Test 1

Q1 - Q2

Advantages of using React:

- Easy to know how a component is rendered, you just need to look at the render function.
- JSX makes it easy to read the code of your components. It is also really easy to see the layout, or how components are plugged/combined with each other.
- You can render React on the server-side.
- It is easy to test, and you can also integrate some tools like jest.
- It ensures readability and makes maintainability easier.
- you can use React with any framework (Backbone.js, Angular.js) as it is only a view layer.

What is not so good about React?

It is only a view layer, you still have to plug your code for Ajax requests, events and so on. Some people get surprised by that.

The library itself is pretty large.

The learning curve can be steep.

If react-native is really how it was described, react is going to become even bigger.

Performance wise, it is really good as it relies on a virtual-dom to know what is really changing in your UI and will re-render only what has really changed.

It does have trouble with very large, slightly changing, lists of children (2000 test), but can be optimized simply.

If you are not sure, just think about the big projects using React: instagram, hipchat, facebook chat and so on.

Q1. According to the above passage, what is the disadvantage of using React?

- A It cannot be rendered on the server-side.
- **B** It is not compatible with other frontend frameworks such as Angular.js.
- **C** It could be difficult to learn.
- D It is not compatible with other frameworks.

Q2. According to the above passage, which of the following is <u>not</u> correct about React?

- A It relies on a virtual-DOM system.
- **B** It only re-renders what has really changed.
- C It is optimized for very large, slightly changing, lists of children components.
- D It has been used in big projects such as Instagram, Hipchat, and Facebook.

Q3 - Q4

Hi @User1!

Thank you for your pull request and welcome to our community.

Action Required

In order to merge any pull request (code, docs, etc.), we require contributors to sign our Contributor License Agreement, and we don't seem to have one on file for you.

Process

In order for us to review and merge your suggested changes, please sign at https://code. facebook.com/cla. If you are contributing on behalf of someone else (e.g. your employer), the individual CLA may not be sufficient and your employer may need to sign the corporate CLA.

Once the CLA is signed, our tooling will perform checks and validations. Afterwards, the pull request will be tagged with CLA signed. The tagging process may take up to 1 hour after signing. Please give it that time before contacting us about it.

If you have received this in error or have any questions, please contact us at cla@fb.com. Thanks!

Q3. Which of the following is not true?



A The tagging process takes at least an hour.

B Contributors need to sign a Contributor License Agreement(CLA) to merge any pull request.

C If you are contributing on behalf of someone else, the individual CLA can be insufficient.

D You can ask further questions through cla@fb.com

Q4. Translate the following sentence to Korean:

In order to merge any pull request(code, docs, etc.), we require contributors to sign our Contributor License Agreement, and we don't seem to have one on file for you.

Answer :

Q5

If you're curious, createElement() is described in more detail in the API reference, but we won't be using it in this tutorial. Instead, we will keep using JSX.

JSX comes with the full power of JavaScript. You can put any JavaScript expressions within braces inside JSX. Each React element is a JavaScript object that you can store in a variable or pass around in your program.

The ShoppingList component above only renders built-in DOM components like <div /> and . But you can compose and render custom React components too. For example, we can now refer to the whole shopping list by writing <ShoppingList />.

Q5. Which of the following is not true?

- A React is a javascript library for building user interfaces.
- **B** JavaScript expressions can be placed within braces inside JSX.

C A React element is a JavaScript object.

D createElement() has been used many times in the tutorial.

Q6 - Q8

Gas

(i) creation, each transaction is charged with a certain amount of gas that has to be paid for by the originator of the transaction (tx.origin). While the EVM executes the transaction, the gas is gradually depleted according to specific rules. If the gas is used up at any point (i.e. it would be negative), an out-of-gas exception is triggered, which ends execution and reverts all modifications made to the state in the current call frame.

This mechanism **incentivizes** economical use of EVM execution time and also compensates EVM executors (i.e. miners / stakers) for their work. Since each block has a maximum amount of gas, it also limits the amount of work needed to validate a block.

