Congratulations! You passed!

Score received: 15.12%.

Latest Submission Grade 90.67%.

To pass 80% or higher

Review the assignment, 20 min.

Go to next item

1. Which of these are essential characteristics of the Cloud? (Select the two characteristics that apply. 1/1 point

- Broad network access
- Correct
  Correct
  Broad network characteristic of the cloud is broad network access: cloud computing resources can be accessed on the network through standard mechanisms and platforms.
- Limited service
- Resource pooling
- Correct
  Correct
  Essential characteristic of the cloud is resource pooling: to allow given cloud provider to serve multiple clients. Which requires so-called multi-tenancy cloud infrastructure.
- Static access

Expand

Correct
Great, you got all the right answers.

2. In the _____ cloud model, the cloud provider provisions the cloud infrastructure for exclusive use by a single organization. 1/1 point

- Private
- Hybrid multicloud
- Hybrid
- Public

Expand

Correct
The hypervisor makes virtualization feasible. The hypervisor is a piece of software that runs above the physical server, and the hypervisor pools the resources from the physical server and allocates them to your virtual environments.

3. A _____ is an executable unit of software in which application code is packaged, along with its libraries and dependencies, in common ways so that it can be run anywhere—desktop, traditional IT, or the cloud. 1/1 point

- Vm
- Hypervisor
- Instance
- Container

Expand

Correct
A container is an executable unit of software in which application code is packaged, along with its libraries and dependencies, in common ways so that it can be run anywhere—desktop, traditional IT, or the cloud.

4. Which type of cloud storage is ideal for storing unstructured data? 1/1 point

- Object
- Block
- Block
- File

Expand

Correct
Object Storage is great for storing large amounts of unstructured data.

5. Front-end developers use CSS to do which of the following to a website? 1/1 point

- Add interactivity to the website
- Hide the website and make it more appealing
- Create the physical structure of the website
- Render the website's pages more quickly and efficiently

Expand

Correct
Front-end developers use CSS to define, apply, and manage different sets of style characteristics to a website and to make the site more appealing.

6. Which of the following best describes a route? 1/1 point

Expand

Correct
Route is a path to a website or page that the user interacts with. Routes generally take user input and create results based on the input.

7. Which HTML tag should you use to specify self-contained content? 1/1 point

- nav
- figure
- number
- section

Expand

Correct
The <figure> tag specifies self-contained content such as graphics, images, or code sections.

8. In JavaScript, what is one use of the following method? 1/1 point

- Join two or more strings together
- Extract part of a string and return the part in a new string
- Convert between objects and primitive literals
- Add whitespace to each side of a string

Expand

Correct
Wrapper objects use special methods such as the valueOf and toString methods to convert between objects and primitive literals.

9. In JavaScript, if you do not initialize a variable, what value will the variable have? 1/1 point

Expand

Correct
If you do not initialize a variable, the variable's value will be undefined.

10. Which of the following is a popular web hosted service for Git repositories? 1/1 point

- Bitbucket
- GitlabHub
- Subversion
- CVS (Integrity)

Expand

Correct
Bitbucket is a popular web hosted service for Git repositories is BitBucket.

11. Which of the following is a feature of the Git Repository model? 1/1 point

- Source code tracking
- Top-down system
- Centralized version control
- Store-leave workflow

Expand

Correct
The pull-pushy flow for Git is tracking source code during development.

12. Assume you are a developer on a GitHub project, and on your computer, you have a cloned copy of the GitHub repository. After editing several files in your local repository, what is the first step you must take to push your changes back to GitHub? 1/1 point

- Create your working directory
- Use the add command
- Update the Master file
- Create a new master branch

Expand

Correct
You are ready to push your changes back to GitHub, you must first run the pull command on the changed files. This command ensures that files into a staging area.

13. What is the following Git command that stores and tries to automatically merge changes from the remote repository to your local repository? 1/1 point

- go block
- go pull
- go push
- go merge

Expand

Correct
The command pull fetches and tries to automatically merge changes from the remote repository to your local repository.

14. In a Gitlab team project, which team member uses the git daemon command as part of their responsibilities? 1/1 point

- Developer
- Gitlog manager
- Repository administrator
- Integrator

Expand

Correct
A repository administrator uses the git daemon command to allow anonymous download from a repository.

15. The cloud-native application stack consists of four different layers: application runtime, application and data services, scheduling and orchestration, and cloud infrastructure. The _____ layer defines the underlying environment. 1/1 point

- Cloud infrastructure
- Application and data services
- Scheduling and orchestration
- Application runtime

Expand

Correct
The cloud infrastructure layer defines the underlying environment. Cloud-native apps are developed for public, private, hybrid, and multi-cloud environments.

