Code Review // Clean Code

Episode 2 – FAIL FAST

What do you think of B12 desks layout?

A. It s good, I like it
B. We need to change that as done on B22
C. I don't like it but I don't like B22 layout neither
D. Team Don't Know

What have we cleaned so far ?

Do not repeat yourself

Fail fast

Use mean full names

Use comments and spaces

Avoid magic numbers

One Purpose For Each Variable

Function Say what they do

Avoid multiple returns

Use objects to protect your data

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ACTIVITIES S2-ACTIVITY - 1
On Google classroom

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Why is it important to fail as soon as possible?

Fail fast

Code should **reveal its bugs** as early as possible.

What is the differences btw those errors types

Static Compilation error

Dynamic Execution error

Code Computation error

Which type of error fails faster ?

1 = fast   3 = slow

A
1   Static compilation error
2   Dynamic execution error
3   Code computation error

C
1   Code computation error
2   Dynamic execution error
3   Static compilation error

B
1   Dynamic execution error
2   Static execution error
3   Code computation error

D   Team Don t know

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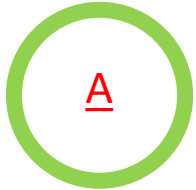B
1   Dynamic execution error
2   Static execution error
3   Code computation error

D   Team Don t know

```java
public static int dayOfYear(int month, int dayOfMonth, int year) {
    if (month == 2) {
        dayOfMonth += 31;
    } else if (month == 3) {
        dayOfMonth += 59;
    } else if (month == 4) {
        dayOfMonth += 90;
    } else if (month == 5) {
        dayOfMonth += 31 + 28 + 31 + 30;
    } else if (month == 6) {
        dayOfMonth += 31 + 28 + 31 + 30 + 31;
    } else if (month == 7) {
        dayOfMonth += 31 + 28 + 31 + 30 + 31 + 30;
    } else if (month == 8) {
        dayOfMonth += 31 + 28 + 31 + 30 + 31 + 30 + 31;
    } else if (month == 9) {
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    } else if (month == 10) {
        dayOfMonth += 31 + 28 + 31 + 30 + 31 + 30 + 31 + 31 + 30;
    } else if (month == 11) {
        dayOfMonth += 31 + 28 + 31 + 30 + 31 + 30 + 31 + 31 + 30 + 31;
    } else if (month == 12) {
        dayOfMonth += 31 + 28 + 31 + 30 + 31 + 30 + 31 + 31 + 30 + 31 + 31;
    }
    return dayOfMonth;
}
```

What will be the call ?

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What is we call : dayOfYear(9, 2, 2019)

A   Static error   B   Dynamic error   C   No error but wrong answer   D   Good answer

We want the number of Day for February 9, 2019

```java
public static int dayOfYear(int month, int dayOfMonth, int year) {
    if (month == 2) {
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What is we call : dayOfYear("February", 9, 2019)

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```

What is we call : dayOfYear(2019, 2, 9)

A   Static error   B   Dynamic error   C   No error but wrong answer   D   Good answer

Is this change make the code fail faster ?

```
public static int dayOfYear(String month, int dayOfMonth, int year) {
   ...
}
```

A   No change   B   Fail faster- static error   C   Fails faster dynamic error

Is this change make the code fail faster ?

```
public static int dayOfYear(String month, int dayOfMonth, int year) {
    ...
}
```

A   No change   B   Fail faster- static error   C   Fails faster dynamic error

Is this change make the code fail faster ?

```
public static int dayOfYear(int month, int dayOfMonth, int year) {
  if (month < 1 || month > 12) {
    return -1;
  }
  ...
}
```

A   No change   B   Fail faster- static error   C   Fails faster dynamic error

Is this change make the code fail faster ?

```
public static int dayOfYear(int month, int dayOfMonth, int year) {
  if (month < 1 || month > 12) {
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  }
  ...
}
```

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Is this change make the code fail faster ?

```
public static int dayOfYear(int month, int dayOfMonth, int year) {
  if (month < 1 || month > 12) {
    throw new IllegalArgumentException();
  }
  ...
}
```

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9

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A   No change   B   Fail faster- static error   C   Fails faster dynamic error

Is this change make the code fail faster ?

```java
public enum Month { JANUARY, FEBRUARY, MARCH, ..., DECEMBER };
public static int dayOfYear(Month month, int dayOfMonth, int year) {
  ...
}
```

A No change   B   Fail faster- static error   C   Fails faster dynamic error

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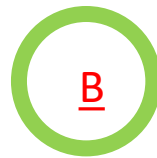A   No change   B   Fail faster- static error   C   Fails faster dynamic error

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ACTIVITIES S2-ACTIVITY 2
On Google classroom

Quiz

Prepare your **flash cards** and... be ready to vote !

How many times is the number of days in April written in **dayOfYear()**?

A 1   B 6   C 8   D 9   E 12

Mind Map

Storytelling is the process of using fact and narrative to **communicate something** to your audience.