The gas price is a value set by the originator of the transaction, who has to pay gas_price * gas up front to the EVM executor. If some gas is left after execution, it is refunded to the transaction originator. In case of an exception that reverts changes, already used up gas is not refunded.

Since EVM executors can choose to include a transaction or not, transaction senders cannot abuse the system by setting a low gas price.

Q6. Is the following statement True or False?

If the gas is depleted, an exception canceling all state modifications will be triggered.

A True

B False

Q7. Choose the best preposition to complete the blank marked (i).

- Α Το
- B Upon
- C Over
- D For

Q8. The word "incentivizes" <u>cannot</u> be replaced by



B boosts

C impedes

D promotes

Q9 - Q11

Kubernetes Components

When you deploy Kubernetes, you get a cluster.

A Kubernetes cluster consists of a set of worker machines, called nodes, that run containerized applications. Every cluster has at least one worker node.

The worker node(s) host the Pods that are the components of the application workload. The control plane manages the worker nodes and the Pods in the cluster. In production environments, the control plane usually runs across multiple computers and a cluster usually runs multiple nodes, providing fault-tolerance and high availability.

This document outlines the various components you need to have for a complete and working Kubernetes cluster.

Control Plane Components

The control plane's components make global decisions about the cluster (for example, scheduling), as well as detecting and responding to cluster events(for example, starting up a new pod when a deployment's **replicas** field is unsatisfied).

Control plane components can be run on any machine in the cluster. However, for simplicity, set up scripts typically start all control plane components on the same machine, and do not run user containers on this machine. See Creating Highly Available clusters with kubeadm for an example control plane setup that runs across multiple machines.

Q9. What can be inferred from the above document about Kubernetes?

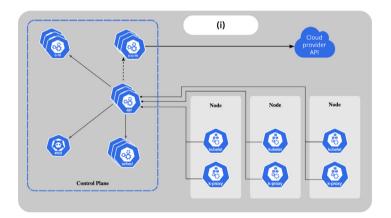
- A Control plane components can be applied to specific machines in the cluster.
- **B** Worker machines decide the global behavior of the nodes.
- C Pods can be created based on the deployment status.
- D Clusters are optimized for running a single application.

Q10. The word "replicas" can be replaced by



- **B** reproduction
- C clones
- D debugging

Q11. Complete the blank marked (i) based on the information shown below.

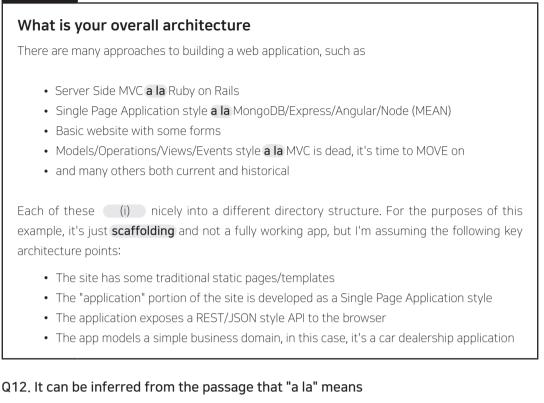


A Pod



- C Worker machine
- **D** Containerized applications

Q12 - Q14





B in the style of

C through

D along with

Q13. Which of the following is the correct definition for "scaffolding"?

- A completed project
- **B** The final step of a project
- C A basic structure that serves as the foundation for a project
- **D** A complex directory structure

Q14. Choose the best word to complete the blank marked (i).



Q15 - Q17

Meet Django

Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of much of the (i) of web development, so you can focus on writing your app without needing to reinvent the wheel. It's free and open source.

Ridiculously fast.

Django was designed to help developers take applications from concept to completion as quickly as possible.

Reassuringly secure.

Django takes security seriously and helps developers avoid many common security mistakes.

Exceedingly scalable.

Some of the busiest sites on the web leverage Django's ability to quickly and flexibly scale.

Incredibly versatile.

Companies, organizations and governments have used Django to build all sorts of things — from content management systems to social networks to scientific computing platforms.

Q15. Which of the following statements is not true?





C Django enables rapid development of secure and maintainable websites.