16. What is the second step in test-driven development? 1/1 point

- Write a test case for a piece of code
- Refactor the code to improve it
- Develop just enough code to make the test pass
- Add extensions to the code

Expand

Correct
Test-driven development follows the red-green-refactor pattern. The second step is to develop just enough code to make the test pass.

17. The process of refactoring and breaking down large legacy applications into a collection of small, loosely coupled microservices that can be migrated to Kubernetes or Azure Kubernetes is called what? 1/1 point

- Lift and shift
- Containerization
- Managing the monolith
- Operational optimization

Expand

Correct
Correct. Managing the large application piece by piece is referred to as "strangling the monoliths."

18. Which of the following is a characteristic of cloud native computing? 1/1 point

- Difficult scalability
- Monolithic application
- Stateful processes
- Loosely coupled

Expand

Correct
Cloud native apps are developed for public, private, hybrid, and multi-cloud environments.

19. Will Rieken-AFS are required to _____. 1/1 point

- Storage
- A natural language classifier
- Unstructured data
- REST APIs

Expand

Correct
Correct. You can interact with each AFS by using one of the HTTP methods, such as GET and POST

20. JSON is the standard format for API data exchange. What relationship does JSON have with Node.js? 1/1 point

- Controls data model table
- Manages file
- Standard representation of native JavaScript objects
- XML, JAT

Expand

Correct
Correct. JSON represents objects that can be processed and rendered by Node.js.

21. React is an open-source library created and maintained by Facebook and community developers. What is it mainly used to build? 1/1 point

- Error messages
- Complex UIs
- Accessibility messages
- AI systems

Expand

Correct
Correct. React is a framework for building client-side dynamic web applications.

22. To make a function or value available to Node.js applications that expect your module, you should: 1/1 point

- Use the require function with a relative path or the core lib
- Add a property to the module.exports object
- Call exports with the name of a variable/function
- Do nothing – it happens automatically

Expand

Incorrect
Incorrect. Refer to the Working with Node.js Modules video.

23. The initial state of a promise object is _____. 1/1 point

- Resolved
- Pending
- Rejected
- Blocked

Expand

Correct
Correct. A promise object is in a pending state when it is created.

24. What is Isomorphic rendering? 1/1 point

- It renders static HTML pages from the server
- It derives the middleware function that the crypto will use
- It renders both a middleware to specific routes
- It's the ability of the server to fill in dynamic content in the HTML skeleton

Expand

Correct
Correct. It uses the view engine property which is responsible for creating HTML from your views.

25. Some of the common Docker CLI commands include _____ to create a new image and _____ for starting deployed images. 1/1 point

- ls, build
- exit, pull
- image, build
- build, run

Expand

Correct
Correct. These are the correct commands for the Docker operations.

27. Which of these is true of Blueprintjs? 1/1 point

- Provides a rollaway integrated/continuous deployment pipeline to both applications or display source code
- Provides a flexible model that maintains choice for users wherever appropriate
- Limits the types of applications that can run on it
- Provides logging, monitoring, and alerting solutions

Expand

Incorrect
Incorrect. Refer to the Container Orchestration video.

28. Which of the following is not true of a container image? 1/1 point

- It is read-only
- It is the same as a container
- It is built by using a Dockerfile
- It is identical to a running image

Expand

Correct
Correct. A container image represents a container that collapsed or snapshot.

29. When the "apply" command is run, the targeted Kubernetes cluster _____. 1/1 point

- Is deactivated
- Low deployments in the namespace
- Has its state changed to match the state that's defined in the provided files
- Is left unchanged

Expand

Correct
Correct. Correct. At its most basic, the "apply" command simply requires a file or directory of files to match.

30. Which of the following is provided by OpenShift's cluster services? 1/1 point

- Networking services
- QA Tester
- Private repository
- Integrated monitoring

Expand

Correct
Correct. Red Hat OpenShift provides a wide array of services to be used with Kubernetes.

33. What is the result of running the following lines of code? **1 / 1 point**

```
class Points(object):
    def __init__(self,a,b):
        self.a=a
        self.b=b
    def print_point(self):
        print('a=',self.a,' b=',self.b)
p1=Points(5,'X','Y')
p1.print_point()
```

- a=X
- b=Y
- a=X b=Y

Expand

Correct
Correct. The variables have been assigned and printed.

32. Web scraping is a process used for automatically extracting information from a website within minutes. What is the purpose of the Python code provided below in web scraping? **1 / 1 point**

"table_row=table.find_all(name='tr')"

- It will find all the data within the table marked with a tag 'all.'
- It will find all the rows within the table.
- It will find all the columns within the table marked with a tag 'all.'
- It will find all the data within the table marked with a tag 'tr.'

