

ISTANBUL TECHNICAL UNIVERSITY
FACULTY OF COMPUTER AND INFORMATICS ENGINEERING

Project Description Form for Computer Project II Course

PROJECT 2

Assignment Date: 16.03.2016

Submission Date: 13.04.2016 11:00

Project Name: Demand Forecasting On E-commerce Data

Project Duration: 4 week

Project Workload (man-hour): 40 hour/man

Project Description:

A tetris bot will be implemented that would be submitted to the following web site that provides an environment to compete bots against each other.

<http://theaigames.com/competitions/ai-block-battle/>

The rules for the bots are given at

<http://theaigames.com/competitions/ai-block-battle/rules>

The game engine and bots communicate through serial input/output with text commands. The description of communication is given at

<http://theaigames.com/competitions/ai-block-battle/getting-started>

You can also find the starter bot (for different programming languages) that implements the initializations and some of the communication between bot&game engine. You should download and start coding on this starter bot. You can use any programming language that you want.

When you are registering to this site, write your institution as Istanbul Technical University so that I can track your groups from

<http://theaigames.com/competitions/ai-block-battle/leaderboard/institute/istanbul-technical-university/>

Remember that the bots implemented in this project will be competing against each other. Your bot score at this web site will be used for grading.

Project Weekly Plan:

1. First week, download starter bot, register on web site and upload a very simple bot that execute all possible commands (left, right etc.). Make sure that your simple bot can communicate with the game engine.
2. Second/third week, search for existing bots and their algorithms from internet. You can adapt the existing code or algorithm so that it can work with the engine.

Upload the bot as frequently as possible to see the possible performance. You can also design and implement an algorithm yourself (based on heuristic, artificial intelligence, optimization methods).

3. Final week, observe your games against other bots from <http://theaigames.com/competitions/ai-block-battle/leaderboard/global/a/> to see the mistakes and problems in your bot. Try to fix the problems and improve the algorithm.

Success Criteria: Students should have uploaded a bot that is not eliminated by the system. In addition, your bot should have a high score compared to your classmates.

Grading:

1. Web site score : %50
2. Presentation and algorithm: %50