TEAM LEAD VERSION (TW-7)

TEAMWORK

CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

- ▶ Icebreaking
- ▶ Questions
- ▶ Interview Questions
- ▶ Coffee Break
- ▶ Logical Reasoning Questions
- ▶ Video of the week
- ▶ Retro meeting
- ▶ Case study / project

Teamwork Schedule

Ice-breaking 10m

- Personal Questions (Stay at home & Corona, Study Environment, Kids etc.)
- Any challenges (Classes, Coding, studying, etc.)
- Ask how they're studying, give personal advice.
- Remind that practice makes perfect.

Ask Questions 15m

1. What will be the output of the following Python code?

```
for x in set('pqr'):
    print(x*2)
```

A.

```
pqr
pqr
```

B.

```
pp
qq
rr
```

C.

```
ppqqrr
```

D.

```
qq
rr
```

```
pp
```

Answer: D

2. Which of the following statements create a dictionary?

A. d = {}
B. d = {“john”:40, “peter”:45}
C. d = {40:”john”, 45:”peter”}
D. All of the mentioned

Answer: D

3. What is the output of the following program?

```
d = {"john":40, "peter":45}
d["john"]
```

A. 40
B. 45
C. “john”
D. “peter”

Answer: A

4. What would this expression return in Python?

```
d = {"john":40, "peter":45}
print(list(d.keys()))
```

A. (“john”:40, “peter”:45)
B. (“john”, “peter”)
C. [“john”, “peter”]
D. [“john”:40, “peter”:45]

Answer: C

5. What is the output of the code shown below?

```
a={}
a['a']=1
a['b']=[2,3,4]
print(a)
```

A. Exception is thrown
B. {'b': [2], 'a': 1}
C. {'b': [2, 3, 4], 'a': 1}
D. {'b': [2], 'a': [3]}

Answer: C

6. What is the output of the code shown below?

```
z=set('abc')
z.add('san')
z.update(set(['p', 'q']))
print(z)
```

A. {'abc', 'p', 'q', 'san'}
B. {'a', 'b', 'c', 'p', 'q', 'san'}
C. {'a', 'b', 'c', ['p', 'q'], 'san}
D. {'a', 'c', 'c', 'p', 'q', 's', 'a', 'n'}

Answer: B

7. Which choice is the most syntactically correct example of the conditional branching?

A.

```
num_people = 5

if num_people > 10:
    print("There is a lot of people in the pool.")
elif num_people > 4:
    print("There are some people in the pool.")
elif num_people > 0:
    print("There are a few people in the pool.")
else:
    print("There is no one in the pool.")
```

B.

```
num_people = 5

if num_people > 10:
    print("There is a lot of people in the pool.")
if num_people > 4:
    print("There are some people in the pool.")
if num_people > 0:
    print("There are a few people in the pool.")
else:
    print("There is no one in the pool.")
```

C.

```
num_people = 5

if num_people > 10:
    print("There is a lot of people in the pool.")
elif num_people > 4:
    print("There are some people in the pool.")
elif num_people > 0:
    print("There are a few people in the pool.")
else:
    print("There is no one in the pool.")
```

D.

```
if num_people > 10;
    print("There is a lot of people in the pool.")
if num_people > 4:
    print("There are some people in the pool.")
if num_people > 0:
    print("There are a few people in the pool.")
else:
    print("There is no one in the pool.")
```

Answer: C

8. What is the term to describe this code?

```
count, fruit, price = (2, 'apple', 3.5)
```

A. tuple assignment
B. tuple unpacking

C. tuple matching
D. tuple duplication

Answer: B

9. What would this expression return?

```
college_years = ['Freshman', 'Sophomore', 'Junior', 'Senior']
return list(enumerate(college_years, 2019))
```

A. [('Freshman', 2019), ('Sophomore', 2020), ('Junior', 2021), ('Senior', 2022)]
B. [(2019, 2020, 2021, 2022), ('Freshman', 'Sophomore', 'Junior', 'Senior')]
C. [('Freshman', 'Sophomore', 'Junior', 'Senior'), (2019, 2020, 2021, 2022)]
D. [(2019, 'Freshman'), (2020, 'Sophomore'), (2021, 'Junior'), (2022, 'Senior')]

Answer: D

10. If we want define style for an unique element, then which css selector will we use?

A. Id
B. class
C. text
D. name

Answer: A

11. Where do < header > and < footer > tags typically occur?

A. as children of < body >, < article >, < aside >, and < section > tags
B. as children of < body >, < article >, and < section > tags
C. as children of < body >, < article >, < aside >, < nav >, and < section > tags
D. as children of < body >, < article >, < table >, and < section > tags

Answer: B

12. The "value" attribute is associated with which set of tags?

A. < button >< input >< form >
B. < input >< label >< meter >
C. < input >< option >< textarea >
D. < li >< input >< option >

