

ÖNEMLİ NOT:

Quiz soruları, olası hatalara karşı tek tek yeniden kontrol edilmemiştir. Bu nedenle, soruların ve doğru cevapların doğruluğunu kontrol etmek tamamen sizin sorumluluğunuzdadır. Sorular, yalnızca yoğun talep üzerine tarafınıza sunulmuştur ve birebir aynılarının sınavda çıkacağına dair herhangi bir garanti bulunmamaktadır fakat sınavda benzer tarzda sorular olacaktır.

IMPORTANT NOTE:

The quiz questions have not been individually rechecked for potential errors. Therefore, it is your responsibility to verify the questions and their correct answers. The questions have been provided to you solely upon high demand, and there is no guarantee that the exact same ones will appear in the exam but similar style will be followed.



Sorular (20)

Quiz

What does "Manipulation" mean in computing? ^

- | | | |
|-----------------------|--------------------|---|
| <input type="radio"/> | Modifying data | ✓ |
| <input type="radio"/> | Debugging software | ✗ |
| <input type="radio"/> | Networking devices | ✗ |
| <input type="radio"/> | Testing algorithms | ✗ |

Quiz

Translate "Computational" into Turkish. ^

- | | | |
|-----------------------|----------------|---|
| <input type="radio"/> | Hesaplamalı | ✓ |
| <input type="radio"/> | Bağlantılı | ✗ |
| <input type="radio"/> | Etkileşimli | ✗ |
| <input type="radio"/> | Görselleştirme | ✗ |

Quiz

"Embedded" systems are? ^

- | | | |
|-----------------------|--------------------------|---|
| <input type="radio"/> | Built into devices | ✓ |
| <input type="radio"/> | External to the system | ✗ |
| <input type="radio"/> | Used only for networking | ✗ |
| <input type="radio"/> | Manually configured | ✗ |

Quiz

What is the Turkish translation of "Automation"? ^

- | | | |
|-----------------------|-----------|---|
| <input type="radio"/> | Otomasyon | ✓ |
| <input type="radio"/> | Şifreleme | ✗ |
| <input type="radio"/> | Gözlem | ✗ |
| <input type="radio"/> | Belgeleme | ✗ |

Quiz

"Algorithmic" processes refer to? ^

- | | | |
|-------------------------------------|------------------------------|---|
| <input checked="" type="checkbox"/> | Step-by-step problem-solving | ✓ |
| <input type="checkbox"/> | Wireless networking | ✗ |
| <input type="checkbox"/> | Debugging errors | ✗ |
| <input type="checkbox"/> | Observing test results | ✗ |

Quiz

Translate "Iterative" into Turkish. ^

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Yinelemeli | ✓ |
| <input type="checkbox"/> | Belirleyici | ✗ |
| <input type="checkbox"/> | Etkileşimli | ✗ |
| <input type="checkbox"/> | Bağılantısız | ✗ |

Quiz

Which best describes "Encoding"? ^

- | | | |
|-------------------------------------|-------------------------------|---|
| <input checked="" type="checkbox"/> | Converting data into a format | ✓ |
| <input type="checkbox"/> | Troubleshooting an error | ✗ |
| <input type="checkbox"/> | Repeating a process | ✗ |
| <input type="checkbox"/> | Analyzing performance | ✗ |

Quiz

Translate "Decoding" into Turkish. ^

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Şifre Çözme | ✓ |
| <input type="checkbox"/> | Ağ Kurma | ✗ |
| <input type="checkbox"/> | Veri Analizi | ✗ |
| <input type="checkbox"/> | Gözlemleme | ✗ |

Quiz

"Binary Code" consists of? ^

- | | | |
|----------------------------------|---------------------|---|
| <input checked="" type="radio"/> | 0s and 1s | ✓ |
| <input type="radio"/> | Letters and numbers | ✗ |
| <input type="radio"/> | Colors and symbols | ✗ |
| <input type="radio"/> | Only numbers | ✗ |

Quiz

What is a "Graphical User Interface (GUI)"? ^

- | | | |
|----------------------------------|--------------------------|---|
| <input checked="" type="radio"/> | A visual interface | ✓ |
| <input type="radio"/> | A command-line interface | ✗ |
| <input type="radio"/> | A binary-only system | ✗ |
| <input type="radio"/> | A networking method | ✗ |

Quiz

Translate "Command-line Interface (CLI)" into Turkish. ^

- | | | |
|----------------------------------|------------------------|---|
| <input checked="" type="radio"/> | Komut Satırı Arayüzü | ✓ |
| <input type="radio"/> | Görselleştirme Sistemi | ✗ |
| <input type="radio"/> | Bilgisayar Bağlantısı | ✗ |
| <input type="radio"/> | Otomatik Çalıştırma | ✗ |

