# Chatbots with Personality

# Notable Code!

```
elif reply == "Core" or reply == "core":
  print("Sweet! Let's do regular planks for 30 seconds.")
  time.sleep (1.5)
  print("Get ready")
  time.sleep(0.9)
  print(5)
  time.sleep(0.9)
  print(4)
  time.sleep(0.9)
  print(3)
  time.sleep(0.9)
  print(2)
  time.sleep(0.9)
  print(1)
  time.sleep(0.9)
  print("GO!!")
  time.sleep(15)
  print(random_movivation)
  time.sleep(12)
  print(3)
  time.sleep(0.9)
  print(2)
  time.sleep(0.9)
  print(1)
  time.sleep(0.9)
  print(random_goodjob + name + "!")
```

```
4 - if response == "1991" or response == "1992" or response == "1993" or response == "1994" or response
      == "1995" or response == "1996":
5
```

Too many boolean expressions in if statement (6/5)

We'll learn how to fix this next week, using the keyword **in**

# More on Booleans

# Boolean Examples

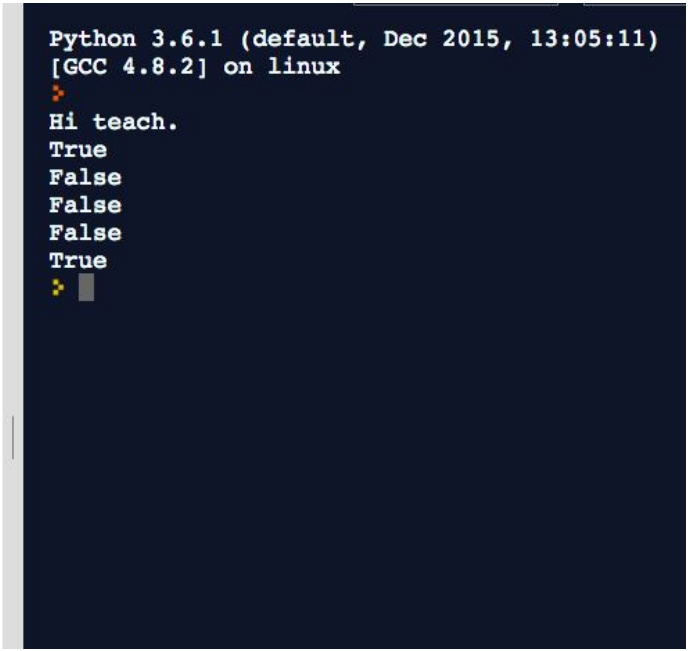
```
# Boolean Review
# Author: Angelica Lim
# Date: Jan. 12, 2018

# Setting a variable to the string Angelica
user_name = "Angelica"

# Print out Hi teach if user_name is Angelica
if user_name == "Angelica":
  print("Hi teach.")

# Print out some boolean expressions
print(user_name == "Angelica")  # True
print(user_name == "Michael")  # False
print(user_name == "angelica")  # False

print(user_name == "angelica" or user_name == "Michael")  # False
print(user_name == "Angelica" or user_name == "Michael")  # True
```