Answer: D

13. What is the correct commit syntax for all changes with a message?

```
<address _______ ______>
  <span itemprop="streetAddress">6410 Via Real</span><br />
  <span itemprop="addressLocality">Carpinteria</span>,
  <span itemprop="addressRegion">CA</span>
  <span itemprop="addressCode">93013</span>
</address>
```

A. itemscope itemtype="http://schema.org/PostalAddress"
B. itemsref="http://schema.org/PostalAddress" itemid="address"
C. itemscope itemref="http://schema.org/PostalAddress"
D. itemid="address" itemtype="http://schema.org/PostalAddress"

Answer: A

14. What is NOT a valid attribute for the < textarea > element?

A. readonly
B. max
C. form
D. spellcheck

Answer: B

15. When should you use < ol > and < ul > elements?

A. Use < ul > when you want a bulleted list and < ol > when you want a numbered list.
B. Use < ul > when you have a list of items in which the order of the items matters. Use < ol > when you have a list of items that could go in any order.
C. Use < ol > when you want a bulleted list and < ul > when you want a numbered list.
D. Use < ol > when you have a list of items in which the order of the items matters. Use < ul > when you have a list of items that could go in any order.

Answer: A

Interview Questions 15m

1. What are some of the key new features in HTML5?

Answer: Key new features of HTML5 include:

- Improved support for embedding graphics,audio,and video content via the new < canvas >,< audio >,< video > tags.
- Extensions to the JavaScript API such as geolocation and drag-and-drop as well for storage and caching.
- Introduction of “web workers”.
- Several new semantic tags were also added to complement the structural logic of modern web applications. These include the < main >, < nav >, < article >, < section >, < header >, < footer >, and < aside > tags.
- New form controls, such as < calendar >, < date >, < time >, < email >, < url >, < search >

2. Discuss the differences between an HTML specification and a browser’s implementation thereof?

Answer: HTML specifications such as HTML5 define a set of rules that a document must adhere to in order to be “valid” according to that specification. In addition, a specification provides instructions on how a browser must interpret and render such a document.

A browser is said to “support” a specification if it handles valid documents according to the rules of the specification. As of yet, no browser supports all aspects of the HTML5 specification (although all of the major browser support most of it), and as a result, it is necessary for the developer to confirm whether the aspect they are making use of will be supported by all of the browsers on which they hope to display their content. This is why cross-browser support continues to be a headache for developers, despite the improved specificiations.

In addition, while HTML5 defines some rules to follow for an invalid HTML5 document (i.e., one that contains syntactical errors), invalid documents may contain anything, and it is impossible for the specification to handle all possibilities comprehensively. Thus, many decisions about how to handle malformed documents are left up to the browser.

3. Explain the difference between div and span?

Answer: Both div and span are used for giving out the output. While span gives the output with display: inline, div gives output with display: block. Typically, span is used when there is the need to display the elements one after the other, i.e., in a line.

Coffee Break **10m**

Logical Reasoning Questions 15m

1. In this logic question, you are standing in a room with three light switches. The switches all correspond to three different light bulbs in an adjacent room that you cannot see into. With all the light switches starting in the off position, how can you find out which switch connects to which light bulb?

Answer: I would turn on the first switch and let it stay on for a few minutes. Then, I'd turn the first switch off and quickly turn on the second switch. Then, checking the room, I'd see the second bulb turned on and feel the other two bulbs to see which one is warmer. The warmer bulb is the one I just turned off, so that belongs to the first switch, while the bulb that's on belongs to the second switch. The third switch would belong to the bulb that is off and coolest to the touch.

2. Let's say you are traveling to Washington D.C. to visit some friends. You call three of your friends to see if it is raining in the city. What is the probability that it is actually raining in Washington D.C.?

Answer: Since I only need one friend to tell me the truth for it to be raining, it could be easier to calculate the probability that all three friends are lying. So I can calculate that each person has a 1/3 chance of lying about the rain. Multiplied together I get 1/27 chances that all three friends lied about the weather. That means that there are 26/27 chances that it is actually raining. This equals a 96% chance of it raining when I arrive to the city.

3. Kevin, Joseph, and Nicholas are 3 brothers. If the following statements are all true, which of them is the youngest?

```
✓ Kevin is the oldest.
✓ Nicholas is not the oldest.
✓ Joseph is not the youngest.
```

A. Joseph
B. Kevin
C. Nicholas
D. Both Joseph and Nicholas

Answer: Kevin, Joseph, and Nicholas are 3 brothers. To find the youngest of the three?

By hypothesis, Kevin is the oldest of the three. Therefore Kevin can’t be the youngest. So Kevin is eliminated.

We are left with Joseph and Nicholas. Since Kevin is not the youngest, either Joseph or Nicholas is the youngest. But it is given in the question that Joseph is not the youngest.

Therefore Nicholas is the youngest.

Video of the Week 10m

- The Gitflow Workflow

- HTML, CSS, JavaScript
- Python For Loops

Retro Meeting on a personal and team level 10m

Ask the questions below:

- What went well?
- What could be improved?
- What will we commit to do better in the next week?

Closing 5m

- Next week's plan
- QA Session
