

Travelers EDP Week 2 Review

1. Which of the following statements are false about React? Select all that apply.
 - a) The command: ***npx create-react-app myapp*** may be used to create a react app with name myapp
 - b) There are two types of react components: functional components and class components
 - c) React component names always begin with a capital letter
 - d) React is an open-source Model-View-Controller application framework
 - e) None of the above

2. Which of the following statements are true in react environment? Select all that apply.
 - a) props can help to pass the data from one component to another component.
 - b) pure function is a function that always returns the same value for the same inputs.
 - c) A state is known as an internal storage of a component in React.
 - d) A state is known as an external storage of a component in React.
 - e) None of the above

3. What does a MongoDB collection consist of?
 - a) data
 - b) fields
 - c) documents
 - d) rows
 - e) None of the above

4. A MongoDB server instance running on localhost listening at port 27017, hosting a database called salesdb. Which of the following are valid URLs to connect to MongoDB database salesdb from JavaScript code?
 - a) mongodb://localhost/salesdb
 - b) mongodb://localhost:27017/salesdb
 - c) http://mongodb://localhost:27017/salesdb
 - d) mongodb://localhost:9999/salesdb
 - e) None of the above

5. Which of the following tools may be used to connect to PostgreSQL database instance and perform database operations? Select all that apply.
 - a) psql Command Line Interface
 - b) pgAdmin Graphical User Interface
 - c) DBeaver (Open-Source GUI tool)
 - d) You must write an application program to connect and perform database operations
 - e) None of the above

6. Which of the following express apps will display a message “Welcome to Travelers hartford” on the browser page and on the node console?

Browser view

Welcome to Travelers hartford

Elements Console Sources Performance Me

```
<html>
<head></head>
... <body>Welcome to Travelers hartford</body> == $0
</html>
```

travelers1.js

```
1 const express = require("express");
2 const myexpressapp = express();
3 let message = 'Welcome to Travelers';
4
5 myexpressapp.get('/travelers', (req, res)=> {
6   res.send(message + " " + "hartford");
7   console.log(message);
8 })
9 .listen(80);
```

travelers2.js

```
1 const express = require("express");
2 const myexpressapp = express();
3 let message = 'Welcome to Travelers';
4
5 myexpressapp.get('/travelers', (req, res)=> {
6   res.send(message);
7   console.log(message);
8 })
9 .get('/travelers/?location', (req, res)=> {
10   let city = req.query.location;
11   message = message + " " + city ;
12   res.send(message);
13   console.log(message);
14 })
15 .listen(80);
```

travelers3.js

```
1 const express = require("express");
2 const myexpressapp = express();
3 let message = 'Welcome to Travelers';
4
5 myexpressapp.get('/travelers', (req, res)=> {
6   res.send(message);
7   console.log(message);
8 })
9
10 myexpressapp.get('/travelers/location', (req, res)=> {
11   let city = req.param.location;
12   message = message + " " + city ;
13   res.send(message);
14   console.log(message);
15 })
16 .listen(80);
```

travelers4.js

```
1 const express = require("express");
2 const myexpressapp = express();
3 let message = 'Welcome to Travelers';
4
5 myexpressapp.get('/travelers', (req, res)=> {
6   res.send(message);
7   console.log(message);
8 })
9
10 myexpressapp.get('/travelers/:location', (req, res)=> {
11   let city = req.params.location;
12   message = message + " " + city ;
13   res.send(message);
14   console.log(message);
15 })
16 .listen(80);
```

- a) travelers1.js
- b) travelers2.js
- c) travelers3.js
- d) travelers4.js
- e) None of the above

7. Given a MongoDB collection called customers, which of the following queries will return all customers with the name “Lisa” ? Select all that apply.

- a) db.customers.find(“Lisa”)
- b) db.customers.find(“name=Lisa”)
- c) db.customers.find(name: Lisa)
- d) db.customers.find({name: ‘Lisa’})
- e) None of the above

8. Which of the following statements are true about Node.js?

- a) Node.js uses a Single-threaded Event driven non-blocking file and network I/O
- b) Node.js uses a configurable thread pool approach and supports non-blocking file and network I/O
- c) Node.js uses a Single-threaded Event driven blocking file and network I/O
- d) Node.js uses a configurable thread pool approach and supports blocking file and network I/O
- e) None of the above

9. We are using a react component called `<Customer/>` in our react application and use a boolean variable **accepted** that represents customer application acceptance state. Which of the following are valid JSX code? Select all that apply.

- a) `<div>{ if(accepted) <Customer/>}</div>`
- b) `<div>{ accepted ? <Customer/> : null}</div>`
- c) `<div>{ accepted && <Customer/>}</div>`
- d) `<div>{ !accepted || <Customer/>}</div>`
- e) None of the above

10. Which of the following are true about PostgreSQL database? Select all that apply.

- a) The default port number of PostgreSQL database instance is 5432
- b) The default port number of PostgreSQL database instance is 27017
- c) In PostgreSQL database, CREATE TABLE statements must define a primary key.
- d) In PostgreSQL database, CREATE TABLE statements do not require a primary key.
- e) None of the above

11. What are CRUD operations in database and REST services environment?

- a) CREATE, REST, UPDATE, DISABLE
- b) CREATE, READ, UPDATE, DELETE
- c) CREATE, RUN, UPDATE, DELETE
- d) CONFIGURE, RUN, UPLOAD, DELETE
- e) None of the above

12. Which of the following MongoDB Shell commands returns all the documents in the collection **customers** ?

- a) `db.customers.all()`
- b) `db.find().customers()`
- c) `db.customers.find()`
- d) `db.customers.show()`
- e) None of the above

13. Which of the following statements are true? Select all that apply

- a) Jest is an open-source JavaScript testing framework.
- b) BDD is a development technique that focuses on creating simple scenarios on how an application should behave from the end user's perspective.
- c) Node.js runs in a browser.
- d) We use JSX code and transpile JSX code into ES5 JavaScript code in react because browsers cannot interpret JSX code.
- e) None of the above

14. Which of the following MongoDB shell queries displays all customers with an age greater than or equal to 21?

- a) `db.customers.select('WHERE age >=21')`
- b) `db.customers.where('age >= 21')`
- c) `db.customers.find('WHERE age >=21')`
- d) `db.customers.find({age: {$gte: 21}})`
- e) None of the above

15. Which of the following statements are false? Select all that apply.

- a) Unit tests should be applied before integration tests.
- b) In JavaScript testing we use `describe()` function to combine tests into a test suite.
- c) Code Coverage is a metric that indicates how much of a codebase has tests.
- d) Code Coverage is a monitoring metric that indicates the health of the running application.
- e) None of the above.

16. What is TDD an acronym for?

- a) Test Data Determination
- b) Test Data Development
- c) Test Driven Development
- d) Test Design Document
- e) None of the above

17. Which of the following features of React help to improve performance?

- a) Shadow DOM
- b) Virtual DOM
- c) Fake DOM
- d) Real DOM
- e) None of the above

18. How many elements can a valid react component return?

- a) 2 or more
- b) 1
- c) 1 or many
- d) 3
- e) None of the above

19. Which of the following is the smallest building block in a react application?

- a) props
- b) state
- c) component
- d) redux
- e) None of the above

20. Which of the following functions is used to change the state of a react component?

- a) `this.state()`
- b) `this.setState()`
- c) `this.changeSetState()`
- d) We cannot change the state of a react component
- e) None of the above