

1. I created the knowledge base by first manually choosing 10 important terms, then going through the 15 files I created sentence by sentence. If the sentence contained one of the important terms, then that sentence would be stored in a dictionary of arrays, with keys being the term and values of the array being sentences. For example, dict['Dallas'] = ['sentence1', 'sentence2', ...].

My topic was 'Dallas', and my top 10 terms were: ["city", "texas", "largest", "park", "district", "population", "station", "river", "north", "downtown"].

### Example screenshots of the knowledge base dictionary:

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largest: According to the Pew Research Center, evangelical Protestantism constituted the largest form of Protestantism in the area as of 2014.
largest: The largest single evangelical Protestant group were Baptists.
largest: The largest Baptist denomination was the Southern Baptist Convention, followed by the historically black National Baptist Convention USA.
largest: The Cathedral Santuario de la Virgen de Guadalupe in the Arts District is home to the second-largest Catholic church membership in the United States and overseas, consisting over 70 parishes in the Dallas Diocese.
largest: Dallas's Jewish population of 50,000-75,000 is the largest of any city in Texas.
largest: As Dallas grew and technology developed, cotton became its boon and by 1900, Dallas was the largest inland cotton market in the world, becoming a leader in cotton gin machinery manufacturing.
largest: Several of Downtown Dallas' largest buildings are the fruit of this boom, but over-speculation, the savings and loan crisis and an oil bust brought the 1980s building boom to an end for Dallas as well as its sister city Houston.
largest: Dallas led Texas's largest cities in Forbes magazine's 2015 ranking of "The Best Place for Business and Careers".
largest: The Dallas-Fort Worth area has one of the largest concentrations of corporate headquarters for publicly traded companies in the United States.
largest: As of 2022, Dallas-Fort Worth represents the second-largest concentration of Fortune 500 headquarters in Texas and fourth-largest in the United States, behind the metropolitan areas of Houston (24), Chicago (35) and New York (62).
largest: In 2008, AT&T relocated their headquarters to Downtown Dallas; AT&T is the largest telecommunications company in the world and was the ninth largest company in the nation by revenue for 2017.
largest: In October 2016, Jacobs Engineering, one of the world's largest engineering companies, relocated from Pasadena, California to Downtown Dallas.
largest: Nearby Irving is home to seven Fortune 500 companies of its own, including ExxonMobil, which is the largest energy oil company in the United States by revenue and market cap, McKesson, the country's largest pharmaceutical distributor and listed at number seven overall on the 2021 Fortune 500 list, Fluor (engineering), Kimberly-Clark, Celanese, Michaels Companies, and Vistra Energy.
largest: Fort Worth is home to two Fortune 500 companies, including American Airlines, the largest airline in the world by revenue, fleet size, profit, passengers carried and revenue passenger mile and D.R. Horton, the largest homebuilder in America.
largest: Susan G. Komen for the Cure, the world's largest breast cancer organization, was founded and is headquartered in Dallas.
largest: Dallas is home of the two other major malls in North Texas, the Dallas Galleria and NorthPark Center, which is the second largest mall in Texas.
largest: Dallas is the third most popular destination for business travel in the United States, and the Kay Bailey Hutchison Convention Center is one of the largest and busiest convention centers in the country, at over 1,000,000 square feet (93,000 m2), and the world's single-largest column-free exhibit hall.
largest: Internal view of Margot and Bill Winspear Opera House Dallas Holocaust and Human Rights Museum American Airlines Center NorthPark Center Dallas Museum of Art T Nasher Sculpture Center The Texas State Fair in Fair Park The Arts District in the northern section of Downtown is home to several arts venues and is the largest contiguous arts district in the United States.
