 **New Bulgarian University**

Bachelor Faculty

Bachelor programme Network Technologies

NETB 375 Programming Practice

AI Chess Game

Prepared by:

Vladimir Petkov, F 74482

Zdravko Donev, F ?????

Vasil Yoshev, F ?????

Atanas Chorbadjiiski, F ?????

Sofia, 2017

TODO: This will be exported as PDF when we are done !

Content:

Problem description ………………………………….……..………………….. 3

Project architecture ……………………….……………………………………. 4

The state class ………………………… ...…………………………………….. 5

The pieces …………....…….………………………………………………….. 6

The controller ………...…….………………………………………………….. 7

The pieces …………. ...…….………………………………………………….. 6

The chesschecker ………..…….……………………………………………….. 7

Graphic user Interface ...…….………………………………………………….. 8

AI …………………….………………………………………………………… 9

Project Description

Using the programming language C++ and programming framework Qt implement a computer program the famous chess game. The game must gave two modes of play: human against human (on the same computer), and human against CPU. The program must have the following features:

* fully functioning GUI that represents the chess board and all pieces;
* white piece can be moved if it is a white player's move, and the same for black pieces;
* each piece is allowed to perform only valid moves according to game rules;
* AI complexity is left to project developers, and it can be the simplest possible -- a random move.