Quiz

"Debugging" refers to? ^

- | | | |
|----------------------------------|-------------------------------|---|
| <input checked="" type="radio"/> | Identifying and fixing errors | ✓ |
| <input type="radio"/> | Writing documentation | ✗ |
| <input type="radio"/> | Designing a database | ✗ |
| <input type="radio"/> | Encoding data | ✗ |

Quiz

What does "Troubleshooting" involve? ^

- | | | |
|-------------------------------------|---------------------------------|---|
| <input checked="" type="checkbox"/> | Diagnosing and solving problems | ✓ |
| <input type="checkbox"/> | Automating tasks | ✗ |
| <input type="checkbox"/> | Running test cases | ✗ |
| <input type="checkbox"/> | Encoding security codes | ✗ |

Quiz

Translate "Documentation" into Turkish. ^

- | | | |
|-------------------------------------|---------------|---|
| <input checked="" type="checkbox"/> | Belgeleme | ✓ |
| <input type="checkbox"/> | Kodlama | ✗ |
| <input type="checkbox"/> | Hata Ayıklama | ✗ |
| <input type="checkbox"/> | Analiz Etme | ✗ |

Quiz

"Data Analysis" is used for? ^

- | | | |
|-------------------------------------|-------------------------------|---|
| <input checked="" type="checkbox"/> | Extracting insights from data | ✓ |
| <input type="checkbox"/> | Debugging code | ✗ |
| <input type="checkbox"/> | Writing test cases | ✗ |
| <input type="checkbox"/> | Designing networks | ✗ |

Quiz

What does "Networking" refer to in computing? ^

- | | | |
|-------------------------------------|------------------------|---|
| <input checked="" type="checkbox"/> | Connecting computers | ✓ |
| <input type="checkbox"/> | Debugging applications | ✗ |
| <input type="checkbox"/> | Automating processes | ✗ |
| <input type="checkbox"/> | Visualizing code | ✗ |

Quiz

Translate "Human-Computer Interaction" into Turkish. ^

<input checked="" type="radio"/>	İnsan-Bilgisayar Etkileşimi	✓
<input type="radio"/>	Algoritmik İşlem	✗
<input type="radio"/>	Veri Bağlantısı	✗
<input type="radio"/>	Belge Yönetimi	✗

Quiz

What is "Visualization" used for? ^

<input checked="" type="radio"/>	Representing data visually	✓
<input type="radio"/>	Automating commands	✗
<input type="radio"/>	Debugging systems	✗
<input type="radio"/>	Encoding video files	✗

Quiz

"Test Cases" are created to? ^

<input checked="" type="radio"/>	Validate software behavior	✓
<input type="radio"/>	Speed up computers	✗
<input type="radio"/>	Store networking data	✗
<input type="radio"/>	Encode security keys	✗

Quiz

Translate "Observations" into Turkish. ^

<input checked="" type="radio"/>	Gözlemler	✓
<input type="radio"/>	Şifreleme	✗
<input type="radio"/>	Algoritma	✗
<input type="radio"/>	Bağlantı	✗

Ayrıntılar

Maks. 200 oyuncu. [Daha fazlası için yükselt](#)

Güncellenme zamanı: 4 hafta önce • Görünürlük: Gizli



Sorular (10)

Quiz

What does the "S" in SOLID stand for? ^

- | | |
|--|---|
| <input checked="" type="radio"/> Single Responsibility | ✓ |
| <input type="radio"/> Simple Solution | ✗ |
| <input type="radio"/> Systematic Coding | ✗ |
| <input type="radio"/> Strong Dependency | ✗ |

Quiz

The Single Responsibility Principle means? ^

- | | |
|--|---|
| <input checked="" type="radio"/> A class should have only one reason to change | ✓ |
| <input type="radio"/> A class should do everything | ✗ |
| <input type="radio"/> A class should have many functions | ✗ |
| <input type="radio"/> A class should never change | ✗ |

Quiz

What does the Open/Closed Principle suggest? ^

- | | |
|--|---|
| <input checked="" type="radio"/> Code should be open for extension but closed for modification | ✓ |
| <input type="radio"/> Code should always be rewritten | ✗ |
| <input type="radio"/> Code should have only one method | ✗ |
| <input type="radio"/> Code should not have any dependencies | ✗ |

Quiz

Why can inheritance cause problems in the Open/Closed Principle? ^

- | | |
|---|---|
| <input checked="" type="radio"/> It can lead to modifying existing code | ✓ |
| <input type="radio"/> It makes classes too simple | ✗ |
| <input type="radio"/> It prevents code reuse | ✗ |
| <input type="radio"/> It makes testing easier | ✗ |

Quiz

According to the Liskov Substitution Principle, subclasses should? ^

- ☒ Replace their parent class without breaking the code ✓
- ☐ Have completely different behaviors ✗
- ☐ Ignore the parent class methods ✗
- ☐ Always modify parent class properties ✗

