Classification of syntactically meaningful sentences is a very useful task for the applications of natural language processing, for example machine translation, search engines and question answering systems. The theoretical linguistic research considers the language to be a system of layers. In our project, a term 'to-be-meaningful' will be specified with respect to this point of view. Namely, the morphological and syntactic layers will be considered. A knowledge-based algorithm classifying a string of Czech words being either meaningful or meaningless will be proposed and implemented. Before being classified, strings will be pre-processed by the external modules. Czech will be used as the object language.