

A dramatic mountain landscape with a paraglider. The scene features several jagged, dark mountain peaks under a cloudy sky. A small figure of a person is perched on the highest peak, with a blue paraglider canopy visible above them. The foreground shows a steep, rocky slope with some green vegetation.

# NodeJS

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WHAT IS NODEJS?

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1. Node.js is a JavaScript runtime built on Chrome's V8 JavaScript engine Node.js Uses an event-driven, non-blocking I/O makes it lightweight and efficient.
2. Asynchronous and Event Driven - many connections can be handled concurrently  
Lightweight and Very Fast
3. I/O bound Applications Data Streaming Applications JSON APIs based Applications.



# Node Architecture

Node Core / Standard Library (JS)

Node Bindings (C++)

Chrome V8 (C++)

libuv (C)

# SYNC I/O

```
var fs = require('fs');  
  
console.time('Start timer');  
  
var data = fs.readFileSync('test.txt');  
console.log("File Read: " + data);  
console.timeEnd('Start timer');  
  
fs.writeFileSync('write.txt', 'Writing to file 111 3333');  
console.log("Done with file write");  
console.timeEnd('Start timer');  
console.log('Done');
```

# ASYNCR I/O

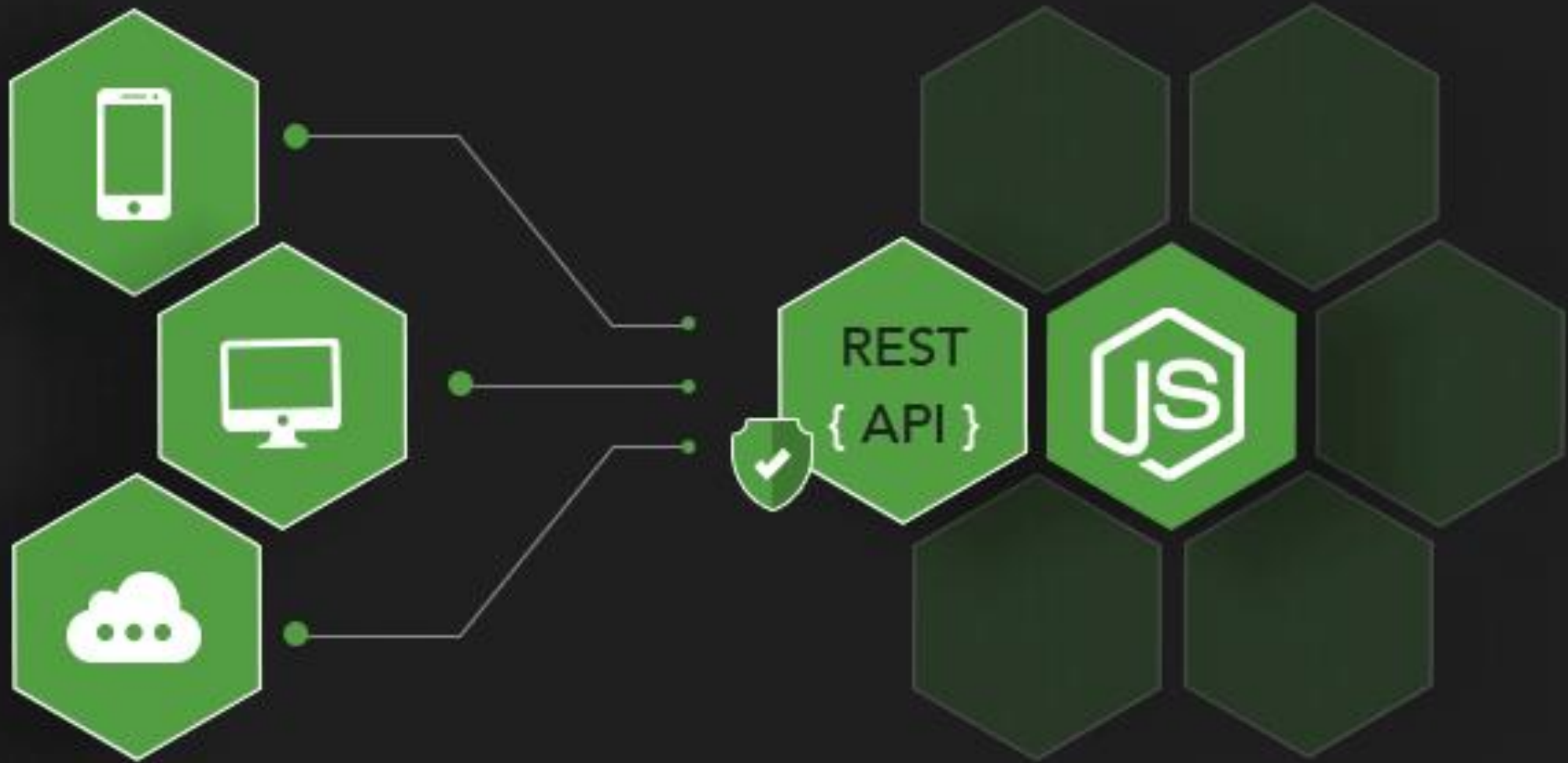
```
var fs = require('fs');

console.time('Start timer Read');
console.time('Start timer Write');

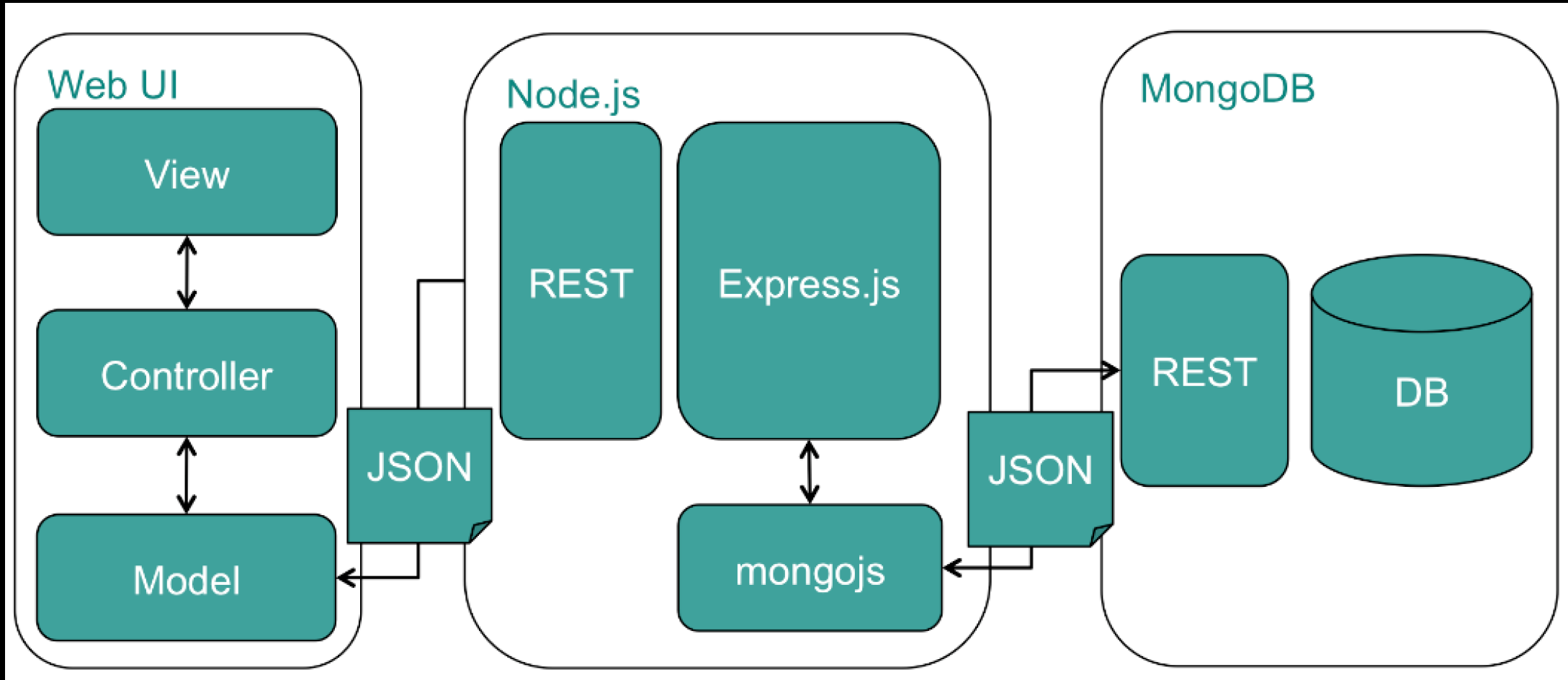
fs.readFile('test.txt', function(err, data) {
  if (err) {
    console.log("File Reading err: " + err);
    return;
  }
  console.log("File Reading: " + data );
  console.timeEnd('Start timer Read');
});

fs.writeFile('write.txt', 'Writing to file 111 3333', function() {
  console.log("Done with file write \n");
  console.timeEnd('Start timer Write');
});

console.log('Done \n');
```



API Architecture |



Questions?