largest: Built in 1936 for the Texas Centennial Exposition world's fair, Fair Park is the world's largest collection of Art Deco exhibit buildings, art, and sculptures; Fair Park is also home to the State Fair of Texas, the largest state fair in the United States.
largest: The park was home to an amusement park, a large pool, waterslides, the world's largest skating rink, and three theaters, the largest being the 2,500-seat Casino Theater.
largest: As part of the ongoing Trinity River Project, the Great Trinity Forest, at 6,000 acres (24 km2), is the largest urban hardwood forest in the United States and is part of the largest urban park in the United States.
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park: With the opening of Victory Park, WFAA began hosting an annual New Year's Eve celebration in AT&T Plaza that the television station hoped would reminisce of celebrations in New York's Times Square; on New Year's Eve 2011 set a new record of 32,000 people in attendance.
park: FC Dallas of Major League Soccer (MLS) play in Frisco at Toyota Stadium (formerly FC Dallas Stadium and Pizza Hut Park), a stadium that opened in 2005.
park: All home games are played at the College Park Center in Arlington.
park: The Dallas Renegades are a professional football team in the relaunched XFL that plays their home games at Globe Life Park, the former home of the Texas Rangers.
park: Although outside the city limits, the Mustangs of Southern Methodist University are in the enclave of University Park.
park: Dallas maintains and operates 486 parks on 21,000 acres (85 km2) of parkland.
park: The city's parks contain 17 separate lakes, including White Rock and Bachman lakes, spanning a total of 4,400 acres (17.81 km2).
park: Dallas's flagship park is Fair Park.
park: Built in 1936 for the Texas Centennial Exposition world's fair, Fair Park is the world's largest collection of Art Deco exhibit buildings, art, and sculptures; Fair Park is also home to the State Fair of Texas, the largest state fair in the United States.
park: Named after Klyde Warren, the young son of billionaire Kelcy Warren, Klyde Warren Park was built above Woodall Rodgers Freeway and connects Uptown and Downtown, specifically the Arts District.
park: Klyde Warren Park is home to countless amenities, including an amphitheater, jogging trails, a children's park, My Best Friend's Park (dog park), a putting green, croquet, ping pong, chess, an outdoor library, and two restaurants: Savor and Relish.
park: Food trucks give hungry people another option of dining and are lined along the park's Downtown side.
park: Klyde Warren Park is home to a free trolley stop on Olive St., which riders can connect to Downtown, McKinney Avenue, and West Village.
park: Built in 1913, Turtle Creek Parkway park is a 23.7-acre (9.6 ha) linear park in between Turtle Creek and Turtle Creek Boulevard in the aptly named Turtle Creek neighborhood.
park: The park is across Turtle Creek from Kalita Humphreys Theater, designed by Frank Lloyd Wright.
park: Opened on July 4, 1906, Lake Cliff Park was called "the Southwest's Greatest Playground".
park: The park was home to an amusement park, a large pool, waterslides, the world's largest skating rink, and three theaters, the largest being the 2,500-seat Casino Theater.
park: After the streetcar bridge that brought most of the park visitors collapsed, Lake Cliff Park was sold.
park: In 1935, Dallas purchased 36 acres (15 ha) from John Cole's estate to develop Reverchon Park.
park: Reverchon Park was named after botanist Julien Reverchon, who left France to live in the La Reunion colony, which was founded in the mid-1800s and was situated in present-day West Dallas.
park: Reverchon Park was planned to be the crown jewel of the Dallas park system and was even referred to as the "Central Park" of Dallas.
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station: After the discontinuance of the "Big D NYE" festivities a few years later, a new end-of-year event was started downtown, with a big fireworks show put on at Reunion Tower, which has since aired on KXAS and other TV stations around the state and region.