D Django is suitable for building content management systems but not social networks.

Q16. Choose the best word to complete the blank marked (i).



- **B** hassle
- C shortcuts
- D benefits

Q17. Choose the correct definition for the term "versatile".

- A ble to be used in many ways
- **B** Built for one specific purpose
- C Restricted in size, amount, or extent
- D controlled by means of rules and regulations

Q18

Mark 'T' if the statement is true and 'F' if it is false.

1) Unopinionated frameworks assume that there are best practices and design patterns to use the frameworks.

2) An argument refers to the variable listed in the function definition.

)

)

(

(

3) Out-of-the-box software refers to software that is ready-made for the general public.

()

4) In general, TL;DR is an acronym for "Too Late; Didn't Release".

()

5) The word "Trim" means to remove the leading and trailing whitespace from a string.

()

6) It is recommended to use articles as precisely as possible when you write a commit message title.

()

Q19 - Q20

A: I created a pull request (i) the agoras/geek-haus repository. Can you take a look?

B : What is the PR for?

A : It fixes the critical bug with the CI/CD workflow.

B : Oh, I thought it was WIP. Let me review it and get back to you.

 $\mathbf{A}:\mathsf{T}|\mathsf{A}!$

B : Quick question. I've found some possible errors (ii) your PR. I think the second

commit (iii) your branch could be the cause.

Q19. What do the letters in the following acronyms stand for?

PR :			
CI/CD :			
WIP :			
TIA :			

Q20. Choose the best prepositions to fill in the blanks marked (i), (ii), (iii).

(i) on (ii) in (iii) at
(i) in (ii) on (iii) on
(i) in (ii) in (iii) on
(i) in (ii) at (iii) on

Test 1 정답 및 해설

Q1 | C

본문에 의하면, 리액트의 러닝 커브(Learning curve, 학습 프로세스)는 다소 가파릅니다 (어렵습니다). 본 문항은 Stack Overflow 답변자의 주관적인 답변을 기반으로 하며, 실제 학습 체감 난이도는 개발자에 따라 다를 수 있습니다.

Q2 | C

본문에 의하면 리액트는 크고 천천히 변하는 다수의 자식 컴포넌트에 최적화되어 있지 않습니다. ~wise는 "~에 대해서"라는 뜻으로, Performance wise 는 '성능과 관련해서'라는 의미입니다.

Q3 | A

본문 "The tagging process may take up to 1 hour after signing"에 의하면, 태깅 프로세스는 서명 이후에 최대 1 시간 소요됩니다.

- on behalf of : 대신하여
- sufficient : 충분한
- corporate : 법인의, 회사의(명사 : Corporation)

Q4 |

풀 리퀘스트(코드, 문서 등)를 병합하려면 기여자는 기여자 라이선스 계약에 서명해야 하는데, 저희 파일(기록)에는 귀하의 계약이 없는 것 같습니다.

Q5 | D

본문 "createElement() is described in more detail in the API reference, but we won't be using it in this tutorial"에 따르면, createElement() 는 튜토리얼에 사용되지 않았습니다.

Q6 | B

본문의 "If the gas is used up at any point (i.e. it would be negative), an out-of-gas exception is triggered, which ends execution and reverts all modifications made to the state in the current call frame"에서 정답을 유추할 수 있습니다. Revert는 "이전 상태로 돌아가다"라는 뜻입니다.

Q7 | B

Upon은 "~하자마자, ~즉시"라는 뜻의 전치사로 Upon creation은 "생성되는 즉시"라는 의미입니다. 나머지 전치사는 creation과 함께 쓰기에 적절하지 않습니다.

Q8 | C

Incentivize는 "(인센티브 등을 주어) 장려하다" 라는 뜻의 동사로, 보기의 A, B, D는 Incentivize의 유의어입니다. Impede는 "지연시키다, 방해하다" 라는 뜻으로 Incentivize의 반대 의미를 가지고 있습니다.

Q9 | C

"For example, starting up a new pod when a deployment's replicas field is unsatisfied (예를 들어 배포의 복제본 필드가 충족되지 않을 때 새 파드 시작)"에서 정답을 유추할 수 있습니다.

