The Shards of Mt. Lampora

Platforming with Modular Music in Elm



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Functional Programming Challenges

Need fast rendering



Canvas API, Tilemap culling

Functional Programming Challenges

Lots of interrelated ⇒ parts



Entity-Component-System

Entities IDs (integer)

IDs (integers)

Components

appearance, bounding box, physics (velocity, acceleration, grounded), user control, shard

Systems

gravity, movement, tilemap collision, shard collision, user input, zone detection, rendering

Modular Music

Zone	Additional Instruments
Outside	Low Piano
Cave, Inside Mountain	Low Piano, Tuba
Top of Mountain	High Piano, Sleigh Bells, Chimes

Level	Shard Count	Additional Instruments
0	0,1	Oboe, Clarinet, Bassoon
1	2, 3	Violin, Cello
2	4, 5, 6	Flute, Drums