- The word whiskey comes from the Gaelic word for water.
- While distillation techniques were practiced as early 2000 BC by the Babylonians, it is believed that Irish monks brought the techniques from the Mediterranean in the 12 century. and the first evidence that alcohol was distilled was by the Italians in the 13 century who distilled alcohol from wine, which was primarily used for medicinal purposes.
- The earliest record of whiskey as a beverage was in Ireland in 1405, and by the 16th century, whisky was widespread around Ireland and Scotland.
- 1556 Parliament of England passed an act which required a license to distill whiskey (although this had little effect)
- The first license to distill was granted to the Sir Thomas Phillips in 1608, which eventually evolved into the Old Bushmills distillery, by King James of Great Britain and Ireland; making it the oldest licensed distillery in the world.
- The demand for whiskey continued to grow, particularly in Ireland, which was the largest market for spirits in the UK, and the largest producer of such. By the late 19th century, there were 28 distilleries in Ireland, while Scottish whiskey production was on a much smaller scale.
- By the 20th century, things took a turn for the worst for poor Ireland.
- By mid 19th century, corn laws were changed allowing for cheaper grain imports to the US. The Coffey still (which I will come back to), which allowed for cheaper, quicker distillation of grains, which in turn led to the rise of blended whiskey (which i will again come back to). More dramatically, was the the first great war, during which 200K irishman fought and nearly 50K died. This was was immediately followed by the Irish War for Independence, and then Irish Civil War, and the subsequent Anglo-Irish trade war. This unfortunate succession of events led to a devastated Irish economy. Now there is a whole HPC talk waiting for someone to do right there! This, combined with American prohibition and the Great depression, left Ireland a bankrupted country with nowhere to export their precious liquid. Irish distilleries shuttered their doors almost all at once.
- Now, a funny thing happened around that same time, the Phylloxera bug, a pest of commercial grapevines, wrecked havoc on French wine, and subsequently the cognac industry.
- This multitude of factors led to a void that Scottish whiskey, which had been around almost as long as Irish whiskey, was eager to fill. In the first part of the 20th century, Scotland surpassed Ireland as the worlds largest whiskey producer, and sadly only 3 distilleries survived in Ireland.
- Now, the history of bourbon is a bit more sketchy. Distillation methods for whiskey were
 probably brought to Kentucky by Irish-Scottish settlers. Elijah Craig, famed Kentucky Baptist
 Minister and entrepreneur has often been cited as creating bourbon (the Father of Bourbon),
 however, this is disputed. We do know that the first licensed bourbon distillery was Evan
 Williams in 1783
- Meanwhile, Irish whiskey has had a huge resurgence over the past 20 years, with now 16 operating distilleries and many more in the works
- So now that we've got the history out of the way, let's actually get into the fun part. What is whiskey? Some key things go into whisky, as there are several different varieties, without

any universal definition. What they have in common is that they are all distilled from a grain mash. Various grains can be used, the most popular being barley, corn, rye, and wheat, and various strains of rice; with each grain providing a particular flavor profile. These may or may not be malted, or germinated to develop the natural enzymes, sugars and proteins that can be used by yeast for fermentation. While other spirits such as gin or vodka are often distilled from fermented grains, the other unifying characteristic is the barrel aging process. All whiskeys are aged in oak barrels, which can be new or used, which imparts additional flavor into the spirit. SO, grain gets malted, dried, fermented, essentially making beer. This beer then get distilled. Generally in Pot stills, rather than column still, which i can talk about later if we have time. Generally, whiskey is distilled 2-3 Times, to maintain the flavor profile, rather than up to several hundred times, as in vodka. So those are the basics.

