— Storein
| | | |— turtlename: one
| | | |— "re"
|— Action: "test action"
| |— "test action"
| |— Dispatch
| | |— "test"
| |— Storein
| | |— "win"
| |— Pen Up (Lifts Pen from Canvas)
| |— Setxy
| | |— y: -300
| |— Pen Down
| |— Store Variable "box1" → 1
| |— Store Variable "box2" → ?
| | |— Box
| | |— "one"
| |— Do action --> "test box"
| |— Store Variable "box1" → 2
| |— Store Variable "box2" → ?
| | |— Box
| | |— "two"
| |— Do action --> "test box"
| |— Store Variable "box1" → 3
| |— Store Variable "box2" → ?
| | |— Box
| | |— "three"
| |— Do action --> "test box"
| |— Store Variable "box1" → 4
| |— Store Variable "box2" → ?
| | |— Box
| | |— "four"
| |— Do action --> "test box"

```

```

└─ Pen Up (Lifts Pen from Canvas)
└─ Setxy
    └─ y: -300
└─ Move Backward → 100 Steps
└─ If
    └─ equal: true
        └─ Variable: "win"
    └─ Drift
        └─ Do action --> "dance"

└─ Start Block --> {ID: 1642957036597, Position: (50.00, -400.00),
Heading: 0°, Color: -10, Shade: 50, Pen Size: 5, Grey: 100.00}
    └─ Setturtlelname2
        └─ "three"
    └─ Pen Up (Lifts Pen from Canvas)
    └─ Setxy
    └─ Do action --> "common events"

└─ Start Block --> {ID: 1642957037345, Position: (150.00, -400.00),
Heading: 0°, Color: -10, Shade: 50, Pen Size: 5, Grey: 100.00}
    └─ Setturtlelname2
        └─ "four"
    └─ Pen Up (Lifts Pen from Canvas)
    └─ Setxy
    └─ Do action --> "common events"

└─ Move Forward → 80 Steps
    └─ Repeat (4) Times
        └─ Fill
            └─ Setgrey
            └─ Setcolor
                └─ Action: "green"
                └─ "green"

└─ Rotate Right → 90°
└─ Setcolor
    └─ Action: "yellow"
    └─ "yellow"

└─ Setgrey
└─ Fill
    └─ Repeat (4) Times
        └─ Move Forward → 80 Steps
        └─ Rotate Right → 90°
└─ Setcolor
    └─ Action: "gray"
    └─ "gray"

└─ Setgrey
└─ Fill
    └─ Repeat (4) Times
        └─ Move Forward → 80 Steps
        └─ Rotate Right → 90°

```

```

├─ Push
│   └─ Ifthenelse
│       └─ Action: "push a note"
│           └─ "push a note"
│       └─ equal: true
│       └─ Random
│       └─ Push
│           └─ "drum"
│   └─ Random
├─ Action: "test box"
│   └─ "test box"
│   └─ Note
│       └─ Duration --> 1/4 = 0.25
│       └─ Ifthenelse
│           └─ equal: true
│               └─ Variable: "box2"
│               └─ "drum"
│               └─ Play Drum → hi hat
│               └─ Pitch --> Solfege: ?, Octave: 4
│               └─ Variable: "box2"
│       └─ Ifthenelse
│           └─ equal: true
│               └─ Variable: "box2"
│           └─ IndexHeap
│           └─ Variable: "box1"
│           └─ Do action --> "green"
│           └─ Store Variable "win" → 0
│           └─ Store Variable "box" → 0
│           └─ If
│               └─ equal: false
│                   └─ Variable: "box2"
│               └─ IndexHeap
│               └─ Store Variable "box" → 1
│           └─ If
│               └─ equal: false
│                   └─ Variable: "box2"
│               └─ IndexHeap
│               └─ Store Variable "box" → 1
│           └─ If
│               └─ equal: false
│                   └─ Variable: "box2"
│               └─ IndexHeap
│               └─ Store Variable "box" → 1
│           └─ If
│               └─ equal: false
│                   └─ Variable: "box2"
│               └─ IndexHeap
│               └─ Store Variable "box" → 1
│           └─ Ifthenelse
│               └─ equal: false
│               └─ Variable: "box"
│               └─ Do action --> "yellow"

```



```

| | | | — Do action --> "gray"
| — Setshade
| — Pen Up (Lifts Pen from Canvas)
| — Increment --> Color: ?, Amount: 5
| | — x: 110
| — Increment --> Color: ?, Amount: 12
| | — y: -300
| — Show Number: ?
| | — Variable: "box2"
| — Increment --> Color: ?, Amount: -5
| | — x: 115
| — Increment --> Color: ?, Amount: -12
| | — y: -288
| — Increment --> Color: ?, Amount: 100
| | — x: 110
| — Pen Down

| — Action: "backup"
| | — "backup"
| | — Move Backward → 100 Steps

| — Action: "dance"
| | — "dance"
| | — Repeat (4) Times
| | | — Set Transposition --> ?
| | | | — Multiply
| | | | | — Random
| | | | — Note
| | | | | — Duration --> 1/4 = 0.25
| | | | | — Ifthenelse
| | | | | | — equal: false
| | | | | | | — Box
| | | | | | | — "one"
| | | | | | | — "drum"
| | | | | | — Play Drum → hi hat
| | | | | | — Pitch --> Solfege: ?, Octave: 4
| | | | | | | — Box
| | | | | | | — "one"
| | | | — Note
| | | | | — Duration --> 1/4 = 0.25
| | | | | — Ifthenelse
| | | | | | — equal: false
| | | | | | | — Box
| | | | | | | — "two"
| | | | | | | — "drum"
| | | | | | — Play Drum → hi hat
| | | | | | — Pitch --> Solfege: ?, Octave: 4
| | | | | | | — Box
| | | | | | | — "two"
| | | | — Note
| | | | | — Duration --> 1/4 = 0.25
| | | | | — Ifthenelse
| | | | | | — equal: false

```

```
| | | | | | — Box  
| | | | | | — "three"  
| | | | | | — "drum"  
| | | | | | — Play Drum → hi hat  
| | | | | | — Pitch --> Solfege: ?, Octave: 4  
| | | | | | — Box  
| | | | | | — "three"  
| | | | | — Note  
| | | | | — Duration --> 1/4 = 0.25  
| | | | | — Ifthenelse  
| | | | | — equal: true  
| | | | | — Box  
| | | | | — "four"  
| | | | | — "drum"  
| | | | | — Play Drum → hi hat  
| | | | | — Pitch --> Solfege: ?, Octave: 4  
| | | | | — Box  
| | | | | — "four"  
  
— Start Block --> {ID: 1644022037786, Position: (375.00, 195.00),  
Heading: 0°, Color: -10, Shade: 0, Pen Size: 5, Grey: 100.00}  
| — Setturtle name2  
| | — "drum"  
| — Pen Up (Lifts Pen from Canvas)  
| — Setxy  
| — Listen  
| | — myclick: click1644022037786  
| | — "broadcast event"  
| — Do action --> "setup"  
  
— Action: "drum action"  
| — "drum action"  
| — If  
| | — equal: true  
| | | — Variable: "active mouse"  
| | — turtle name: four  
| | — Storein  
| | | — turtle name: four  
| | — "drum"
```