

The goal of this thesis was to implement *Faker* software library capable of filling instances of user defined classes with pseudorandom content and targeting the .NET platform. Requirements the *Faker* library should fulfill were based on the analysis of existing implementations of similar software libraries for various programming languages.

*Xoshiro256\*\** PRNG algorithm was chosen to be used as the source of 64-bit long pseudorandom words. *Faker* uses pseudorandom words produced by *xoshiro256\*\** to generate pseudorandom values of all basic data types available in C# programming language. Furthermore, a *Source Generator* is used to ensure, that the *Faker* can be easily extended by additional categories of pseudorandom values such as first names, last names or addresses.

The *Faker* allows to set sets of rules describing a required structure of pseudorandom data and it is subsequently capable of generating large amounts of the pseudorandom content with the specified structure. The emphasis was put on making the rule setting API as intuitive as possible and ensuring that the majority of syntactic mistakes made while stating rules is detected at compile time.