Quiz

What happens if a subclass changes the expected behavior of a parent cl... ^

- ☒ It violates Liskov Substitution Principle ✓
- ☐ It follows SOLID principles ✗
- ☐ It makes the program faster ✗
- ☐ It reduces system security ✗

Quiz

What problem does the Interface Segregation Principle try to solve? ^

- ☒ Large interfaces making classes implement unnecessary methods ✓
- ☐ Classes using too many constructors ✗
- ☐ Small programs running too fast ✗
- ☐ Functions having too many arguments ✗

Quiz

What does the Dependency Inversion Principle recommend? ^

- ☒ Depending on abstractions rather than concrete implementations ✓
- ☐ Using only simple classes ✗
- ☐ Always modifying existing code ✗
- ☐ Avoiding the use of interfaces ✗

Quiz

Why is the Dependency Inversion Principle useful? ^

- | | | |
|-----------------------|--|---|
| <input type="radio"/> | It makes code easier to test and change | ✓ |
| <input type="radio"/> | It makes software complex | ✗ |
| <input type="radio"/> | It forces programmers to write more code | ✗ |
| <input type="radio"/> | It removes all dependencies | ✗ |

Quiz

What is the main goal of SOLID principles? ^

- | | | |
|-----------------------|--|---|
| <input type="radio"/> | To create maintainable and flexible code | ✓ |
| <input type="radio"/> | To make software harder to change | ✗ |
| <input type="radio"/> | To write longer code | ✗ |
| <input type="radio"/> | To remove all classes from a program | ✗ |



Sorular (20)



Quiz

What does "recursion" mean in programming? ^

- ☒ A function that calls itself ✓
- ☐ A function that uses loops ✗
- ☐ A function that sorts data ✗
- ☐ A function that searches data ✗



Quiz

Which algorithm makes choices based on what seems best at the mome... ^

- ☒ Greedy Algorithm ✓
- ☐ Dynamic Programming ✗
- ☐ Bit Manipulation ✗
- ☐ Graph ✗



Quiz

What is "bit manipulation" used for? ^

- ☒ Working with individual bits ✓
- ☐ Sorting data ✗
- ☐ Searching graphs ✗
- ☐ Managing memory ✗



Quiz

What does a "graph" represent in computer science? ^

- ☒ Connections between nodes ✓
- ☐ A type of sorting algorithm ✗
- ☐ A way to manipulate bits ✗
- ☐ A method for caching data ✗



Quiz

What is a "heap" used for in programming? ^

<input checked="" type="checkbox"/>	Implementing a priority queue	✓
<input type="checkbox"/>	Sorting data	✗
<input type="checkbox"/>	Searching graphs	✗
<input type="checkbox"/>	Manipulating bits	✗

Quiz

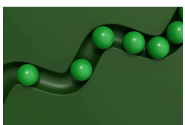
What does "BFS" stand for? ^

<input checked="" type="checkbox"/>	Breadth-First Search	✓
<input type="checkbox"/>	Binary-First Sort	✗
<input type="checkbox"/>	Bit-First Search	✗
<input type="checkbox"/>	Basic-First Search	✗

Quiz

What does "DFS" stand for? ^

<input checked="" type="checkbox"/>	Depth-First Search	✓
<input type="checkbox"/>	Dynamic-First Sort	✗
<input type="checkbox"/>	Data-First Search	✗
<input type="checkbox"/>	Direct-First Search	✗



Quiz

Which algorithm finds the shortest path in a graph? ^

<input checked="" type="checkbox"/>	Dijkstra's Algorithm	✓
<input type="checkbox"/>	Quick Sort	✗
<input type="checkbox"/>	Merge Sort	✗
<input type="checkbox"/>	Backtracking	✗

Quiz

"Graph" bilgisayar biliminde neyi temsil eder? ^

- | | | |
|-----------------------|----------------------------------|---|
| <input type="radio"/> | Düğümmler arasındaki bağlantılar | ✓ |
| <input type="radio"/> | Bir tür sıralama algoritması | ✗ |
| <input type="radio"/> | Bitleri manipüle etme yolu | ✗ |
| <input type="radio"/> | Veriyi ön belleğe alma yöntemi | ✗ |



Quiz

What is "merge sort" known for? ^

- | | | |
|-----------------------|--------------------------|---|
| <input type="radio"/> | Using divide-and-conquer | ✓ |
| <input type="radio"/> | Using a pivot | ✗ |
| <input type="radio"/> | Using a heap | ✗ |
| <input type="radio"/> | Using backtracking | ✗ |