- Scotch
- When we think of premium whisky, we think of scotch. All scotch must be barrel aged for a minimum of three years.
- Important to know that there are two types of scotch, single malt, and blended scotch. Single malt scotch must come from the same distillery. Not necessarily the same batch, but the same distillery. And can be various ages. All single malt scotch comes from malted barley. Blended scotch can come from multiple distilleries and can come from multiple grains such as cheaper corn.
- In general, premium scotch has been aged for decades, is free of additives such as caramel coloring, and has not been chill filtered, to essentially remove cloudiness or particles.
 Compare this to Johnny Walker, which is a blend, that creates a specific brand and look, and definitely adds coloring and filters their product so there are no impurities.
- Now All scotch must be aged for at least 3 years. There are no regulations on barrel types. The vast majority of Scotch distilleries, however, will use used bourbon barrels. Now we will get to bourbon in a second. Second, but by law, bourbon barrels must be new American oak barrels and can only be used once. The more times you use a barrel, the less flavor it imparts. So to protect the integrity of bourbon, by law, barrels can be used only once. No such law with scotch. The the market for premium used bourbon barrels is HUGE. Plus, American Oak is much highly sought after than European oak, as it imparts a sweeter flavor, and is more porous, allowing for more interaction between the wood and the spirit. The finest example of theirs partnership is the Laphroaig distillery in Scotland, and Makers Mark in Kentucky.
- But scotch makers are not restricted to bourbon barrels. Many have experiments with wine barrels, rum casks, etc, and the whiskey can be transferred between barrels for additional aging or finishing.
- One such example is Macallan, which no doubt at one point anyway, had the finest reputation of all scotch whiskey. They in fact, hand pick their American oak barrels from lumber yards in the American Northwest, but them, and lease them to Spanish Sherry makers, who then send them back to Macallan. Now sherry has declined in popularity but the demand for used sherry barrels has not, which continues to drive the sherry market. This sweet desert wine imparts a gorgeous desert-like flavor to Macallan and other Sherry whiskeys.
- The last point I want to mention about Scotch is the regions. Each region in Scotland that procured whiskey. These include the highlands, which are heavily influenced by the mainland soil, the Lowlands, the islands, which take on a briny, sea salt characteristic,

Speyside, the most famous region, in which over half of all distilleries are located. They take their water from the river Spey, the 3rd largest river in Sotlland, (thats the Easter Etches house on the Macallan estate, Built for John Grant, and in generally have the most delicate and sweetest profile of all scotch. Lastly is the next famous region, the Islay region. ALL whiskeys produced in Islay are peated, meaning, they the malted barley is fired dried using peat moss from Scotlands ancient peat bogs. Peat is this partially decayed plant matter that slowly accumulates in the marsh like areas in Scotland and Ireland, and takes thousands of years to mature. This peat must be carefully harvested, and is burned to dry the malted barley. This leaves a very characteristic, deep phenolic Smokey characteristic on the whiskey. Almost like super charged bbq potato chips. It can be quite strong. Not recommended for the the beginning Scotch drinker, but inevitably, once you acquire a taste for it, you will find there is absolutely nothing else quite like it.

- America
- America is well known for its two dominant varieties of whiskey, with a third subset. Bourbon is the most famous of them all. By law, it must be made in the US, not necessarily Kentucky, although that is where the major of the larger distilleries reside, and 95% of the bourbon is made, it must be comprised of at least 51% corn, leaving the rest up the the master distillers to play with, and it MUST be aged in charred new American oak barrels, which cannot be reused. Bourbon aged less than 4 years must include so on the label, and in order to be called STRAIGHT bourbon, it must be aged at least 2 years. Lastly, it can be bottled in bond, meaning that it comes form a single distillery, in a single season, and aged for at least 4 years, and bottled at 100 proof, and stored in a government controlled warehouse. Now, because of the only 51% corn requirement, so many varieties and flavors have emerged. Rye adds a s-iciness to it, wheat softens the alcohol. EH Taylor won WWOTY in 2018. Now, Kentucky is hot. Bourbon matures faster and interacts with the barrels more than in Scotland, where its cold. Newtons laws of thermodynamics for the physicists in the room. So you generally don't see bourbons matured in barrels for as long as you see them in Scotland. Most comes from Kentucky, because of marketing these days, but Kentucky does have a great humid climate, Limestone filtered water, and the infrastructure to make great bourbon.
- Rye is the next most famous American whiskey (my apologies to the Canadians). This is old school American whiskey, this is what the cowboys in the old west would drink when the walked into a bar and asked for a whiskey. Same laws in America apply, 51% rye, new charred oak barrels, same age requirements. Rye is great in cocktails, as the spiciness can cut through the other ingredients, particularly the sweeteners, and give you a nice balanced flavor. Bookers Rye won WWOTY in 2017.
- The final subcategory if Tennessee whiskey. This is essentially bourbon that was distilled in Tennessee, and after the distillation process, charcoal filtered 1-2 times to remove impurities and impart an incredibly smooth characteristic to it. Think Jack Daniels, with its ultra sweet flavor that is ridiculously smooth for a such a young alcohol, only 4 years old. Remember, aging in the barrel softens the alcohol, it's much smoother and more flavorful the longer you age it ("smooth as Tennessee whiskey").
- Irish Whiskey
- In the 80s, Irish whiskey began to make a slow steady comeback. Since the new millennium, the demand for Irish whiskey has skyrocketed. Presently, there is a large

