The aim of this thesis is to enhance the functionality of the Dataspecer tool which primarily focuses on modeling and maintaining schemas of data structures which are based on various conceptual models. The extension allows the users of the tool to generate OpenAPI specifications for the aforementioned data structures. This thesis provides state of the art regarding the following concepts: API, REST API, API specification and OpenAPI specification. What's more it analyzes various sources and defines characteristics of a good REST API (with respect to API specifications). The developed extension facilitates generation of OpenAPI specifications that adhere to the characteristics of a good REST API.