Software lab summer term 2016
Implementation of Heuristic Algorithms for Board Games
– Assignment 2 –

Next meeting is on 24.05.2016. Upload your code and report before the deadline of 27.05.2016.

Task 1

Implement the client network protocol. It should communicate with our game server without any errors. Therefore adhere to the given network specification. However your client does not need to pay attention to the time and search depth constraints given in the server's messages yet.

Your client must reply with valid moves for both game phases. Note that bombs can be placed on any field which is not a hole. Bombs will destroy all tiles – that is turn them into holes – within the specified radius. Keep in mind that transitions are also deleted with the respecting tiles.

You will find a compiled game server in the repository `swp-i2-2016-pm` which you can use for testing.

Please bear in mind that upon completion of this exercise your client must be able to play without errors (for example by selecting random valid moves). The strict deadline for fixing problems with server communication or move validation is 04.06.2016. We may exclude groups which do not meet this strict deadline from the lab. This is because all subsequent exercises assume you have a working client.

Task 2

Implement at least one ranking function. Given a board and a player it should return a number that indicates the rating of this board from that player's perspective. Your implementation should be time efficient.