

How rankings were determined: the main factor was the sheer amount of content that the website had to offer. This was not only the number of pages or links associated but also how in-depth and rich the content was. If two sites were very similar in both ways, then I went off of which had better ease of access to locate various topics or information. Lastly, the user experience was also important - how well the site was made, easy to understand / locate topics, and overall pleasant to look at. The top websites have the most content and are easiest to understand and navigate, while the bottom will have less content and may have a worse user experience.

1. Tutorials Point, located at <https://www.tutorialspoint.com/dwh/index.htm>. This site has tips from easy to more advanced topics related to data warehousing. It is easy to follow as the pages on the left hand side of the site follow from general, broad, and basic overview concepts narrowing down into specific and difficult concepts. This site is useful for both new people with no understanding of data warehousing, but also people who need help with the more complicated topics. They also contain a section for potential interview questions which most sites do not have, along with future aspects: defining how data warehousing is subject to change over time.

2. EW Solutions, located at <https://www.ewsolutions.com/data-warehouse-standards/>. This site contains multiple categories for database related topics such as data management, modeling / architecture, security, or quality assurance. Each of these categories contains multiple sections which further contains a multitude of articles to describe and define each topic. Most categories have a “best practices” section with multiple articles describing the best practices in different levels of detail. The data warehousing category specifically contains sections for analytics, architecture, assessments, best practices, and ETL.

3. Zentut, located at <https://www.zentut.com/>, contains various tutorials and articles on SQL, data warehousing, data mining, and various related languages. The data warehouse section contains topics such as dimensional modeling, architecture, star schema, and fact table information. It shows examples of SQL diagrams and snippets of SQL statements to help get a better understanding of how topics work along with large diagrams that help visualize the topic. Each topic gives a nice summary at the top of the article to help determine if it is something that will be helpful to read.

4. Panoply, located at <https://panoply.io/data-warehouse-guide/>, contains information about data warehouses, ETL, Redshift, and BigQuery. This site contains a lot of general information about the differences between data warehouses, data marts, databases, and data lakes to help differentiate between them all along with information on data mining and business intelligence. I found the Redshift section interesting as I did not know anything about it - it is a massive data warehouse in the cloud hosted by Amazon. I felt the same about the BigQuery section which seems like Google's equivalent of Redshift.

5. Guru 99, located at <https://www.guru99.com/data-warehousing-tutorial.html>, contains a lot of information on data warehousing and architecture. What is unique about this site is they have a section fully based on testing - ways to test a database, ETL, or quality assurance. They contain basic tutorials on various topics along with videos to follow along with. Another unique aspect is the live projects which give you real life projects acting as if you were in a real corporate development environment. There aren't any specific data warehousing projects but they are still neat such as projects working with automation, SQL injection / security, and data driven frameworks.

6. JavaTPoint, located at <https://www.javatpoint.com/data-warehouse>, contains a ton of tutorials and examples on data warehousing, OLAP, dimensional modeling, and schemas as a part of their 'data warehouse' section. There are many images and diagrams depicting each step of the way for each explanation along with easy to follow pages - scrolling through every tutorial and clicking the next at the bottom of the page for endless content. This could be very helpful for this course as all of the topics are broken down and built from basic to more complex as the tutorials go on.

7. Last Night Study, located at <http://www.lastnightstudy.com/Show?id=48/Data-Warehouse-Architecture>, contains various topics related to data warehousing, ETL, OLAP, data mining, and others. This site does not have as much information as the others higher up but is still helpful for a quick general overview of its various topics. This site shows related topics on the left side along with on the bottom when you reach the end of a topic to jump to a new one. There are a lot of images accompanying the explanations. There may be less topics but they give a much broader view on each topic to help people achieve just a basic and beginner level understanding of them all.

8. 1 Key Data, located at <https://www.1keydata.com/>, contains a section for data warehousing and business intelligence along with a database normalization section. The data warehousing section contains various concepts such as the various data

models, star schema vs snowflake schema, data integrity, and OLAP. A unique part of this site is the Business Intelligence Conferences section which lists some various conferences available this year such as the data science convention. Another is a section defining why data warehouses can fail which also includes information based on the author's personal experience.

9. Data Warehouse Information Center, located at <https://datawarehouseinfo.com/>. This site has much less information than others on this list but is still helpful. They include multiple sections for what data warehouses are and how to build them, but also a section on data warehouse automation which I had not seen on the other sites. This site is also for promoting their software but still provides valuable tabs along with a 'technical resources' section linking to their blog posts, FAQs, and others. The blog posts section actually contained the most useful information to me but was somewhat difficult to find.

10. KDnuggets, located at <https://www.kdnuggets.com/tag/data-warehouse>, contains many articles and blog posts about technology. Their data warehouse tag contains 30 various articles about data warehousing, ETL, data lakes, and others. This is at the bottom of my list as the website is kind of ugly to look at and hard to filter through. I do like how there are ways to sort by tag so not only is there the data warehouse tag but also big data, data lakes, machine learning, ETL, and others that you can sort by to find articles and blog posts on whichever topic is most relevant.