**Explain this as if I am a 10 yr old: "The aim of the game is to profitably make markets. This means providing liquidity at the best prices at volumes large enough to facilitate the trading activity of other market participants. Your success will lie in identifying profitable opportunities to trade at fair prices, place your orders as quickly as possible, and keep your risk exposures below defined bounds." Explain in depth if necessary.**

Imagine you're in a big marketplace where people buy and sell things like fruits and vegetables. Some people want to buy more of something, and some people want to sell what they have.

In this game, you get to be one of the sellers in the marketplace. Your goal is to sell things at a good price to people who want to buy them. But you also want to make sure that there are enough people buying and selling, so everyone can get what they want.

To do this, you need to pay attention to what other sellers are doing and what buyers are looking for. You want to offer things for sale at a fair price that people are willing to pay. And you want to make sure you have enough of what people want to buy, so they don't have to go to other sellers.

But, just like in the real marketplace, there's a risk involved. Sometimes, you might not be able to sell everything you have, or you might not be able to sell it at the price you want. So you need to be careful and not take too many risks.

Overall, if you can sell things at a good price, have enough to sell, and manage your risks well, you'll be successful in this game.

**What is market making. Explain through example.**

Market making is the process of providing liquidity to financial markets by buying and selling securities or other financial instruments. In other words, market makers are the middlemen between buyers and sellers in financial markets, and their job is to facilitate trading by providing continuous quotes for buyers and sellers to trade against. Here's an example to illustrate how market making works:

***“****Let's say you want to buy shares of Company A, which is listed on the stock exchange. You place an order to buy 100 shares at $10 per share. At the same time, there is another investor who wants to sell 100 shares of Company A at $10 per share. Without a market maker, you and the other investor would need to find each other in the market to complete the trade. This could be difficult and time-consuming, especially if there are many other buyers and sellers in the market.*

*However, with a market maker, the process is much smoother. The market maker stands ready to buy or sell shares of Company A at all times, providing a continuous bid-ask spread for the stock. In this case, the market maker might offer to buy shares of Company A at $9.95 per share and sell shares at $10.05 per share. When you place your order to buy 100 shares at $10 per share, the market maker would sell you those shares at $10.05 per share, making a profit of $0.10 per share (the difference between the bid and ask prices).*

*In turn, if another investor wants to sell 100 shares of Company A at $10 per share, the market maker would buy those shares at $9.95 per share, making a profit of $0.05 per share (again, the difference between the bid and ask prices). By providing liquidity to the market and profiting from the bid-ask spread, the market maker helps to ensure that there is always someone available to buy or sell shares of Company A, which in turn helps to keep the market efficient and fair for all participants.****”***

**In the provided example, If I want to buy 100 shares of Company A at $10 each, and market maker is selling those 100 shares for $10.05 per share, why would I purchase?**

Good question! In the example I provided, the market maker is selling shares of Company A at a higher price than your bid price of $10 per share. This means that you would have to pay more than what you initially wanted to pay in order to buy the shares.

However, it's important to understand that the market maker's role is to provide liquidity and ensure that there are always buyers and sellers in the market. In other words, they are there to facilitate trading activity, and as a result, they need to be able to buy and sell shares quickly and efficiently.

In this case, the market maker may be selling shares of Company A for $10.05 per share because that is the price at which they are able to sell the shares to other buyers in the market. If you really want to buy the shares and there are no other sellers in the market at $10 per share, then you may choose to buy the shares at the market maker's offer price of $10.05 per share in order to ensure that you can buy the shares you want.

However, it's also important to note that you don't have to buy the shares at the market maker's offer price if you don't want to. You could choose to wait and see if another seller comes into the market who is willing to sell shares at a lower price, or you could adjust your bid price to match the market maker's offer price if you really want to buy the shares quickly. Ultimately, it's up to you to decide whether or not you want to buy the shares at the market maker's offer price, based on your own assessment of the market and your investment goals.

**What if the market maker itself doesn't hold the shares of Company A?**

If the market maker doesn't hold the shares of Company A, they may still be able to facilitate the trade by borrowing or obtaining the shares from other sources. For example, the market maker could have agreements in place with other firms or investors who hold shares of Company A, allowing them to borrow or obtain the shares when needed.

Alternatively, the market maker could use a process called "naked short selling" to facilitate the trade. Naked short selling is a controversial practice in which the market maker sells shares of Company A that they do not currently hold, with the intention of buying them back at a later time to cover the short position. This can help to provide liquidity and facilitate trading, but it can also be risky and may lead to market manipulation if done improperly.

In either case, the market maker would still be able to provide liquidity and facilitate trading in the market, even if they don't hold the shares of Company A themselves. However, it's important to note that these practices can be complex and may involve significant risk, so market makers must carefully manage their positions and adhere to regulations to ensure fair and efficient trading for all market participants.

**Explain this as if I am 10 year old with example "To attract market makers to their market, the exchange has agreed to provide incentives and services as described below. Each trade attracts a small fee paid to the exchange. In the Ready Trader Go ETF market, the aggressor in a trade pays the taker fee, which is 2bps, or 0.02% of the value of the trade. However, to incentivize market making the exchange pays the initiator of the passive order in the trade a maker fee – 1bp or 0.01% of the value of the trade."**

Imagine you have a lemonade stand, and you want to sell as much lemonade as possible. You know that your friends like your lemonade, but you want to attract more customers who don't know about your stand yet. So, you decide to offer them a special deal to encourage them to buy from you.

The exchange works in a similar way. They want to attract people who want to buy and sell things like stocks or ETFs (which are like special packages of stocks). One way they can do this is by offering special deals, or incentives, to people who want to trade on their exchange.

In this case, the exchange charges a small fee for every trade that happens on their exchange. This fee helps to pay for the services and technology that the exchange provides to make trading possible. The person who makes the trade pays a small fee, which is called the taker fee.

But, the exchange also wants to encourage people to be "market makers". A market maker is someone who is willing to buy and sell stocks on the exchange all the time, to help keep the market active and the prices stable. So, the exchange offers a special deal to market makers. If someone is a market maker and they put in an order to buy or sell a stock, and someone else comes along and takes them up on that offer, the exchange will actually pay them a small fee, which is called the maker fee.

Think of it like this: If you were a lemonade stand owner and wanted to encourage more people to come and buy your lemonade, you could offer your friends a special deal where they get a free cup of lemonade for every cup they buy. This would encourage your friends to buy more lemonade from you, and they might even tell their other friends about your lemonade stand. In the same way, the exchange is offering special deals to market makers to encourage them to trade on their exchange, which can help to keep the market active and attract even more traders in the future.