variants of Irish whiskey. You have blended, and single malt, similar to scotch. But you also have the popular single pot still whiskey. This is Unique to Irish whiskey. In 1785, the Brits imposed a malt tax on the Irish, who retaliated by producing a mix of whisky that was half malted and half un malted or un-germinated to maintain their profits. This results in a more earthy flavor and less sweetness, as the sugars and enzymes are less developed by the germination process. So you will see that in a lot of Irish whiskeys nowadays. Many of the blended Irish whiskeys are triple distilled, for a smoother drink, at the cost of complexity of flavor, however, many of the single malts or single pot stills are still only double distilled.

- Canadian Whiskey
- One of the other traditional powers in the whiskey world is Canada. Now alluded to Canada earlier when talking about Rye whiskey, as most Canadian whiskey has a distinct rye component to it. The laws are more lax in Canada, and corn is still the most commonly used grain, but being a cold climate country, their rye is said to impart a lighter, smoother flavor profile to their whiskey, and most of these ended up getting blended to appeal to the US mass market. For many years, Canadian Whisky was the stepbrother to Bourbon and Scotch, however, in 2016, Crown Royal Norther Harvest Rye won world whiskey of the year in Jim Murray's whiskey bible, one of the more prestigious whiskey awards, which sparked a huge surge in Canadian whiskey sales. And it's hard to find a better bottle for \$30, if you can find it.
- Japanese whiskey
- The newest player on the whiskey market, and one we need to talk about. I'm sure many of you know the Japanese culture must better than I do, but one thing that I do know, is that when the Japanese do something, they go all out, and generally do not take any shortcuts. In the 1920s, the first distillery was opened in Yamazaki, near Kyoto. Shinjiro Torii, a pharmaceutical salesman, was the founder, and hired Masataka Taketsuru, a sake maker to Learn the art of Scotch whiskey. He studied at the Longmorn and Springbank distilleries in Scotland for several years before returning to Japan, and eventually established his own distillery, the Nikka distillery. Subsequently the Yamazaki was acquired by the Suntory group, which was featured in the Bill Murray movie Lost In Translation.
- Early on, Japanese whiskey was entirely domestic, with the intent on making a carbon copy of Scotch. They even went so far as to import water from Scotland. Eventually, the demand and the quality grew, and it's own uniqueness started to show through. There are now 9 distilleries in Japan, and one must be an apprentice for up to 25 years before they earn the tile of Master Distiller. Japanese do not like to import cheap grains, like Scotland, and instead relies on its domestic grains, resulting in unique blended whiskeys, that have less variation and behave more like single malts. Now, while the demand for worldwide whiskey has grown, companies like Glenlivet and Macallan in Scotland has upped their production, meaning there is less whiskey to sit in barrels for longer years, since people want it now. This has invariably resulted in a slight dip in quality. Japan, however, has resisted this temptation, and their production is less, however, their quality is highest. It is quickly becoming the world standard for premium, quality whiskey. In fact, in 2015, Yamazaki Sherry Cask won the world whiskey of the year, and their reputation continues to grow.
- The Future
- So hopefully now everyone has a firm grasp on the fundamentals of whiskey.

