

NOTE: Most are links to Gainlo.co . The Gainlo blog is a good place to read about system design case studies

System Design Case Studies

URL Shortener

- <http://stackoverflow.com/questions/742013/how-to-code-a-url-shortener>
(<http://stackoverflow.com/questions/742013/how-to-code-a-url-shortener>)
- <http://blog.gainlo.co/index.php/2016/03/08/system-design-interview-question-create-tinyurl-system/> (<http://blog.gainlo.co/index.php/2016/03/08/system-design-interview-question-create-tinyurl-system/>)
- <https://www.interviewcake.com/question/python/url-shortener>
(<https://www.interviewcake.com/question/python/url-shortener>)

Collaborative Editor

- <http://blog.gainlo.co/index.php/2016/03/22/system-design-interview-question-how-to-design-google-docs/> (<http://blog.gainlo.co/index.php/2016/03/22/system-design-interview-question-how-to-design-google-docs/>)

Photo Sharing App

- <http://blog.gainlo.co/index.php/2016/03/01/system-design-interview-question-create-a-photo-sharing-app/> (<http://blog.gainlo.co/index.php/2016/03/01/system-design-interview-question-create-a-photo-sharing-app/>)

Social Network Feed

- <http://blog.gainlo.co/index.php/2016/02/17/system-design-interview-question-how-to-design-twitter-part-1/> (<http://blog.gainlo.co/index.php/2016/02/17/system-design-interview-question-how-to-design-twitter-part-1/>)
- <http://blog.gainlo.co/index.php/2016/02/24/system-design-interview-question-how-to-design-twitter-part-2/> (<http://blog.gainlo.co/index.php/2016/02/24/system-design-interview-question-how-to-design-twitter-part-2/>)
- <http://blog.gainlo.co/index.php/2016/03/29/design-news-feed-system-part-1-system-design-interview-questions/> (<http://blog.gainlo.co/index.php/2016/03/29/design-news-feed-system-part-1-system-design-interview-questions/>)

Trending Algorithm

- <http://blog.gainlo.co/index.php/2016/05/03/how-to-design-a-trending-algorithm-for-twitter/> (<http://blog.gainlo.co/index.php/2016/05/03/how-to-design-a-trending-algorithm-for-twitter/>)

Facebook Chat

- <http://blog.gainlo.co/index.php/2016/04/19/design-facebook-chat-function/>
(<http://blog.gainlo.co/index.php/2016/04/19/design-facebook-chat-function/>)

Key Value Store

- <http://blog.gainlo.co/index.php/2016/06/14/design-a-key-value-store-part-i/>
(<http://blog.gainlo.co/index.php/2016/06/14/design-a-key-value-store-part-i/>)
- <http://blog.gainlo.co/index.php/2016/06/21/design-key-value-store-part-ii/>
(<http://blog.gainlo.co/index.php/2016/06/21/design-key-value-store-part-ii/>)

Recommendation System

- <http://blog.gainlo.co/index.php/2016/05/24/design-a-recommendation-system/>
(<http://blog.gainlo.co/index.php/2016/05/24/design-a-recommendation-system/>)

Cache System

- <http://blog.gainlo.co/index.php/2016/05/17/design-a-cache-system/>
(<http://blog.gainlo.co/index.php/2016/05/17/design-a-cache-system/>)

E-commerce Website

- <http://blog.gainlo.co/index.php/2016/08/22/design-ecommerce-website-part/>
(<http://blog.gainlo.co/index.php/2016/08/22/design-ecommerce-website-part/>)
- <http://blog.gainlo.co/index.php/2016/08/28/design-ecommerce-website-part-ii/>
(<http://blog.gainlo.co/index.php/2016/08/28/design-ecommerce-website-part-ii/>)

Web Crawler

- <http://blog.gainlo.co/index.php/2016/06/29/build-web-crawler/>
(<http://blog.gainlo.co/index.php/2016/06/29/build-web-crawler/>)
- <http://www.makeuseof.com/tag/how-do-search-engines-work-makeuseof-explains/>
(<http://www.makeuseof.com/tag/how-do-search-engines-work-makeuseof-explains/>)
- <https://www.quora.com/How-can-I-build-a-web-crawler-from-scratch/answer/Chris-Heller>
(<https://www.quora.com/How-can-I-build-a-web-crawler-from-scratch/answer/Chris-Heller>)

YouTube

- <http://blog.gainlo.co/index.php/2016/10/22/design-youtube-part/>
(<http://blog.gainlo.co/index.php/2016/10/22/design-youtube-part/>)
- <http://blog.gainlo.co/index.php/2016/11/04/design-youtube-part-ii/>
(<http://blog.gainlo.co/index.php/2016/11/04/design-youtube-part-ii/>)

Hit Counter

- <http://blog.gainlo.co/index.php/2016/09/12/dropbox-interview-design-hit-counter/>
(<http://blog.gainlo.co/index.php/2016/09/12/dropbox-interview-design-hit-counter/>)