station: These schools include: Dallas has several local newspapers, magazines, television stations and radio stations that serve the Dallas-Fort Worth metroplex, which is the fifth-largest media market in the United States.

station: Area television stations affiliated with the major broadcasting networks (network 0&0's highlighted in bold) include KDFW 4 (Fox), KXAS 5 (NBC), WFAA 8 (ABC) (which for many years was owned by Belo alongside the Morning News), KTVT 11 (CBS), KERA 13 (PBS), KUVN 23 (UNI), KDFI 27 (MNTV), KDAF 33 (The CW), and KXTX 39 (TMJ).

station: KTXA-21 is an independent station formerly affiliated with the now-defunct UPN network.

station: Over 101 radio stations operate within range of Dallas.

station: The city of Dallas operates WRR 101.1 FM, the area's main classical music station, from city offices in Fair Park.

station: Its original sister station, licensed as WRR-AM in 1921, is the oldest commercially operated radio station in Texas and the second-oldest in the United States, after KDKA (AM) in Pittsburgh.

station: Because of the city's central geographical position and lack of nearby mountainous terrain, high-power class A medium-wave stations KRLD and WBAP can broadcast as far as southern Canada at night and can be used for emergency messages when broadcasting is down in other major metropolitan areas in the United States.

station: Hispanic Broadcasting Corporation (HBC), the largest company in the Spanish-language radio station business, is based in Dallas.

station: Dallas's oldest remaining fire station building still stands at the corner of McKinney Ave. and Leonard and was built in 1892.

station: Today, the system is the seventh-busiest light rail system in the country with approximately 55 stations on 72 miles (116 km) of light rail, and 10 stations on 35 miles (56 km) of commuter rail.

station: The Red and Blue Lines are conjoined between 8th & Corinth Station in Oak Cliff through Mockingbird Station in North Dallas.

station: The two lines service Cityplace Station.

station: The Orange Line initially operated as a peak-service line providing extra capacity on portions of the Green and Red Lines (Bachman Station on the Green Line, through the Downtown transit mall, to Parker Road Station on the Red Line making a "U"-shape).

station: However, the first stage of the Orange Line opened on December 6, 2010, extending its west end from Bachman to Belt Line Station in Irving.

station: DFW Airport Station is the terminus for the Orange Line and connects Skylink.

station: The Oak Cliff Transit Authority took the lead with leaders envisioning a streetcar line that would link Union Station and the Dallas Convention Center in Downtown to Oak Cliff, Methodist Medical Center, and the Bishop Arts District via the Houston Street Viaduct.

station: In addition to light rail, Amtrak's Texas Eagle also serves Union Station, providing daily service east to Chicago and west to San Antonio, and thrice-weekly service west to Los Angeles.

station: The Trinity Rail Express terminates at Union Station and T&P Station.

population: "By 2050, it is projected that 89 percent of the U.S. population and 68 percent of the world population will live in urban areas," says Office of Environmental Quality and Sustainability Director Carlos Evans.

population: With a 2020 census population of 1,304,379, it is the ninth-most populous city in the U.S. and the third-largest city in Texas after Houston and San Antonio.

population: The city has a population from a myriad of ethnic and religious backgrounds and one of the largest LGBT communities in the U.S. WalletHub named Dallas the fifth-most diverse city in the United States in 2018.

## 2. Dialog 1:

Bot: Hello! I'm Dolly and I'm here to tell you all about Dallas. What's your name?

User: I'm John, and I'm visiting Dallas. What attractions do you recommend?

Bot: Of course, John. Dallas is home of the two other major malls in North Texas, the Dallas Galleria and NorthPark Center, which is the second largest mall in Texas.

User: I will check that out. I enjoy outdoor activities. How is the weather there in the summer?

Bot: It is often sunny and hot outside.

User: I like taking walks, are there any parks in the area?

Bot: Built in 1913, Turtle Creek Parkway park is a 23.7-acre (9.6 ha) linear park in between Turtle Creek and Turtle Creek Boulevard in the aptly named Turtle Creek neighborhood.

## Dialog 2:

Bot: Hello! I'm Dolly, and I'm here to tell you all about Dallas. What's your name?

User: I'm John.

Bot: Hello John, what would you like to know about Dallas?

User: What is the population of Dallas?

Bot: With a 2020 census population of 1,304,379, it is the ninth-most populous city in the U.S. and the third-largest city in Texas after Houston and San Antonio. Would you like to know more?

User: Sure

Bot: Its metropolitan area encompasses one-quarter of the population of Texas, and is the largest in the Southern U.S. and Texas followed by the Greater Houston metropolitan area.