Travelers EDP Week 2 Review
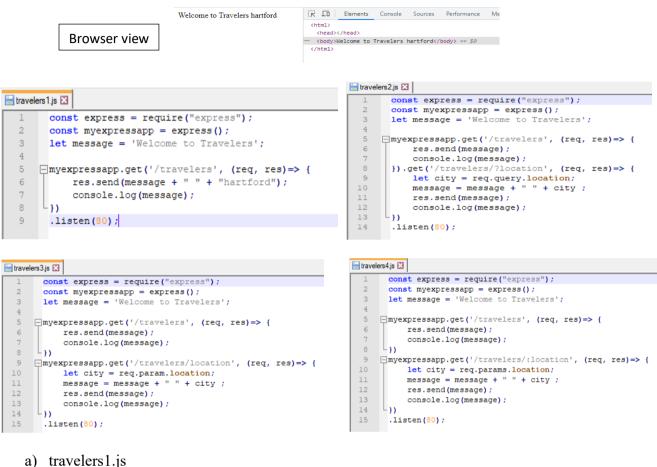
1. Which of the following statements are false about React? Select all that apply.

    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?

Welcome to Travelers hartford

```
Browser view
```

```
IR  Lo   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    }).get('/travelers/?location', (req, res)=> {
9        let city = req.query.location;
10       message = message + " " + city ;
11       res.send(message);
12       console.log(message);
13   })
14   .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    myexpressapp.get('/travelers/location', (req, res)=> {
10       let city = req.param.location;
11       message = message + " " + city ;
12       res.send(message);
13       console.log(message);
14   })
15   .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    myexpressapp.get('/travelers/:location', (req, res)=> {
10       let city = req.params.location;
11       message = message + " " + city ;
12       res.send(message);
13       console.log(message);
14   })
15   .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