

Prerequisite:

Python 3.x.

Installation:

- Clone the repository.
- Make sure Python is installed.
- No external dependencies are required.

Usage:

Launch the app with:

```
python Questions.py
```

Example of execution:

First-Time Use:

When you first run the application, you'll see:

```
=====
Welcome to the Computer Science QCM
=====

Please enter your name: aymen

Welcome back aymen!

1. View History
2. Start the QCM
3. Exit

=====
```

Taking a Quiz :

1. Select option 2 to start a quiz:

```
1. View History
2. Start the QCM
3. Exit
```

```
=====
```

```
Enter your choice (1-3): 2
```

```
Available categories:
```

```
=====
```

```
1. Computer Basics
2. Programming Fundamentals
3. Networking
4. Cybersecurity
5. Database Management
6. Web Development
7. Operating Systems
```

```
=====
```

2. Choose a category:

```
Select a category (number): 1
```

```
You have selected: Computer Basics
```

```
=====
```

3. Answer questions:

```
1- What does CPU stand for?
```

```
A. Central Processing Unit
C. Control Programming Unit
```

```
B. Computer Processing Unit
D. Central Programming Unit
```

```
=====
```

```
Enter your answer (A/B/C/D): a
```

```
✓ CORRECT!
```

2- Which type of memory is volatile?

A. ROM

B. RAM

C. SSD

D. Hard Drive

Enter your answer (A/B/C/D): a

X INCORRECT!

The correct answer is: B

4. View your results:

Category: Computer Basics

Final score: 2/10

Session recorded on: 2025-01-17 22:07:35

Viewing History:

Select option 1 from the main menu:

1. View History
2. Start the QCM
3. Exit

Enter your choice (1-3): 1

Your Game History:

Date: 2025-01-17 21:54:54

Category: Computer Basics

Score: 2/10

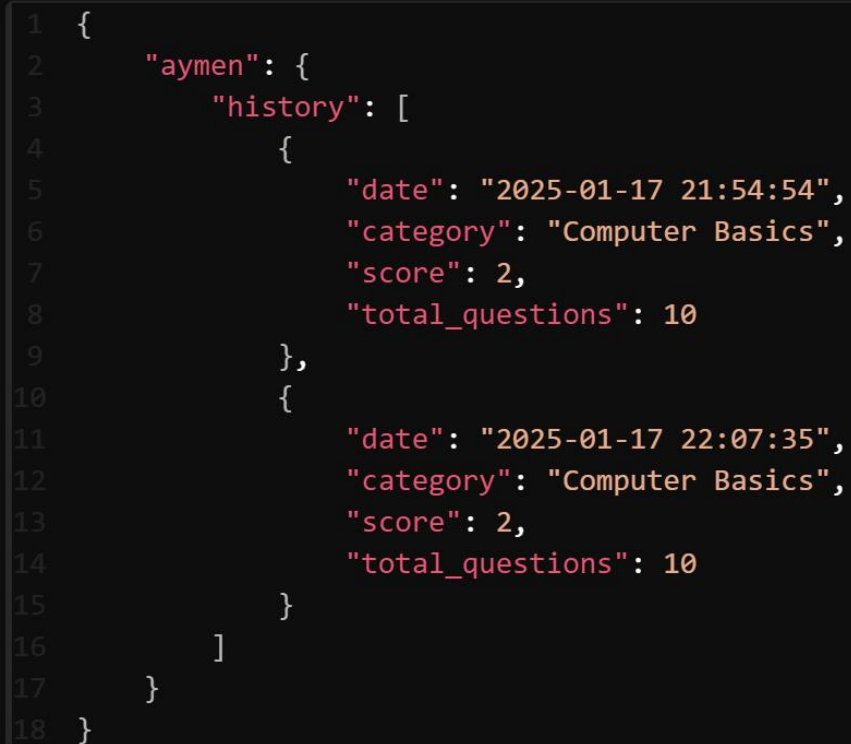
Date: 2025-01-17 22:07:35

Category: Computer Basics

Score: 2/10

Data Storage :

- User data and quiz history are stored in user_data.json.
- The file is created automatically on first use.
- Data format:



```
1 {
2   "aymen": {
3     "history": [
4       {
5         "date": "2025-01-17 21:54:54",
6         "category": "Computer Basics",
7         "score": 2,
8         "total_questions": 10
9       },
10      {
11        "date": "2025-01-17 22:07:35",
12        "category": "Computer Basics",
13        "score": 2,
14        "total_questions": 10
15      }
16    ]
17  }
18 }
```