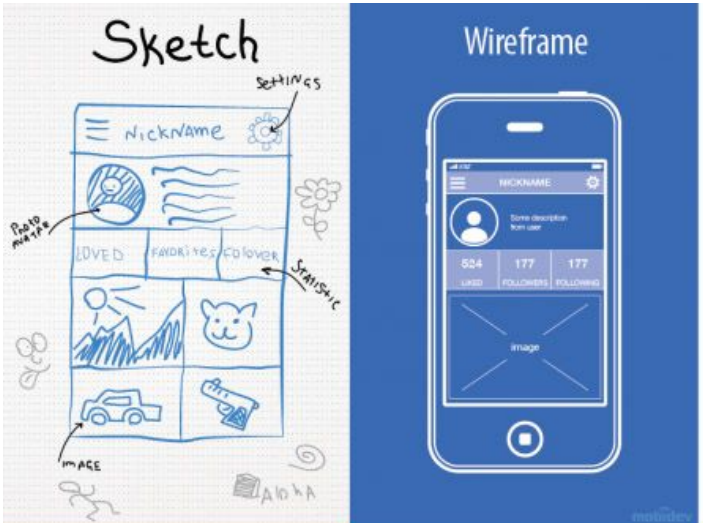


# Industry

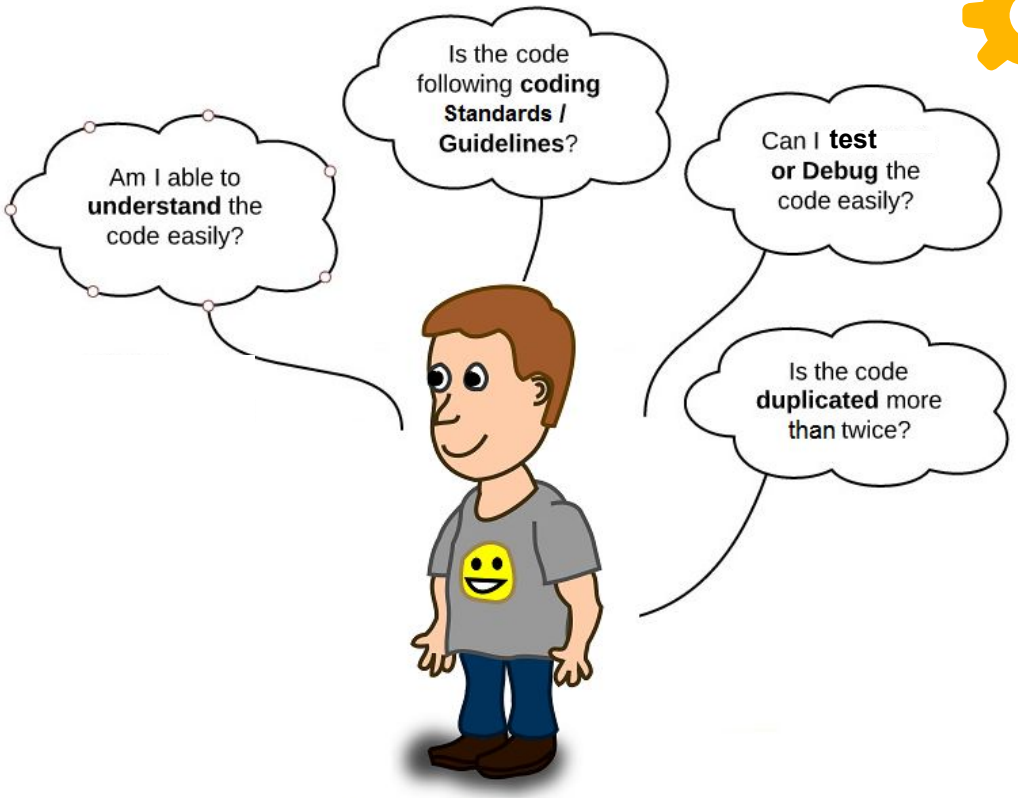
Realities about being a software engineer

# Standup Meetings

# Design / prototype phase

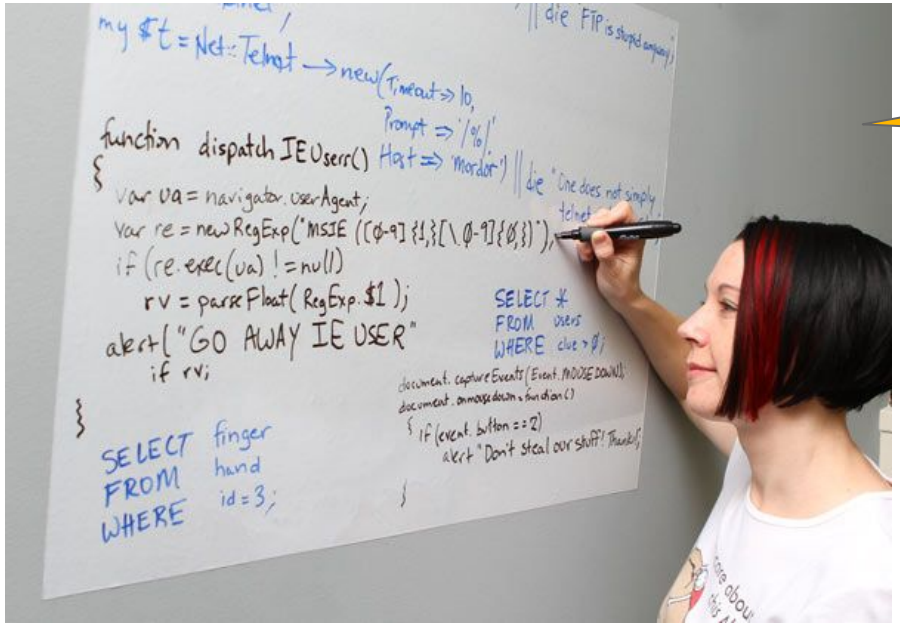


# Code reviews




Source: http://www.evoketechnologies.com/

# Coding interviews




Whiteboard coding interviews

# Self-test

This is a mock exam. It's not for marks.