Quiz

What is "quick sort" known for? ^

- | | | |
|-----------------------|--------------------------|---|
| <input type="radio"/> | Using a pivot | ✓ |
| <input type="radio"/> | Using divide-and-conquer | ✗ |
| <input type="radio"/> | Using a heap | ✗ |
| <input type="radio"/> | Using backtracking | ✗ |



Quiz

What is "sliding window" used for? ^

- | | | |
|-----------------------|--|---|
| <input type="radio"/> | Solving problems with a window of elements | ✓ |
| <input type="radio"/> | Sorting data | ✗ |
| <input type="radio"/> | Searching graphs | ✗ |
| <input type="radio"/> | Manipulating bits | ✗ |

Quiz

What is "backtracking" used for? ^

- | | | |
|-------------------------------------|--------------------------------|---|
| <input checked="" type="checkbox"/> | Finding all possible solutions | ✓ |
| <input type="checkbox"/> | Sorting data | ✗ |
| <input type="checkbox"/> | Searching graphs | ✗ |
| <input type="checkbox"/> | Manipulating bits | ✗ |

Quiz

What is "divide and conquer" used for? ^

- | | | |
|-------------------------------------|--------------------------------------|---|
| <input checked="" type="checkbox"/> | Breaking problems into smaller parts | ✓ |
| <input type="checkbox"/> | Sorting data | ✗ |
| <input type="checkbox"/> | Searching graphs | ✗ |
| <input type="checkbox"/> | Manipulating bits | ✗ |

Quiz

What does "Big-O notation" describe? ^

- | | | |
|-------------------------------------|---------------------------------|---|
| <input checked="" type="checkbox"/> | The performance of an algorithm | ✓ |
| <input type="checkbox"/> | The size of a data structure | ✗ |
| <input type="checkbox"/> | The complexity of a graph | ✗ |
| <input type="checkbox"/> | The efficiency of a cache | ✗ |

Quiz

What is an "LRU cache" used for? ^

- | | | |
|-------------------------------------|---------------------------|---|
| <input checked="" type="checkbox"/> | Caching with limited size | ✓ |
| <input type="checkbox"/> | Sorting data | ✗ |
| <input type="checkbox"/> | Searching graphs | ✗ |
| <input type="checkbox"/> | Manipulating bits | ✗ |

Quiz

"Dynamic programming" ne için kullanılır? ^

- | | | |
|-------------------------------------|--|---|
| <input checked="" type="checkbox"/> | Problemleri küçük parçalara bölerek çözmek | ✓ |
| <input type="checkbox"/> | Veriyi hızlıca sıralamak | ✗ |
| <input type="checkbox"/> | Bitleri manipüle etmek | ✗ |
| <input type="checkbox"/> | Grafikleri aramak | ✗ |



Quiz

"Greedy algoritma" ne tür seçimler yapar? ^

- | | | |
|-------------------------------------|--------------------------------|---|
| <input checked="" type="checkbox"/> | Anında en iyi görünen seçimler | ✓ |
| <input type="checkbox"/> | En kötü görünen seçimler | ✗ |
| <input type="checkbox"/> | Rastgele seçimler | ✗ |
| <input type="checkbox"/> | Önceden belirlenmiş seçimler | ✗ |



Sorular (10)

Quiz

What does "Tech Stack" refer to in web development? ^

- | | | |
|-----------------------|--|---|
| <input type="radio"/> | A set of technologies used to build an application | ✓ |
| <input type="radio"/> | A single programming language | ✗ |
| <input type="radio"/> | A hardware configuration | ✗ |
| <input type="radio"/> | A type of web hosting service | ✗ |

Quiz

What does LAMP stand for in web development? ^

- | | | |
|-----------------------|-----------------------------------|---|
| <input type="radio"/> | Linux, Apache, MySQL, PHP | ✓ |
| <input type="radio"/> | Laravel, Angular, MongoDB, Python | ✗ |
| <input type="radio"/> | Linux, AWS, MongoDB, PHP | ✗ |
| <input type="radio"/> | Linux, Apache, MongoDB, Python | ✗ |

Quiz

Why is choosing a tech stack important early in development? ^

- | | | |
|-----------------------|---|---|
| <input type="radio"/> | Changing it later can be difficult and time-consuming | ✓ |
| <input type="radio"/> | It has no impact on the project | ✗ |
| <input type="radio"/> | It only affects the front-end | ✗ |
| <input type="radio"/> | It determines the programming language used | ✗ |

Quiz

What are the three main parts of a tech stack? ^

- | | | |
|-----------------------|-----------------------------------|---|
| <input type="radio"/> | Front-end, Back-end, APIs | ✓ |
| <input type="radio"/> | HTML, CSS, JavaScript | ✗ |
| <input type="radio"/> | Database, Hosting, SEO | ✗ |
| <input type="radio"/> | UI Design, UX Design, Development | ✗ |

