

Identifiant secret

 Epreuve de :
 Session : Date :
 Année universitaire :
 Classe :
 Nom :
 Prénom :
 N° Inscription : Salle :

 Signatures des
surveillants

 Total des
feuilles
doubles
remises

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Examen	Session Principale/ Semestre 2
Matière: NodeJS	Classe : L2T
Enseignant(e):	Date: 21/05/2024
<u>Documents non autorisés</u>	Duration: 1h30

 Numéro de la
double feuille

 Total des doubles
feuilles remises

1

2

Note attribuée

- What is Node.js?
 - A backend JavaScript runtime environment
 - A front-end framework
 - A backend framework
 - A database management system
- Who developed Node.js?
 - Apple
 - Microsoft
 - Ryan Dahl
 - Google
- In which year was Node.js first released?
 - 1999
 - 2000
 - 2009
 - 2023
- What engine does Node.js use to execute JavaScript code?
 - SpiderMonkey
 - V8
 - JavaScriptCore
 - .Net Core
- Which command is used to install Node.js packages?
 - node install
 - npm install
 - pip install
 - gradle install
- What does npm stand for?
 - Node Package Manager
 - Network Package Manager
 - Node Program Manager
 - New Package Manager
- How do you initialize a new Node.js project?
 - npm initial
 - npm init
 - npm upgrade
 - npm audit
- Which file is used to define the properties of a Node.js project?
 - node.json
 - project.json
 - package.json
 - config.json

Signatures des correcteurs

NE RIEN ÉCRIRE DANS CETTE PARTIE

9. How do you include a module in Node.js?
- a. `require('module');`
 - b. `import module from 'module';`
 - c. `include('module');`
 - d. `module('module');`
10. Which method is used to create a server in Node.js?
- a. `network.createServer()`
 - b. `server.create()`
 - c. `node.createServer()`
 - d. `http.createServer()`
11. Which of the following is a core module in Node.js?
- a. `lodash`
 - b. `nestjs`
 - c. `http`
 - d. `axios`
12. What does the `fs` module stand for?
- a. File Store
 - b. File Source
 - c. File System
 - d. File Structure
13. What is MongoDB?
- a. A relational database
 - b. A programming language
 - c. A NoSQL database
 - d. A front-end framework
14. Who developed MongoDB?
- a. Microsoft
 - b. MongoDB Inc.
 - c. Amazon
 - d. Google
15. What does BSON stand for in MongoDB?
- a. Basic Serialized Object Notation
 - b. Binary Serialized Object Notation
 - c. Basic JSON
 - d. Binary JSON
16. What is the default port for MongoDB?
- a. 27016
 - b. 27017
 - c. 27018
 - d. 27019
17. How do you start the MongoDB shell?
- a. `mongo`
 - b. `mongod`
 - c. `mongodb`
 - d. `start mongo`

