Department of Information Systems (DIFS)	Academic year 2019/2020

Master's Thesis Specification

23053

Student: **Vasilišin Maroš, Bc.**
Programme: Information Technology   Field of study: Information Systems
Title: **Intelligent Manager of Fantasy Premier League Game**
Category: Artificial Intelligence
Assignment:

1. Get acquainted with the Fantasy Premier League game. Analyze existing tools for management and recommendation of players, summarize their advantages and disadvantages.
2. Study the principles of supervised learning.
3. Find and analyze features which affect performance of the Premier League's players in the real upcoming league rounds.
4. Design an artificial intelligence which would predict the performance of Premier League players in the upcoming league rounds. Design a web manager of the Fantasy Premier League game which would use the predictions to improve the score of the game.
5. Implement the web manager and the artificial intelligence.
6. Evaluate the usability of the web manager and results of predictions. Analyze the improvement of the game play score. Design improvements of the software.

Recommended literature:

- Machine Learning. *Coursera: Online Courses From Top Univeristies* [online]. 2019 [cit. 2019-10-13]. Available at: https://www.coursera.org/learn/machine-learning
- Premier League. *Fantasy Premier League, Official Fantasy Football Game of the Premier League* [online]. 2019 [cit. 2019-10-13]. Available at: https://fantasy.premierleague.com/

Requirements for the semestral defence:

- Items 1 to 4.

Detailed formal requirements can be found at https://www.fit.vut.cz/study/theses/

Supervisor: **Hynek Jiří, Ing., Ph.D.**
Head of Department: Kolář Dušan, doc. Dr. Ing.
Beginning of work: November 1, 2019
Submission deadline: May 20, 2020
Approval date: October 23, 2019