- Now for the last few minutes we have I'd like to talk abut why this industry is experiencing such massive growth. In Kentucky alone, Bourbon is now a 9 billion dollar industry, with 3 billion in revenue. while Scotch is a 7 billion dollar industry and the third biggest industry in Scotland, while sales have exploded over 40% in the past 5 years alone. This is phenomenal growth. Back in the 80s and 90s, Bourbon would sit on the shelves for years. The famed pappy van winkle would be as easy to find on the shelves as Jim Beam. Now the Pappy van Winkle 23yr sells for several thousands of dollars. Impossible to find on the shelves.
- People are flocking to whiskey these days. It's finally passed vodka in terms of US spirit sales. Vodka, which is cheaper to produce, and was immensely popular in the 80s and 90s, was the drink of choice of James Bond, which made it a favorite of the baby boomers, and with it's various flavored varieties was marketed heavily towards women, has seen a steep decline in growth.
- So why is it so popular? Well, our society is becoming ever so disconnected. I called the credit reporting agency the other day. I talked to a robot for 10 minutes before getting transferred to a human in another country, who eventually transferred me to a human in Washington. Disconnected society. We order pizza on the internet without ever interacting with someone. However, even within the multinational corporations, whiskey still requires some of the same techniques that it did centuries ago. Trees that produce the Barrels must planted, nurtured for decades, then selected in advance. The grains must be germinated, grown, and fermented, then distilled, sometimes in small batches. The product must be tasted, stored in barrels that are aged in wear houses for years, checked regularly by the master distiller, rotated to different parts of the wear House based on heat and humidity, and transferred to additional barrels to finish the aging process. There is a lot of work that must go into this. There are a lot of hands that touch that whiskey before it gets poured into you glass. In this disconnected society, Whiskey reminds us that perfection cannot be obtained by taking shortcuts. Similar to the craft beer craze, a spirit that is essentially hand made, in small batches, seems a lot more satisfying. The attention to detail. The process. It reminds us of who we are, of what we are capable of. It's natural, its locally made. Like fine art, or a hand crafted piece of furniture. It offers an experience like no other. Its an experience.
- Barley or grain is soaked kick start the germination or malting process. Then the barley is traditionally spread on a malting floor by men using shovels for a week to complete the germination process. Then kiln dried. At this point you may add peat into the drying mix, which are bricks of ancient decayed vegetation, which has taken tens of thousands of years to be made. This product is then coarsely ground into a flour and mixed with hot water, then transferred to a vessel where yeast is then added. This mash is then fermented for several days with proprietary top secret yeast strands that are millions of years old, and with strands of yeast that are otherwise extinct or impossible to replicate. Then this wash, as they call it, is transferred to the Stills, where it is boiled and distilled in a pot or column still. Then distilled again. This product, called white dog, is then transferred to the barrels that were hand picked from American Oak Forrests. Trees that have been maintained for decades, sometimes hundreds of years, and hand selected by master coopers, before the trees were even cut down, and hand cut into precisely the right shape, held in place with hand forged iron ferrules, and then charred to release the natural sugars inside. Then, these barrels must first be filed with bourbon for several years or Sherry wine, and aged for years in a warehouse, before beginning their second life. Now, these barrels are filled for the second time with our white dog, and they are carefully transferred to another aging warehouse, in a

far away land in another continent, with surprising little humidity and temperature control. instead often relying on the natural environment of Kentucky, Scotland, Japan or Canada to provide those unique aging characteristics. They must be regularly rotated, and often moved to other parts of the warehouse which are warmer or cooler, depending on the master distillers strategic plan. It may be then transferred to another barrel for additional finishing, such as barrels that housed rum rom Costa Rica, Puerto Rico or Jamaica, Again, they must be tasted regularly until it is deemed ready for use. It is then mixed with other whiskey to create a blend, or mixed with its siblings from within the warehouse to create the perfect drink. Think about that process, how many man hours go into that. How many lines that have to intersect to create something simple as a drink. How many years did these processes take. How many families are fed by this industry. How many centuries of this skill, that you cannot learn in a book, that have been passed down from generation to generation. This simply cannot be accomplished with robots, machines, or computers. This requires human skill. This is something that human beings, even in our disconnected society, still have the ability to create. I absolutely love that. I think of that process every time I enjoy a glass. It really is an experience like no other.

- So, what do I recommend you start with? Start with Bourbon. It's sweet and delicious. Start with Blanton's. It's not cheap, but its readily available, and is hands down one of the best bourbons in the world, and is permanently in my top 5 bourbons. If you compare it to say, Jim Beam, or Jack Daniels, you will see a HUGE jump in quality. If you want something local, try Journeyman distillery. Copper craft is good, but still quite young. Better stuff to come from them down the line. If you want to start with Scotch, start with a Speysider. Start with Glenmorangie 10. Very drinkable, very light. Really good. Make your way to Macallan 12. Much more intense flavors, and more desert-like. Stay with Macallan for a long time while you try others such as Glendronach and Balvenie. Next, when you ready to try something smokey or peaty, start with Talisker (my personal favorite) or Highland park. Before you move onto anything more peated than that, give me a call, and we will talk.
- As for Irish whiskies, give Redbreast a try. It's a single pot still Irish whiskey or Green Spot if you can find it. Anything you can find from Japan, don't think, just buy it!