Our ArmGram website is the Armenian version of Grammarly that checks and suggests the user change the words where grammatical or spelling errors have occurred.

The website creating process included three main steps: Web Scraping, Logical Code, and Website Design.

Web Scraping has been done with the help of the requests and BeautifulSoup libraries. Its functionality was scraping all texts from Armenian websites(with no spelling errors) and splitting the texts taking only unique words. The scraping has been done from 2 websites: grapaharan.org and encyclopedia.am. From grapaharan.org we scraped all texts from all sections(Արձակ, Չափածն, և այլն). From the encyclopedia.am we scraped all texts from two encyclopedias. The splitted words were put together(again, only unique words are taken) in a massive.txt file. Overall, the file contains more than 435,000 words(but there are a lot of արևմտահայերեն words as well).

The logical code is based on seven functions that are adding punctuations, capitalizing the sentences, suggesting to change demonstrative pronouns and շաղկապները when it occurs more than two times in a sentence and the function that is suggesting to use other synonyms of the particular word. For this synonym part, we did scraping as well. From the website http://dictionary.advandcash.biz we scraped all words and, using RegEx, splitted them, and put each word with its synonymous ones in a list.

The Website is written with the help of the Streamlit library. In it we added title, a text area, a botton and made the size corresponding to the need of the text inputed and added our logo.