Quiz

What is the main function of the front-end layer? ^

- | | | |
|-------------------------------------|-----------------------------|---|
| <input checked="" type="checkbox"/> | Building the user interface | ✓ |
| <input type="checkbox"/> | Storing data | ✗ |
| <input type="checkbox"/> | Running back-end logic | ✗ |
| <input type="checkbox"/> | Handling cloud computing | ✗ |

Quiz

What is the purpose of APIs in a tech stack? ^

- | | | |
|-------------------------------------|--|---|
| <input checked="" type="checkbox"/> | Connecting the front-end to the back-end | ✓ |
| <input type="checkbox"/> | Replacing databases | ✗ |
| <input type="checkbox"/> | Running machine learning models | ✗ |
| <input type="checkbox"/> | Hosting websites | ✗ |

Quiz

Which of the following is a back-end technology? ^

- | | | |
|-------------------------------------|-----------|---|
| <input checked="" type="checkbox"/> | Node.js | ✓ |
| <input type="checkbox"/> | React | ✗ |
| <input type="checkbox"/> | Tailwind | ✗ |
| <input type="checkbox"/> | Bootstrap | ✗ |

Quiz

Why do some companies use catchy acronyms for tech stacks (e.g., MEA...) ^

- | | | |
|-------------------------------------|--|---|
| <input checked="" type="checkbox"/> | It makes them more recognizable in the tech industry | ✓ |
| <input type="checkbox"/> | It improves software performance | ✗ |
| <input type="checkbox"/> | It reduces development costs | ✗ |
| <input type="checkbox"/> | It forces developers to use a specific database | ✗ |

Quiz

What tool is commonly used for state management in React applications? ^

- | | | |
|-----------------------|-----------|---|
| <input type="radio"/> | Redux | ✓ |
| <input type="radio"/> | Bootstrap | ✗ |
| <input type="radio"/> | Tailwind | ✗ |
| <input type="radio"/> | Firebase | ✗ |

Quiz

Why might a developer choose Firebase for a tech stack? ^

- | | | |
|-----------------------|---|---|
| <input type="radio"/> | It provides authentication, database, and hosting | ✓ |
| <input type="radio"/> | It is the fastest front-end framework | ✗ |
| <input type="radio"/> | It replaces JavaScript | ✗ |
| <input type="radio"/> | It only works for mobile apps | ✗ |



Sorular (20)

Quiz

What is the main purpose of Abstraction in programming? ^

- ☒ Hides implementation details ✓
- ☐ Exposes all functionality ✗
- ☐ Increases code size ✗
- ☐ Makes code run faster ✗

Quiz

Encapsulation helps developers by? ^

- ☒ Bundling data and methods ✓
- ☐ Increasing dependencies ✗
- ☐ Removing methods from classes ✗
- ☐ Slowing down execution ✗

Quiz

Cohesion in software design refers to? ^

- ☒ The focus of a module ✓
- ☐ The number of dependencies ✗
- ☐ Code reusability ✗
- ☐ The amount of comments in code ✗

Quiz

What does Coupling describe in software development? ^

- ☒ Dependency between modules ✓
- ☐ The speed of a program ✗
- ☐ The amount of functions per class ✗
- ☐ Memory usage ✗

Quiz

Scalability means a system can? ^

<input checked="" type="checkbox"/>	Handle increasing workload efficiently	✓
<input type="checkbox"/>	Process data faster	✗
<input type="checkbox"/>	Reduce the need for testing	✗
<input type="checkbox"/>	Be replaced easily	✗

Quiz

Maintainability in software ensures? ^

<input checked="" type="checkbox"/>	Easy modification and debugging	✓
<input type="checkbox"/>	High processing speed	✗
<input type="checkbox"/>	Low memory usage	✗
<input type="checkbox"/>	Removal of all dependencies	✗

Quiz

What is the main goal of Reusability? ^

<input checked="" type="checkbox"/>	Using components multiple times	✓
<input type="checkbox"/>	Preventing code sharing	✗
<input type="checkbox"/>	Increasing memory usage	✗
<input type="checkbox"/>	Removing old features	✗

Quiz

Modularity in software development allows? ^

<input checked="" type="checkbox"/>	Dividing a system into independent modules	✓
<input type="checkbox"/>	Writing code in one large file	✗
<input type="checkbox"/>	Removing dependencies completely	✗
<input type="checkbox"/>	Increasing the complexity of code	✗

Quiz

Robustness in software means? ^

- | | | |
|-------------------------------------|---|---|
| <input checked="" type="checkbox"/> | The ability to handle errors gracefully | ✓ |
| <input type="checkbox"/> | Running without any memory usage | ✗ |
| <input type="checkbox"/> | Eliminating security checks | ✗ |
| <input type="checkbox"/> | Making code harder to test | ✗ |