Q10 | C

Replica는 "복제본, 사본"이라는 의미입니다. 유의어로 Copy, Clone이 있습니다.

Q11 | B

본문의 "쿠버네티스 클러스터는 노드라고 하는 워커 머신 세트로 구성됩니다 (A Kubernetes cluster consists of a set of worker machines, called nodes)" 및 "컨트롤 플레인 컴포넌트는 클러스터 내의 모든 머신에서 실행될 수 있습니다 (Control plane components can be run on any machine in the cluster)"에서 정답을 유추할 수 있습니다.

Q12 | B

A la 는 프랑스어에서 비롯된 전치사로 "~류의, ~풍의, ~을 본딴"를 뜻합니다. In the style of와 동일한 의미로 사용됩니다.

Q13 | C

Scaffolding은 "발판, 뼈대, 비계 (건설 현장의 작업을 위한 임시 가설물)"라는 뜻으로, 본문에서는 "프로젝트의 기반이 되는 기초적인 구도"를 의미합니다.

Q14 | A

빈칸은 주어 "Each of these"의 동사입니다. 주어 Each는 단수로, 빈칸은 단수형 주어에 대응되는 fits가 문법적으로 옳습니다.

Q15 | D

본문의 "From content management systems to social networks"는 "컨텐츠 관리 시스템부터 소셜 네트워크까지"라는 뜻으로, 소셜 네트워크는 Django가 사용되는 범위에 포함됩니다.

Q16 | B

Hassle은 "귀찮거나 번거로운 일 또는 상황"을 뜻합니다.

Advantage : 장점, 유리한 점
 Shortcut : 지름길, 손쉬운 방법

D Benefit : 혜택, 이득

Q17 | A

Versatile은 "다용도의" 또는 "다목적의"를 뜻하는 형용사로 보기 중 A가 옳은 정의입니다.

Q18 |

- 1) **F**: Unopinionated framework은 자유도와 유연성을 중요시하며, Opinionated framework는 프레임워크의 템플릿과 설계를 따르는 것을 권장합니다.
- 2) F: Argument(인자)가 아닌 Parameter(매개변수)에 대한 설명입니다.
- 3) T: Out-of-the-box software는 설정 없이 즉시 사용할 수 있는 소프트웨어를 의미합니다.
- 4) F: 일반적으로 TL;DR은 Too Long; Didn't Read를 의미합니다.

5) **T** : 동사 Trim은 문자열의 불필요한 좌우 공백을 제거하는 것을 뜻합니다.

6) **F** : 커밋 메시지는 a, an, the와 같은 관사(Article) 사용을 최소화하는 것을 권장합니다.

Q19 |

PR: Pull Request

CI/CD : Continuous Integration / Continuous Deployment (또는 Delivery)

WIP : Work In Progress

TIA : Thanks In Advance

Q20 | C

일반적인 상황에서 리포지터리(Repository)와 풀 리퀘스트(Pull Request) 앞에는 전치사 in을, 브랜치 앞에는 전치사 on을 사용합니다.

[예]

- Code in the repository

- The latest commit on the master branch

하지만 특정한 전치사가 필요한 동사 및 명사가 문장 내에 있을 경우, 실제 사용하는 전치사는 달라질 수 있습니다.

[예]

- Any thoughts on this pull request? (Thought **on** A : A에 대한 생각)
- Adding a commit to the branch (**Add** A **to** B : A를 B에 추가하다)

문제 출처

- [Q1 Q2] Stack Overflow, #28442239
- [Q3 Q4] Github, facebook/react, Issue #22267
- **[Q5]** React docs, Tutorial : Intro to React
- [Q6 Q8] Solidity docs, Introduction to Smart Contracts
- [Q9 Q11] Kubernetes documentation, Kubernetes Components
- [Q12 Q14] Github, focusaurus/express_code_structure, README.md
- [Q15 Q17] djangoproject.com



번역:<u>www.geekhaus.club/translation</u>

NO CODE NO GAIN