



Assignment of master's thesis

Title: King Karel – An Educational Programming Puzzle Game
Student: Bc. Jan Bittner
Supervisor: Ing. Jan Matoušek
Study program: Informatics
Branch / specialization: Software Engineering
Department: Department of Software Engineering
Validity: until the end of summer semester 2022/2023

Instructions

King Karel is an educational game with programming puzzles. The game aims at children and other beginners, who will playfully learn the concepts of programming and algorithms.

Within the thesis:

- Research existing similar applications and games in teaching programming.
- Analyze and compare selected technologies for development.
- Assemble application requirements and use cases, design the game itself and game logic, and write a game design document.
- Design the game architecture and user interface using software engineering methods.
- Implement a game prototype and test the application according to the design.
- Subject the prototype to thorough player testing.
- Summarize the experience gained and outline the possibilities for continuing the project.