

## What the Hack: Building a Chatbot | Episode 8 Challenges

*Ready to test your knowledge? Turn your brain fans on to maximum speed with these challenges!*

### Challenge 1: Be Creative and Improve our Chatbot!

As we've seen in our episode, our chatbot is far from perfect. For example, it can only understand 3 words: Good, Bad and Not Bad, when in real life, we humans use more than just these 3 words to express how we are!

In this challenge, your mission is to examine our algorithm, and spot some problems and rooms for improvement for our chatbot, work on the code that we already have in the video, make modifications to the algorithms using what you've already learned in the previous episodes, and see how you can make our chatbot better at chatting with us!

You can copy and paste the code in our video below into Repl.it or any Python IDE (Integrated Development Environment), and let your problem-solving skills and programming knowledge take over!

```
Message = input("How are you doing? : ")
Message = Message.upper()

if Message == 'GOOD':
    print("Awesome!")
elif Message == 'BAD' or Message == 'NOT GOOD':
    print("Sorry to hear that...")

else:
    unknown = input("I don't know what you mean. Is it good or bad? :")
    unknown = unknown.capitalize()
    if unknown == 'Good':
        print("That's great!")
    else:
        print("Aww...")
```

## Challenge 2: Build Your Own Chatbot!

This is your chance to be creative and build your own chatbot! Think about some basic conversations that you can make with your friends on a daily basis, and brainstorm how to turn them into algorithms for our chatbot! Remember to use your problem-solving skills whenever you run into trouble, and review some of the concepts that we've learned by revisiting the videos!

Below is a simple idea that you can take on, but don't be limited to just this, be creative! :

1. Motivational quote generator chatbot:

Based on how your user is feeling, you can have your chatbot tell your user some motivational quotes! For even better functionality, you can have your chatbot ask the user for some motivational quotes and learn how to use them to respond to your user in future conversations!

Remember the useful concepts of decision-making, string manipulation, storing information in lists and more that we learned in our episodes, and hack away!