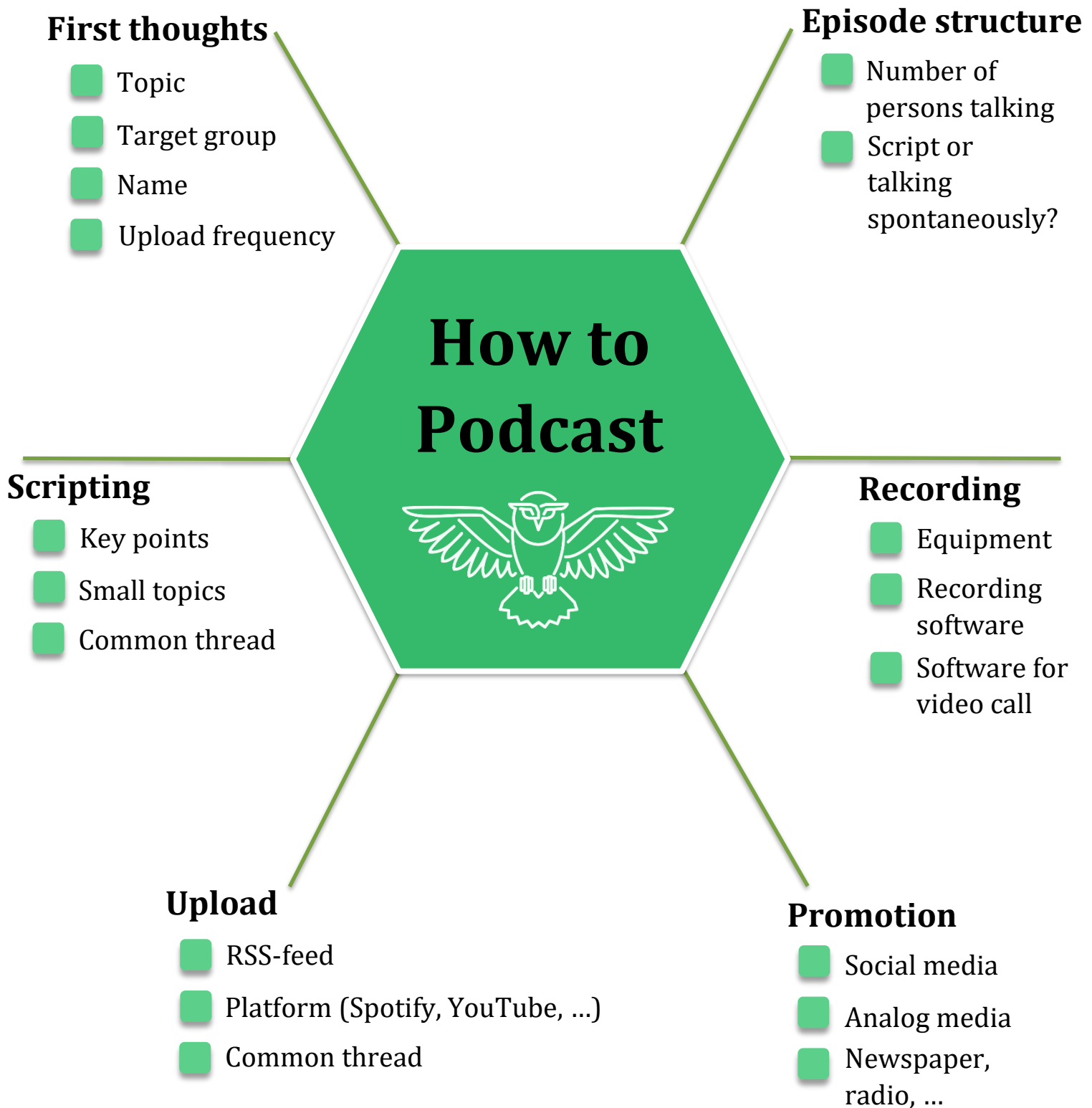


A guide on how to develop and produce a podcast



How to Podcast – A guide for the iGEM community

This year we created a podcast about biotechnology. There are many aspects to be considered if you want to turn an idea into a final podcast. This is why we decided to give you an overview about everything you need to think about during the creation process and what we ourselves have learned.

What is your podcast about?

First of all, you need to decide what topic you want to discuss in your podcast. This may seem easy but there are loads of possibilities and even if you have already decided on a topic, you have to consider if it has enough potential to be talked about for longer than one episode.

