

The goal of the thesis is to improve the existing Editor and Simulator applications that have been created by the autor as his Bachelor Thesis. Document speaks about the main aspects of bridge; about the auction and the bridge play. The whole document is based on the author's Bachelor Thesis which is frequently referenced in the document. Nevertheless, the document should be readable without any previous knowledge of author's former work.

The author is discussing his effort to create logic expressions to describe bridge hands and truths in the bridge world. These expressions are then used to construct auction conventions and whole auction systems. The author is discussing the bridge problems and presenting the improved algorithm to solve double-dummy problems. The work also describes the software from the engineering point of view and speaks about the graphic user interface of both programmes.