

Abstract geometric lines in the top left corner of the page, consisting of several overlapping, irregular polygons and lines that create a complex, layered effect.

GOLF INSTRUCTOR CHATBOT

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PROBLEM STATEMENT



Problem: Build a chatbot to answer basic golf improvement questions

How?


- Used the YouTube transcripts of a top golf instructor Mike Malaska's videos using YouTubeTranscriptApi
- Built 3 models: TF-IDF, SentenceTransformer, OpenAI

Why?

- Access to golf instruction isn't always easy or affordable
- Hope to consolidate information from 200 videos into a chatbot



Malaska Golf - GENERATING SPEED BY PUSHING AWAY

 Malaska Golf
115K subscribers

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800

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Thanks

Clip

117K views 6 years ago

A question of the week from Mike's new learning site at www.malaskagolf.com – This is a great benefit for members. You see something that isn't quite clear in your game, or if you have a question about a certain technique, you can post your comments and questions to those videos. Mike looks over all the comments daily. Throughout the week he responds to member comments with new videos that explain in more detail. It's that simple. [Show more](#)

video_id	jfomRZ1Ekk0
title	Malaska Golf - GENERATING SPEED BY PUSHING AWAY
views	116934
likes	791
release_year	2017
description	<p>A question of the week from Mike's new learning site at www.malaskagolf.com – This is a great benefit for members. You see something that isn't quite clear in your game, or if you have a question about a certain technique, you can post your comments and questions to those videos. Mike looks over all the comments daily. Throughout the week he responds to member comments with new videos that explain in more detail. It's that simple. MALASKA GOLF IS HERE TO HELP YOU ENJOY THE GAME MORE. No other online golf-instruction center gives you direct access to a world-renowned swing coach like Malaska Golf does. My goal is to give you a better understanding of why things happen they way they do. Don't just play golf. Understand it. Join FREE for 30 Days, or get two months free when you join for a year. Visit www.malaskagolf.com.</p>
transcript	<p>this question comes to us from Carrie from the EMM system relative to generating speed now there are a number of ways to generate speed and you can get to the top and fire your hips and the club's back here and then try to throw it and catch it up that that is a way to create speed however I spent half my career doing that the timing and everything I had to do with that was incredible or I could just hang on and hit it I couldn't hit it very far relative to what I could do so really what we're trying to do here everybody talks about the medicine ball toss so when you throw a medicine ball if I was going to throw a medicine ball that way I get it right here now when I'm right here my shoulders are still turned my hips still back the medicine balls here and then I then everything goes together on there different circles so really a golf swing when you get to the top when you start down the handles got to come down this hip is kind of pushing away and the club's going out there so that you're kind of pushing away and if the club goes out you're pushing more and more away from it which accelerates the club so the more I push away so the club's coming down and going out if I push away from that it's going to accelerate the club so the harder I push away the more speed it's going to generate out there offsetting forces now I could also jump up in the air and it will make it go down but now we're talking about timing and a lot of things to get in the way of that so I'm just monitoring the further I want to hit it I go back when I start down as soon as I start down if I push away here handle comes down club goes out if I push away from the club really hard it generates a lot of club head speed into the ball but it's a push away not a turn now do I turn sure I do because if I get up to the top and I start down the way this joint works does that clubs coming down and I'm pushing away from it that force in this joint starts to make it rotate so you're actually going to turn maybe your hips might even turn through the ball more than they ever have before you're not even trying to do it because now they're reacting to the force of the club rather than get ahead of it then trying to catch it up so yeah generating speed comes from pushing away get the club out so now the more speed you generate through the ball the more stable the club</p>
views to likes ratio	147.830594
transcript_ID	33

EDA & CHALLENGES

Mean TF-IDF	
hands	4.735774
arms	4.007276
like	3.820070
goes	3.814157
right	3.658056
hips	3.554847
know	3.365603
going	3.194266
club	3.169562
see	3.122412

frequency	word
0	2758 club
1	2712 going
2	2696 right
3	2639 go
4	2321 ball
5	2225 get
6	1761 like
7	1594 swing
8	1493 hit
9	1471 back

frequency	bigram
0	390 feel like
1	383 club head
2	311 hit ball
3	207 little bit
4	203 momentum club
5	202 go back
6	196 right arm
7	195 golf swing
8	178 go way
9	171 right hand

Challenges

- No punctuations in the transcripts, had to create sentences
- Casual conversation not as specific as written text
- Video can't pick up the visual context

OPENAI MODEL 5 RESPONSES

- **How do I hit a draw?** To hit a draw, you can either change your path into the ball slightly so the club comes from the inside of the target line with the face square, or you can time the face to rotate a little bit more a little earlier. You can also strengthen your left hand grip slightly to shut the face down a little bit. Experiment with these options to find out which one works for you under pressure.
- **How can I get more consistent?** To get more consistent, focus on developing a consistent tempo and rhythm. Practice making swings with a consistent tempo and rhythm, and focus on the feel of the motion rather than the result. Make sure to take breaks between shots and practice with different clubs and targets to test your consistency. Additionally, practice with a club with a big face to help you focus on the timing of your swing.
- **How do I fix my slice?** The most common cause of a slice is an incorrect grip. To fix a slice, start by adjusting your grip to make it stronger. This will help you to turn the face of the club over more easily. Additionally, focus on making sure your lower body moves before your upper body in your swing. This will help you to keep the club on the correct path and prevent it from going out to the right. Finally, make sure you are shallowing the angle of approach into the ball, rather than just shallowing the shaft. This will help you to hit the ball straight and with more power.
- **How do I gain confidence?** Gaining confidence can be achieved by focusing on your strengths and playing to them. Identify what you are good at and focus on that. Also, practice self-talk and positive affirmations. Remind yourself that you are capable and that you have worked hard to get to where you are. Lastly, accept that failure is a part of life and use it as a learning experience.
- **How do I improve my mental game?** To improve your mental game, focus on playing to your strengths and away from your weaknesses. Develop a positive self-talk strategy that focuses on the process of making the shot rather than the outcome. Replace negative thoughts with positive ones, such as saying your wife's name or a happy thought. Finally, practice visualization techniques to help you see the line correctly and commit to the shot.