Quiz

What does Extensibility allow in software? ^

- | | | |
|-------------------------------------|---|---|
| <input checked="" type="checkbox"/> | Adding new features without major changes | ✓ |
| <input type="checkbox"/> | Removing features automatically | ✗ |
| <input type="checkbox"/> | Replacing all modules at once | ✗ |
| <input type="checkbox"/> | Making the system harder to modify | ✗ |

Quiz

What is the goal of the DRY principle? ^

- | | | |
|-------------------------------------|---------------------------------|---|
| <input checked="" type="checkbox"/> | Eliminating redundancy | ✓ |
| <input type="checkbox"/> | Increasing code length | ✗ |
| <input type="checkbox"/> | Avoiding class inheritance | ✗ |
| <input type="checkbox"/> | Writing the same function twice | ✗ |

Quiz

The KISS principle suggests that software should be? ^

- | | | |
|-------------------------------------|---|---|
| <input checked="" type="checkbox"/> | Simple and free of unnecessary complexity | ✓ |
| <input type="checkbox"/> | Built with many extra features | ✗ |
| <input type="checkbox"/> | As complex as possible | ✗ |
| <input type="checkbox"/> | Dependent on many external libraries | ✗ |

Quiz

YAGNI (You Aren't Gonna Need It) helps prevent? ^

<input type="checkbox"/>	Over-engineering	✓
<input type="checkbox"/>	Writing documentation	✗
<input type="checkbox"/>	Code testing	✗
<input type="checkbox"/>	Security vulnerabilities	✗

Quiz

What does the Single Responsibility Principle (SRP) state? ^

<input type="checkbox"/>	Each module should have one job	✓
<input type="checkbox"/>	A module should handle everything	✗
<input type="checkbox"/>	Each class should have at least 10 functions	✗
<input type="checkbox"/>	Each function must call another function	✗

Quiz

The Open-Closed Principle (OCP) means software should be? ^

<input type="checkbox"/>	Open for extension, closed for modification	✓
<input type="checkbox"/>	Modified frequently	✗
<input type="checkbox"/>	Always use inheritance	✗
<input type="checkbox"/>	Closed for any updates	✗

Quiz

Liskov Substitution Principle (LSP) ensures that? ^

<input type="checkbox"/>	Subclasses can replace their parent classes	✓
<input type="checkbox"/>	Parent classes should not exist	✗
<input type="checkbox"/>	Subclasses must be removed	✗
<input type="checkbox"/>	Every class must extend another class	✗

Quiz

Interface Segregation Principle (ISP) recommends? ^

<input checked="" type="radio"/>	Small, specific interfaces instead of large ones	✓
<input type="radio"/>	One large interface for everything	✗
<input type="radio"/>	Removing all interfaces	✗
<input type="checkbox"/>	Using only private methods in interfaces	✗

Quiz

Dependency Inversion Principle (DIP) states that? ^

<input checked="" type="radio"/>	High-level modules should depend on abstractions	✓
<input type="radio"/>	Low-level modules should control the system	✗
<input type="radio"/>	There should be no dependencies	✗
<input type="checkbox"/>	All modules should use hardcoded values	✗

Quiz

What is Agile Development known for? ^

<input checked="" type="radio"/>	Iterative and flexible development	✓
<input type="radio"/>	Strict and fixed planning	✗
<input type="radio"/>	Single large software releases	✗
<input type="checkbox"/>	Eliminating testing phases	✗

Quiz

Technical Debt refers to? ^

<input checked="" type="radio"/>	Future maintenance burden due to shortcuts	✓
<input type="radio"/>	Fast execution of code	✗
<input type="radio"/>	The total cost of software	✗
<input type="checkbox"/>	The amount of servers needed	✗



Sorular (20)

Quiz

What is the main goal of Abstraction in programming? ^

- | | | |
|----------------------------------|--|---|
| <input checked="" type="radio"/> | Hiding implementation details and exposing only relevant parts | ✓ |
| <input type="radio"/> | Making code longer | ✗ |
| <input type="radio"/> | Removing all functions from a class | ✗ |
| <input type="radio"/> | Increasing memory usage | ✗ |

Quiz

Encapsulation helps developers by? ^

- | | | |
|----------------------------------|------------------------------------|---|
| <input checked="" type="radio"/> | Bundling data and methods together | ✓ |
| <input type="radio"/> | Exposing all internal details | ✗ |
| <input type="radio"/> | Making all variables public | ✗ |
| <input type="radio"/> | Reducing security in software | ✗ |

Quiz

Modularity in software design allows? ^

- | | | |
|----------------------------------|---|---|
| <input checked="" type="radio"/> | Breaking a program into independent modules | ✓ |
| <input type="radio"/> | Writing all code in one file | ✗ |
| <input type="radio"/> | Avoiding reusable code | ✗ |
| <input type="radio"/> | Making software harder to maintain | ✗ |