On the one hand, it should be a topic that you are passionately interested in, otherwise you could lose interest yourself. On the other hand, you have to decide who your target group will be. It is something completely different, for example explaining a Gibson assembly to someone who has done it a hundred times in the lab than to your grandma, who has probably never heard of it.

After that, you still need to think about a name. This decision may seem like something you can think about later, but you should start thinking about it in an early state. The podcast's name will be the first thing that people read when they think about listening to your podcast. Besides, you will need a name at the latest when you start recording. You should choose it wisely and try to find a name that is easy to remember, for example a pun or something similar.

How do you want to structure the episodes?

Before you start recording you have to set some parameters. Do you want to script your episode or just start talking? Keep in mind that you maybe want to convey knowledge and could miss important aspects if you do not write them down beforehand. Do you want to talk by yourself or with a second or maybe third person? This is depending on how you want to structure your podcast, maybe you want to tell a story and do not need somebody else or maybe you want someone to react to it and ask questions. This is not a decision which is set in stone, you can also switch the number of persons speaking between the episodes.

Do you want to write a script?

As already mentioned, it is unlikely to leave out important information when you wrote them down before. Nevertheless, there are different ways to write a script for your episode. It is useful to have a common thread for your episode so that the listeners can follow your talking easily. You need to find a compromise between writing down enough to understand what you need to say and not writing down too much so that the listeners know exactly that you are just reading aloud. We have found that it is better to write down key points to speak more freely, but if you have difficulties with this you can also write down whole sentences. Another thing you can do to show that you are not just reading a script is to distribute small topics among the speakers and do not talk in detail about what you are going to say before recording. This enables you to react spontaneously to what is said, which makes you more likeable. Nevertheless, be careful not to lose your common thread.

How do you record your episodes?

To record your podcast, there is some equipment needed. You need a microphone to record your voice and a computer to save and edit the recording. You could spend a lot of money on high end equipment, but that is probably not necessary for you at the beginning. There are many different kinds of microphones on the market. Maybe you know someone who already owns one and can lend it to you or you can ask at your school or university if they are able to lend. We used the Audio-Technica AT2020USB+ microphone we got from the Center of Educational Development and Technology at our university. It has a USB chord which makes it easy to connect it to your computer without an interface.

You also have to consider that you may want to use multiple microphones if you are more than one speaker as the recording will be better if each speaker has their own audio track.

You can use different programs on your computer to record and edit your episodes. Audacity is a common software for recording. You can download it for free and record with it pretty easy. It also has many features for editing afterwards and there are a lot of explaining videos online.

Another option is Reaper. It has a special theme for podcast recordings which is called "Ultraschall" and can be used on a free test trial.

During the recent pandemic, you may not be able to meet with your potential podcast partner, or you may want to reduce social contact with other people in general. Therefore, it is helpful to record the podcast from home, with the software options mentioned above. Just hop on a call via your preferred software (it could be Skype, Zoom, Microsoft Teams, ...) and both record your own voice. In the editing stage you will have two audio tracks that can be placed on top of each other. If you have some difficulties with the synchronicity of your tracks, it can be helpful to count to three together at the start of the recording. This way, you will have a reference to align your tracks perfectly. Keep in mind that both persons will need a good microphone.

How do I upload my podcast?

For uploading, you generally need a so-called RSS-feed (Really Simple Syndication). It allows users and applications to access updates to websites in a standardized, computer-readable format. You are going to need some time to understand the concept, but once understood, it is very simple. Spotify, Apple Music and other streaming services normally just need your RSS-feed for displaying your podcast. An RSS feed can for example be generated on a website that you own. We used a website offered and hosted by our university. Alternatively, there are several providers that host podcasts. You have to consider that this may incur costs. Uploading on YouTube should be very easy too, because you just need an account and the format of your podcast has to be mp4. (You could for example just show one picture throughout the entire video and just put your podcast audio track beside it.)

How do I promote my podcast?

The kind of advertisement of your own podcast depends strongly on the respective target group, which is supposed to listen to it in the end. If the target group is younger, advertising via social media such as Instagram, Twitter or Facebook is a good option. Of course, you can also use analog media, such as printed flyers or posters, which can then draw attention to the podcast in many public places. You could also ask newspapers or newsletters to report about your podcast, or even request an audience with a small radio station in your area.

As you can see, there is a wide range of ways to promote your podcast and attract new listeners. Just get creative and always think about the target group that you are trying to reach and how they gather information for themselves.