

- 
1. This skill is important for a full stack developer to be able to build and deploy applications to development, staging, and production servers.

1 / 1 point

- ☐ Back End Development
- ☒ DevOps
- ☐ Front End Development
- ☐ Database Administration

✓ **Correct**

That's correct! DevOps is a set of practices and tools that integrates development and IT operations to automate and streamline development and deployment.

2. This part of an application deals with business logic, workflow, and data storage and retrieval.

1 / 1 point

- ☐ Caching
- ☐ DevOps
- ☐ Front end
- ☒ Back end

✓ **Correct**

That's correct! The back end of the application deals primarily with data retrieval and manipulation, while the front end displays that data.

3. A full stack developer may be responsible for interfacing with tools like PostgreSQL and MySQL. In which part of the stack listed below would these tools belong?

1 / 1 point

- ☐ DevOps
- ☒ Back end
- ☐ Front end
- ☐ User interface

✓ **Correct**

That's correct! These are examples of relational databases that are part of the data stack in the back end.

4. Which one of the following is used in the front end?

1 / 1 point

- ☐ Python
- ☐ Redis
- ☐ DRF
- ☒ React

✓ **Correct**

That's correct! React is a popular JavaScript framework used by front end developers.

5. A web application has a front end, back end, and a database, and all three are located on the same physical server. These components of the application are referred to as what?

1 / 1 point

- ☐ Tiers
- ☒ Layers
- ☐ Stacks
- ☐ Services

✓ **Correct**

That's correct! Since all three components of the application are on the same physical server, they are considered layers rather than tiers.

6. In a 4-tier architecture, the \_\_\_\_\_ tier is added to the 3-tier architecture.

1 / 1 point

- ☒ delivery
- ☐ application
- ☐ data
- ☐ presentation

✓ **Correct**

That's correct! This is done by adding tools like CDNs to the 3-tier architecture to aid in the faster delivery of content to clients.

7. True/False: When using an N-tier architecture, it is easier to secure an application.

1 / 1 point

- ☒ True
- ☐ False

✓ **Correct**

That's correct! Since the application is separated into its components, it can be easier to secure the application.

8. This is the computer or other device used to communicate with the back end of an application.

1 / 1 point

- ☒ Client
- ☐ Server
- ☐ Core
- ☐ API

✓ **Correct**

That's correct! The client can be "thin" (just providing a user interface) or "thick" (consuming data and doing some heavier processing on the client side).

9. Which of the following are client-server architectures? Select all that apply.

0.8 / 1 point

☒ All multiplayer games.

☒ **Correct**

That's correct! All multiplayer games require a server and the mobile device acts as a client.

☒ A chat application, like WhatsApp.

☒ **Correct**

That's correct! A chat application like WhatsApp has a client application that runs on the client's device, and communication happens via the servers.

☒ Websites

☒ **Correct**

That's correct! Every website or web application requires at least a client and a server to function properly.

☐ Home appliances connected to the internet.

☐ All mobile applications.

You didn't select all the correct answers

10. Which of the following can be used as both a layer and a tier? Select all that apply.

0.6 / 1 point

☒ Database

☒ **Correct**

That's correct! You can keep the database on the same server where the application code is hosted as well as host it on a separate server. So a database can be treated as both a layer and a tier.

☒ Firewall

☒ **Correct**

That's correct! There are software firewalls which can be hosted on the same machine where the application code is hosted and it can also be hosted on a separate server.