Quiz

Scalability refers to a system's ability to? ^

- | | | |
|----------------------------------|------------------------------------|---|
| <input checked="" type="radio"/> | Handle growth efficiently | ✓ |
| <input type="radio"/> | Run without errors | ✗ |
| <input type="radio"/> | Reduce the number of modules | ✗ |
| <input type="radio"/> | Eliminate security vulnerabilities | ✗ |

Quiz

Maintainability ensures that software? ^

- | | | |
|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | Can be modified and improved easily | ✓ |
| <input type="checkbox"/> | Remains unchanged forever | ✗ |
| <input type="checkbox"/> | Runs without an internet connection | ✗ |
| <input type="checkbox"/> | Cannot be updated | ✗ |

Quiz

Interoperability in computing means? ^

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | Different systems can communicate and work together | ✓ |
| <input type="checkbox"/> | A system works only with specific hardware | ✗ |
| <input type="checkbox"/> | A program cannot connect to databases | ✗ |
| <input type="checkbox"/> | Preventing software from running on multiple devices | ✗ |

Quiz

Concurrency allows a program to? ^

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | Execute multiple computations at the same time | ✓ |
| <input type="checkbox"/> | Run only one task at a time | ✗ |
| <input type="checkbox"/> | Store data efficiently | ✗ |
| <input type="checkbox"/> | Avoid using multiple CPUs | ✗ |

Quiz

Virtualization is the process of? ^

- | | | |
|--------------------------|---|---|
| <input type="checkbox"/> | Creating virtual instances of computing resources | ✓ |
| <input type="checkbox"/> | Writing code without variables | ✗ |
| <input type="checkbox"/> | Avoiding software updates | ✗ |
| <input type="checkbox"/> | Running code on a single server only | ✗ |

Quiz

Containerization is used for? ^

- | | | |
|-----------------------|---|---|
| <input type="radio"/> | Packaging software into portable and efficient containers | ✓ |
| <input type="radio"/> | Storing data in large databases | ✗ |
| <input type="radio"/> | Running programs only on local machines | ✗ |
| <input type="radio"/> | Avoiding cloud computing | ✗ |

Quiz

Dependency Injection improves modularity by? ^

- | | | |
|-----------------------|---|---|
| <input type="radio"/> | Injecting dependencies instead of hardcoding them | ✓ |
| <input type="radio"/> | Removing dependencies from all projects | ✗ |
| <input type="radio"/> | Avoiding the use of interfaces | ✗ |
| <input type="radio"/> | Running code without dependencies | ✗ |

Quiz

Microservices architecture is based on? ^

- | | | |
|-----------------------|---|---|
| <input type="radio"/> | Building applications as a collection of loosely coupled services | ✓ |
| <input type="radio"/> | Creating a single, large monolithic application | ✗ |
| <input type="radio"/> | Running only one service at a time | ✗ |
| <input type="radio"/> | Avoiding software scalability | ✗ |

Quiz

Orchestration in software development refers to? ^

- | | | |
|-----------------------|---|---|
| <input type="radio"/> | Automated management of complex workflows | ✓ |
| <input type="radio"/> | Writing code without any automation | ✗ |
| <input type="radio"/> | Removing dependencies from software | ✗ |
| <input type="radio"/> | Running applications without a database | ✗ |

Quiz

GraphQL is used for? ^

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | Enabling clients to request exactly the data they need | ✓ |
| <input type="checkbox"/> | Storing large amounts of data | ✗ |
| <input type="checkbox"/> | Running only on SQL databases | ✗ |
| <input type="checkbox"/> | Creating front-end interfaces | ✗ |

Quiz

Continuous Integration (CI) helps teams by? ^

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | Frequently integrating code changes into a shared repository | ✓ |
| <input type="checkbox"/> | Avoiding software updates | ✗ |
| <input type="checkbox"/> | Running applications without a database | ✗ |
| <input type="checkbox"/> | Reducing the number of software releases | ✗ |

Quiz

Continuous Deployment (CD) ensures that? ^

- | | | |
|--------------------------|---|---|
| <input type="checkbox"/> | Software updates are automatically released to production | ✓ |
| <input type="checkbox"/> | Developers manually update the software | ✗ |
| <input type="checkbox"/> | Code is not tested before release | ✗ |
| <input type="checkbox"/> | Software changes are only released yearly | ✗ |

Quiz

Serverless Computing allows developers to? ^

- | | | |
|--------------------------|---|---|
| <input type="checkbox"/> | Build applications without managing servers | ✓ |
| <input type="checkbox"/> | Remove all databases from applications | ✗ |
| <input type="checkbox"/> | Avoid using cloud-based services | ✗ |
| <input type="checkbox"/> | Write software without any dependencies | ✗ |