18. What is a collection in MongoDB?
 - a. To create a mutable object that persists across renders
 - b. To manage state
 - c. To manage context
 - d. To handle side effects
19. What is a document in MongoDB?
 - a. A row
 - b. A column
 - c. A table
 - d. A database
20. What is the purpose of the \$lookup operator in MongoDB?
 - a. To join documents from different collections
 - b. To sort documents in a collection
 - c. To filter documents in a collection
 - d. To create an index on a collection
21. What is a JSON Web Token (JWT)?
 - a. A standard for creating tokens that assert a user's identity and can be used for authentication and authorization.
 - b. A database system used for storing user credentials.
 - c. A protocol for securing network communications.
 - d. A programming language for creating web applications.
22. Why is authentication and authorization important for web applications?
 - a. It is not important, as web applications can function without it.
 - b. It helps to improve the performance of web applications.
 - c. It helps to prevent unauthorized access to sensitive information and resources.
 - d. It helps to reduce the development time of web applications.
23. How can authentication be applied to a web application?
 - a. By requiring users to enter their name and email address on the login page.
 - b. By implementing a username and password system, or by using a third-party authentication provider such as OAuth or OpenID.
 - c. By encrypting all data that is transmitted between the client and server.
 - d. By restricting access to the web application to certain IP addresses.
24. How can authorization be applied to a web application?
 - a. By requiring users to enter their name and email address on the login page.
 - b. By defining roles and permissions for users, and checking those roles and permissions before granting access to resources.
 - c. By encrypting all data that is transmitted between the client and server.
 - d. By allowing all users to access all resources without any restrictions
25. What is the purpose of error handling in a Node.js application?
 - a. To stop the application from crashing when an error occurs.
 - b. To provide a way to gracefully handle errors and return appropriate responses to clients.
 - c. To log errors for later analysis.
 - d. To catch and ignore all errors, allowing the application to continue running.
26. What is the purpose of a custom error class in Node.js?
 - a. To replace the built-in Error class with a custom implementation.
 - b. To provide a way to define custom error messages.
 - c. To provide a consistent way to handle errors across an application.
 - d. To hide error details from clients for security reasons.
27. Which of the following is a common technique for handling errors in asynchronous code in Node.js?
 - a. Using try/catch blocks.
 - b. Using callback functions that take an error parameter as the first argument.
 - c. Using synchronous functions instead of asynchronous functions.
 - d. Using global error handlers that catch all errors in the application.

28. What is the purpose of a 404 error handler in a Node.js application?
- To handle errors that occur due to invalid input from clients.
 - To handle errors that occur due to server-side issues, such as database connectivity problems.
 - To handle requests for resources that do not exist.
 - To handle errors related to user authentication or authorization.
29. What is the purpose of a try-catch block in JavaScript?
- To replace if-else statements for handling errors in a code block.
 - To prevent errors from occurring in a code block.
 - To attempt to execute a block of code, and handle any errors that occur during its execution.
 - To break out of a loop or switch statement in the event of an error.
30. What is the first step to install MongoDB on a Windows machine?
- Download the MongoDB installer from the MongoDB website.
 - Install Node.js on the machine.
 - Create a new directory for MongoDB.
 - Configure the MongoDB server settings.
31. Which command is used to start the MongoDB server?
- mongo
 - mongod
 - npm start
 - mysql start
32. What is the purpose of middleware in the context of a web application's request/response cycle?
- To handle incoming requests from the client.
 - To modify the request or response objects as they pass through the middleware pipeline.
 - To generate HTML code for the web application.
 - To store and retrieve data from a database.
33. Which command is used to connect to a MongoDB server using the MongoDB shell?
- mongo
 - mongod
 - npm start
 - mysql -u <username> -p <password>
34. Which of the following is an example of connecting to a MongoDB server using a Node.js application?
- const mysql = require('mysql');
 - const mongoose = require('mongoose');
 - mongoose.connect('mongodb://localhost/my_database', { useNewUrlParser: true });
 - const express = require('express');
 - const app = express();
 - const pg = require('pg');
 - const client = new pg.Client();
35. What is middleware in the context of web development?
- A programming language used to create web applications.
 - A server that hosts web applications.
 - Software that connects different components of a web application and handles communication between them.
36. A database management system used to store data for web applications. Which method is used to insert a new document into a MongoDB collection?
- db.find()
 - db.update()
 - db.deleteOne()
 - db.insertOne()
37. Which method is used to find documents in a MongoDB collection that match a specified query?
- db.find()
 - db.update()
 - db.deleteOne()
 - db.insertOne()

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2	2

38. Which method is used to update a single document in a MongoDB collection?
- db.find()
 - db.updateOne()
 - db.deleteOne()
 - db.insertOne()
39. Which method is used to delete multiple documents from a MongoDB collection?
- db.find()
 - db.update()
 - db.deleteMany()
 - db.insertOne()
40. In MongoDB, which method is used to insert a single document into a collection?
- find()
 - update()
 - remove()
 - insertOne()