# **JavaScript Terminal Project – Riddle Game**

**Estimated Time:** 3-4 hours  
**Platform:** Node.js (terminal, using ECMAScript Modules)  
 **Topics Covered:** ESM import/export, terminal input, OOP, basic modules

## **Project Goal**

Create a **terminal-based Riddle Game** using JavaScript with **ES Modules** and **Object-Oriented Programming**, entirely synchronous.

The game should:

* Ask the player for their name (see appendix A)
* Load all riddles from files
* Show riddles one by one
* Wait for the correct answer before moving on
* Track how long the player took to finish all riddles
* Show total time and average time per riddle

## **Suggested Folder Structure**

* riddle-game/
* ├── app.js ← Main file that runs the game
* ├── riddles/ ← Folder with all riddle files
* │ ├── r1.js
* │ ├── r2.js
* │ └── ...
* └── classes/ ← Folder for class definitions
* ├── Riddle.js
* ├── Player.js

## **Riddle File Format**

Each file in the riddles/ folder should export a riddle object:

* // riddles/r1.js

export default {

id: 1,

name: "Easy Math",

taskDescription: "What is 5 + 3?",

correctAnswer: "8"

};

All riddles should follow this structure.

## **Task Breakdown**

### **1. Ask for Player Name**

* Use readline-sync for synchronous terminal input (see appendix A at the end)

### **2. Load All Riddles**

* Import all riddles into your main js file. try to import one line, and not import each riddle individually:

// app.js

import AllRiddles from ‘path/to/file/ - V  
  
import riddle1 from ‘/path/to/file’  
import riddle2 from ‘/path/to/file’ - X  
…

### **3. Object-Oriented Classes**

#### **Class: Riddle**

Represents a single riddle.

**Properties:**

* id
* name
* taskDescription
* correctAnswer

**Methods:**

* ask()
  + Displays the riddle
  + Uses the provided readlind.question function to get user input
  + compare the given input to the correct answer
  + Repeats until the correct answer is given

#### **Class: Player**

Tracks player info and timings.

**Properties:**

* name
* times[] — array of durations per riddle

**Methods:**

* recordTime(start, end)
* showStats() — display total and average time

### **4. Game Flow (app.js)**

**Steps:**

* Welcome the player
* Ask for player name
* Load all riddles
* For each riddle:  
  + Record start time (Date.now()) - hint - use a decorator!
  + Call riddle.ask()
  + Record end time
  + Save time difference
* After all riddles are solved:  
  + Show total time
  + Show average time

## **Example Output**

* Welcome to the Riddle Game!
* What is your name? Sarah
* Riddle 1: Easy Math
* What is 5 + 3? → 8
* Correct!
* Riddle 2: Mystery
* I speak without a mouth. What am I? → echo
* Correct!
* Great job, Sarah!
* Total time: 72 seconds
* Average per riddle: 36 seconds

## **Bonus Challenges (Optional)**

### **Multiple Choice Riddles**

* Create MultipleChoiceRiddle class that inherits from Riddle
* Add choices[] array
* Display choices as numbered options
* Check the answer based on user selection

Appendix A: how to ask user for input, using npm readline-sync package:

1. install readline-sync by running: npm install readline-sync
2. import by using: import readline from ‘readline-sync’;
3. run by using:

const name = readlind.question('What is your name? ');

console.log(`Hello, ${name}!`);