Product descriptions are an important part of product presentation in e-commerce. This bachelor thesis explores the possibilities of using language models based on the Transformer architecture to generate product descriptions based on textual product information. Data from a real ecommerce store was used and three different approaches were tested during the work. Fine-tuning of the GPT2 small Czech model, using the Mistral model with the translation of its inputs and outputs into English and directly using Chat-GPT on the Czech data. A combination of automated metrics and human moderation was used to evaluate the generated texts. The result is a clear ranking of these approaches (ChatGPT, Mistral, GPT2 small Czech), with none proving sufficiently reliable for practical use.