“Space Invaders”

Game Programmer Assignment

The assignment consists of making a simple version of the classic game *Space Invaders* (<http://www.playspaceinvaders.info/>). The goal of the assignment is to assess your ability to write clean/readable production code, and your ability to put in place a simple architecture and structure that allows you to complete the task efficiently. To give you an idea of the scope, we do not expect that you need to spend more than 6 – 10 hours on the assignment.

Please contact Stanislav Tkachenko ([tkachenkos@arkadium.com](mailto:tkachenkos@arkadium.com)) with any questions.

## Expected Results

1. Source code and everything needed for compilation should be included in the delivered package. If there are specific setup steps, please document these.
2. A compiled and executable file should be attached.
3. We would like to see the assignment completed within 1 week.

## Requirements

1. The game should have at least one level. Adding levels should be easy.
2. There should be a couple of different types of enemies/aliens with different abilities.
3. The space craft should have more than one type of cannon.
4. Technologies & platforms:
   1. C#, .NET
   2. Monogame / Unity3d / Wave

### Bonus requirements

1. Visual level editor.
2. Per pixel collision detection.
3. Simple AI for aliens.
4. Bonus scores.

### Example screenshot:

