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## **HandyGames™ Recruitment Project**

### **About this document**

This document is property of HandyGames, and it is illegal to share this document with anyone else.

The task of HandyGames recruitment project is to determine your programming proficiency level and estimate how well you will fit into HandyGames team.

### **Rules of Recruitment Project**

Read these instructions carefully.

If you have any open questions after reading this document, write us an email or make a call. Make sure you will ask all questions in the first place.

Upon receiving this document, you will have about 7 days to complete your task and send finished project back for examination.

Use modern platform to develop your project. We suggest using one of following:

- Unity
- Unreal Enging
- Android Studio
- Visual Studio

You must use provided game concept and resources in your project. Implement as many required features as accurately as possible. Following game concept will count towards your score. You may expand the game with your own ideas and resources. Document your code carefully and comprehensible.

Send us your project per e-mail before the deadline expires. The complete submission must include:

- Project files for used IDE
- Well-structured and commented source code
- Project documentation in English, including explanation of your strategy and used algorithms (DOC or PDF)
- Executable file for one of following platforms: Windows, Smartphone/Tablet (Android, iOS)

Once we received your submission, we will conclude the project and start examination. Any subsequently filed submissions or parts of projects will not be considered.

We will announce our decision to you as soon as examination is completed.

## Definition of Project

Your task is to develop a simple game for PC or Smartphone following game concept and using resources provided by HandyGames.



## Game Concept

- The game is played in “landscape” screen
- The player looks at a randomly generated map consisting of 4 or 5 pathways connected from left to right, first-person perspective. (See the mock-up picture above for a general idea!)
- The player has 20 bullets, mouse-click or tapping the screen fires his gun at that position, killing anything alive there. Add simple graphical effects to illustrate this fact.
- Waves of ladybugs cross the level from left to right or right to left.
- Sometimes, Ladybugs have hostages (Characters) between them.
- Every hostage is preceded and followed by at least one ladybug.
- Waves always have two or more Ladybugs and exactly one hostage.
- Every hostage is unique, there are 5 different Characters.
- No Hostage can be on the screen twice.

- Hostages are led across the screen as long as they haven't been killed or freed.
- A hostage is freed when both the ladybug in front and behind her are dead.
- Freed hostages jump up and move to the top right of the screen where they line up, showing the player how many were freed.
- The game ends after all 20 bullets are spent, OR all hostages are dead or freed.

### **Map Generation**

- Pathways undulate (May have up and down ramps in them).
- Pathways must not have steps in them (Use appropriate east/west ramps).
- Pathways may be partially concealed by other pathways in front of them.
- Every Pathway has at least three consecutive visible, unconcealed blocks.

### **Bonus Items**

If time allows, feel free to implement additional features:

- Simple sound effects and background music
- Shootable bonus items as you see fit
- Highscore saving