Expand

Correct
Feedback: Correct! find_all() is a method in the table object that will identify tags in a table with the parameter passed into it.

33. What value of x will produce the following output? **1 / 1 point**

Hello
Christina

```
x='A'
if(x=='A'):
    print('Hello')
else:
    print('Bye')
print('Christina')
```

- x=A
- x=1
- x='A'

Expand

Correct
Correct! x= 'A' is the parameter that matches up with the conditional.

34. When using the open() function, what is the purpose of passing the parameter 'a+' into it? **1 / 1 point**

- Reading and writing. Cannot truncate the file.
- Writing and reading. Truncates the file.
- Opening and reading. Creates a new file if none exists.
- Appending and reading. Creates a new file if none exists.

Expand

Correct
Correct. Rather than passing 'a' only, 'a+' both appends and reads.

35. Say you have a list named myList with these elements: ["Asher","Ralph","Leia", "Simone"]. Which of the following shows the correct code for printing out the Leia element? Select two. **1 / 1 point**

- [x] print(myList[2])
  - Correct
    Correct! The index of the first element is 0 which makes the index for Leia 2.
- [x] print(myList[-2])
  - Correct
    Correct! Negative numbers can be used to access elements in reverse order where the index of the last item in the list is -1 which makes the Leia element -2.
- [ ] print(myList[3])
- [ ] print(myList[-1])

Expand

Correct
Great, you got all the right answers.

36. Which statement about an entity-attribute model regarding a movie is true? **1 / 1 point**

- The movie is a row.
- The movie is a column.
- The movie is an attribute.
- The movie is an entity.

Expand

Correct
Correct! An entity is the subject of focus.

37. What is the purpose of using a Django template? **1 / 1 point**

- It converts static HTML to dynamic HTML.
- It can easily be mapped to a relational database.
- It is an alternative to the entity-relationship model for rendering data.
- When combined with Django views, it presents data as a dynamic HTML page.

Expand

Correct
Correct! "Django uses a template to generate dynamic Web pages that are sent back and rendered in a user's browser."

38. When you create a Django project, Django creates some core files, including manage.py. What purpose does manage.py serve? **1 / 1 point**

- It creates markdown elements.
- It provides a command line interface so you can interact with the Django project.
- It contains the URL and routing definitions of your Django app.
- It contains the settings and configurations for your Django project.

Expand

Correct
Correct! manage.py is a command line interface used to interact with the Django project to start the server, migrate models, and so on.

39. Which Django class is used for styling textual elements? **0 / 1 point**

- text-style
- card-deck
- form-control
- navbar

Expand

Incorrect
Incorrect. Refer to the Bootstrap Integration video.

40. Which statement is true regarding object-relational mapping? **1 / 1 point**

- ORM bridges the gap between OOP and SQL.
- ORM utilizes lookup tables to access data.
- A change in the database only require changes to the data access logic but not to the application logic.
- ORM usually makes debugging simpler than SQL.

Expand

Correct
Correct! Developers can use just one programming paradigm development.

41. Modern software development often uses which of the following along with the twelve-factor application methodology? **1 / 1 point**

- Microservices
- SaaS
- Databases deployed on VMs
- Monoliths

Expand

Correct
Correct! Microservices are not a requirement for twelve-factor apps. However, microservices are often used in conjunction with the twelve-factor application methodology.

42. Besides FaaS, which compute model's maintenance is managed by its provider? **0 / 1 point**

- Virtual machine
- Container
- SaaS
- PaaS

Expand

Incorrect
Incorrect. Refer to the Comparing the Faas Model video.

43. OpenShift is a platform for running microservices. Which of the following are some of its features? Select the two features that apply. **0 / 1 point**

- [x] Sells third-party software
  - This should not be selected
    Incorrect. Refer to the OpenShift Recap video.
- [x] Orchestrates containerized workloads
  - Correct
    Correct! OpenShift orchestrates containerized workloads and thus provides an excellent pattern for a cloud-native application.
- [ ] Integrates with serverless architectures
- [ ] Deployus cloud-native applications

Expand

Incorrect
You didn't select all the correct answers

44. Which statement best describes blocking invocations? **0 / 1 point**

- They wait for a result prior to invocation.
- They invoke the action immediately but do not wait for the result.
- After the invocation they wait for the result.
- The result is invoked prior to the action.

Expand

Incorrect
Incorrect. Refer to the Create and Invoke Actions part 1 video.

45. Which technology is generally considered an example of serverless computing? **1 / 1 point**

- FaaS
- SaaS
- IaaS
- PaaS

Expand

Correct
Correct! FaaS is an excellent example of serverless computing.