Quiz

Load Balancing improves performance by? ^

- | | | |
|-----------------------|--|---|
| <input type="radio"/> | Distributing network traffic across multiple servers | ✓ |
| <input type="radio"/> | Running applications on a single machine | ✗ |
| <input type="radio"/> | Reducing network security | ✗ |
| <input type="radio"/> | Removing APIs from applications | ✗ |

Quiz

Technical Debt refers to? ^

- | | | |
|-----------------------|--|---|
| <input type="radio"/> | The long-term cost of quick fixes or inefficient solutions | ✓ |
| <input type="radio"/> | Increasing system security | ✗ |
| <input type="radio"/> | Reducing software complexity | ✗ |
| <input type="radio"/> | The total financial cost of a software project | ✗ |

Quiz

Refactoring in software development means? ^

- | | | |
|-----------------------|--|---|
| <input type="radio"/> | Restructuring code without changing its behavior | ✓ |
| <input type="radio"/> | Rewriting all code from scratch | ✗ |
| <input type="radio"/> | Making software more complex | ✗ |
| <input type="radio"/> | Removing all functions from a module | ✗ |

Quiz

Observability helps developers by? ^

- | | | |
|-----------------------|---|---|
| <input type="radio"/> | Monitoring and gaining insights into system performance | ✓ |
| <input type="radio"/> | Increasing software complexity | ✗ |
| <input type="radio"/> | Avoiding software updates | ✗ |
| <input type="radio"/> | Reducing system logs and tracking | ✗ |



Sorular (10)

Quiz

What is one of the first technologies that enabled modern containerizati... ^

- | | | |
|-----------------------|--------------------------------|---|
| <input type="radio"/> | Kubernetes | ✗ |
| <input type="radio"/> | Docker | ✗ |
| <input type="radio"/> | Linux Control Groups (Cgroups) | ✓ |
| <input type="radio"/> | VirtualBox | ✗ |

Quiz

What does a hypervisor do in a virtual machine setup? ^

- | | | |
|-----------------------|---------------------------|---|
| <input type="radio"/> | Manages container images | ✗ |
| <input type="radio"/> | Manages operating systems | ✗ |
| <input type="radio"/> | Allows spinning up VMs | ✓ |
| <input type="radio"/> | Transfers network packets | ✗ |

Quiz

Why are virtual machines considered “bloated” compared to containers? ^

- | | | |
|-----------------------|-------------------------------------|---|
| <input type="radio"/> | They require no internet | ✗ |
| <input type="radio"/> | They include guest OS and libraries | ✓ |
| <input type="radio"/> | They can't access APIs | ✗ |
| <input type="radio"/> | They are limited to Linux only | ✗ |

Quiz

In Docker, what is the file that describes how to build a container image? ^

- | | | |
|-----------------------|----------------|---|
| <input type="radio"/> | Manifest.yaml | ✗ |
| <input type="radio"/> | Dockerfile | ✓ |
| <input type="radio"/> | App.config | ✗ |
| <input type="radio"/> | Container.json | ✗ |

Quiz

Which of the following is not a container runtime mentioned in the video? ^

- | | | |
|-----------------------|---------------|---|
| <input type="radio"/> | Rocket | ✗ |
| <input type="radio"/> | Docker | ✗ |
| <input type="radio"/> | Hyper-V | ✓ |
| <input type="radio"/> | Cloud Foundry | ✗ |

Quiz

What is the correct three-step process to create a container? ^

- | | | |
|-----------------------|------------------------------|---|
| <input type="radio"/> | Code → Build → Run | ✗ |
| <input type="radio"/> | Build → Push → Monitor | ✗ |
| <input type="radio"/> | Manifest → Image → Container | ✓ |
| <input type="radio"/> | Manifest → Deploy → VM | ✗ |

Quiz

What key benefit does containerization offer over traditional VM setups? ^

- | | | |
|-----------------------|---|---|
| <input type="radio"/> | Higher power usage | ✗ |
| <input type="radio"/> | More complex networking | ✗ |
| <input type="radio"/> | Lightweight deployment and better scalability | ✓ |
| <input type="radio"/> | Requires more hardware | ✗ |

Quiz

How do containers improve DevOps and CI/CD pipelines? ^

- | | | |
|-----------------------|--|---|
| <input type="radio"/> | They reduce code quality | ✗ |
| <input type="radio"/> | They limit code sharing | ✗ |
| <input type="radio"/> | They simplify deployment and improve consistency | ✓ |
| <input type="radio"/> | They block cloud-native services | ✗ |

Quiz

What allows containers to share unused CPU and memory with each oth...



Separate hypervisors



Guest operating systems



Shared resource pooling



Static allocation



Quiz

What does cloud-native architecture promote in containerized environm...



Monolithic design



Loose coupling and modularity



VM-based deployment



Manual scaling