Try to do it without looking at your notes.

# Question 1

Write a **fortune cookie generator** that prints out a random fortune when the program is run.

Here are 3 sample runs:

```
Python 3.6.1 (default, Dec 2015, 13:05:11)
[GCC 4.8.2] on linux
>
You will have great success.
>
```

```
Python 3.6.1 (default, Dec 2015, 13:05:11)
[GCC 4.8.2] on linux
>
You will become rich.
>
```

```
Python 3.6.1 (default, Dec 2015, 13:05:11)
[GCC 4.8.2] on linux
>
You will find love.
>
```

# Question 2

Write a **CoffeeBot** that asks if you would like cream.

It should accept Yes/yes or No/no as inputs, and reply appropriately depending on the answer.

If the user inputs anything else, it should repeat back their answer and say that it does not understand.

Here are 4 sample runs:

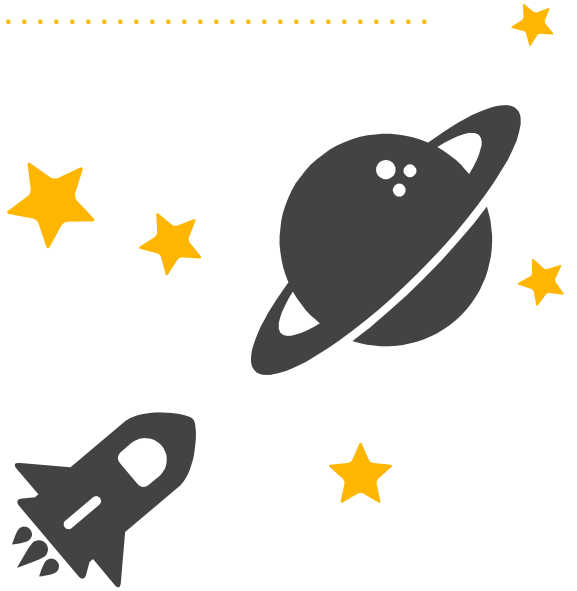
```
I'm CoffeeBot. Would you like cream with your coffee? (Yes/No)
 Yes
Here's your coffee with cream.
```

```
I'm CoffeeBot. Would you like cream with your coffee? (Yes/No)
 yes
Here's your coffee with cream.
```

```
I'm CoffeeBot. Would you like cream with your coffee? (Yes/No)
 No
Here's your coffee, no cream.
```

```
I'm CoffeeBot. Would you like cream with your coffee? (Yes/No)
 asdf
Sorry, I don't know what asdf means.
```

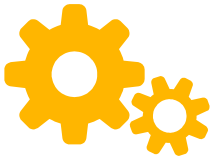
# Strategies



How do you do problem solving?

# Problem Solving Strategy 1

Design your algorithm using a concrete example.



# Problem Solving Strategy 2

Break down a large problem into smaller parts.

# Answers

Example solutions, for your reference.

# Question 1

Here is a basic solution that works.

```
# Question 1: Fortune Cookie Generator
# Author: Angelica Lim
# Date: Jan. 12, 2018

# Generates a random fortune

# Create a list
fortunes = ["You will have great success.", "You will find love.", "You will become rich."]

# Select random
import random
random_fortune = random.choice(fortunes)

# Output
print(random_fortune)
```

# Question 1

Here is a solution that works, *plus* follows coding standards and minimizes duplication.

```
1   # Question 1: Fortune Cookie Generator
2   # Author: Angelica Lim
3   # Date: Jan. 12, 2018
4   # Generates a random fortune
5
6   import random
7
8   # Create a list
9   fortunes = ["have great success.", "find love.", "become rich."]
10
11  # Select random
12  random_fortune = random.choice(fortunes)
13
14  # Output
15  print("You will " + random_fortune)
```

# Question 2

```
# Question 2. CoffeeBot
# Author: Angelica Lim
# Date: Jan. 12, 2018

# Asks if you want cream or not (Yes/No)
print("I'm CoffeeBot. Would you like cream with your coffee? (Yes/No)")

# Get input
response = input()

# If you want cream, say here's your coffee with cream
if response == "Yes" or response == "yes":
  print("Here's your coffee with cream.")

# Otherwise if they say no, say here's your coffee no cream
elif response == "No" or response == "no":
  print("Here's your coffee, no cream.")

# In all other cases, say I don't know what ___ means
else:
  print("Sorry, I don't know what " + response + " means.")
```

# Self reflection

- Where did I get stuck?
- Any errors I often get?

The error checker is your friend. It was created because computer scientists knew they were human and would forget things.

- How awesome am I to be writing full ChatBot programs already?