User Descriptive Material

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Thank you on behalf of all UPWOOD Project Partners for accessing the UPWOOD Game! We hope you will enjoy your experience and learning from it.

WHAT IS THE UPWOOD TRAINING GAME?

The UPWOOD Training Game is an educational game developed by EXELIA in the framework of Intellectual Output 3, Task 3, of the Erasmus + Project Up-skilling construction workers in wood construction methods for energy efficient buildings (UPWOOD). UPWOOD's core objective is to address current and emerging occupational skills needs for energy efficient and innovative woodworking construction practices.

To this end, UPWOOD aims at supporting individuals (construction workers and apprentices) in acquiring and developing key competences related to wood construction methods through work-based learning VET, that will enable them to acquire new skills and become familiar with innovative woodworking construction methods and applications.

Construction workers, construction sector company employees, apprentices and as well construction sector employers will play the UPWOOD online game. The game is based on multiple branching scenarios. The player will become the story protagonist who will be asked to use their knowledge on wood properties, as well as construction methods and applications in order to decide the most appropriate way forward in each case. The game starts from the same entry point of each story. However, while this entry point is common, the choices of each player may lead to different outcomes. Decision making on behalf of the player will have an impact on the entire playing experience by determining the progress (different branches within the same scenario), dialogues and consequences within the gaming environment, thus fostering a) the sense of participation and involvement, b) the feeling of attachment to the game due to personal responsibility, and c) the degree of control on the part of the player.

Moreover, branching scenarios will significantly increase the replay value of the UPWOOD game by offering learners the possibility to go through the entire experience in a different way, applying newly acquired knowledge towards achieving better results. Also, the multiplicity of options, combined with a flexible learning procedure allow for an evaluation process of learners' performance that is more accurate and fair.

Computer game development is much more than just this – so find out! We wish you a lot of fun!

SYSTEM REQUIREMENTS

Minimum System Requirements

CPU: Info

CPU SPEED: 2.0 GHz

RAM: 2 GB

OS: Windows 7 32-bit SP1

VIDEO CARD: DX10 compatible or better

PIXEL SHADER: 4.0

VERTEX SHADER: 4.0

SOUND CARD: Yes

FREE DISK SPACE: 350 MB

Minimum Recommended Requirements

CPU: Info

CPU SPEED: 2.0 GHz multi-core

RAM: 8 GB

OS: Windows 7 64-bit SP1

VIDEO CARD: 1 GB VRAM DX10 compatible

PIXEL SHADER: 4.0

VERTEX SHADER: 4.0

SOUND CARD: Yes

FREE DISK SPACE: 350 MB

DEDICATED VIDEO RAM: 1 GB

HOW TO PLAY THE GAME

1. Start your computer
2. Open your browser
3. Click on the following link: https://www.upwoodproject.eu/
4. Enter UPWOOD website
5. Go to the Training Game from the main deliverables section
6. Download and unzip. the folder
7. Double click on the Chrome HTML Document (story.html5) file
8. Play the UPWOOD Training Game.

UPWOOD GAME LOGO

FOR THE TRAINERS/LEARNERS

Finding your way with the UPWOOD Game…

Busy professionals and employees, such as construction workers, often perceive conventional training procedures as time consuming and tiring. Gaming can overcome such perceptions, because it offers unique structures that serve as ice-breakers and provide innovativeness and diversity in the learning procedure.

Learning materials appear more entertaining to learners, since games offer a platform for the exercise of the creative behaviour and divergent thinking. Essentially, game-based learning can be more efficient compared to other "traditional" learning environments, because it does not seem to be packed with an immense amount of content that often proves to be inapproachable to students.

To this end, the UPWOOD Training Game emphasizes on the construction of scenarios that simulate real-world problems and offer learners the opportunity to face real world challenges that can be dealt

with in a risk-free environment. The Game enables the player to enter "fantasy" worlds, created though with real case scenarios.

Engaging in competitive real-world problem solving in a fantasy world is really important to learners who participate in VET programs, because practical concerns and solutions are much more valuable to them than the accumulation of a large amount of information. Hence, game-based learning can be an ideal teaching methodology for VET; game-based learning in vocational education and training usually takes the form of entertaining online or offline games that involve some degree of simulation.

THE GAME SCREEN

Let's go over the symbols that are permanently fixed on all game screens first.

Along the lower edge of the monitor is the menu bar. This will help you to proceed to each story game.

At far left is the UPWOOD project's logo.

On the right bottom there is in certain cases, usually in the beginning of the game, the indicators previous/next or submit.

THE GAME CHARACTERS AND STORY

1st Story:

A landowner intends to build a house of wood, so she turns to a builder. While the builder is experienced in construction, both he and the landowner have no experience with wood as a building material. Together they go to different experts to learn about wood properties and limitations. The player needs to justify various wood applications in construction, choose the most appropriate wood type/component in given circumstances and consider the possibilities of improving the properties of wood in constructions.

2nd Story:

Aki owns a log house built in the 1990s. The façade needs to be renovated as its exterior cladding panels and surface paint has worn over time. Aki is familiar with working with wood, so he decided to buy supplies from a local timber store and renovate facades with his friend, Risto.

3rd Story:

Steve is a construction worker recently sent to a new project at the construction site where he is currently located. Steve is working together with a team of other construction workers. It is important to the foreman Tim that his co-workers gain insights into important tasks on site, so that they learn to work independently and behave responsibly. At this morning meeting, foreman Tim informs the construction team about the delivery time of expected wood elements by 9:00 a.m. As Tim has an important meeting with the building contractor at the same time, he requires some help with the delivery arrival. Therefore, Steve and his colleague Peter are asked to represent Tim's management responsibilities for the duration of two hours.

4th Story:

There is an old apartment in need of a renovation. The owner is aware of the poor insulation and wants to fix all the thermal bridges that can be improved in the property. The installations need to be updated too. The head of the works will help to choose the best options available. The player needs to choose between the different options given considering the aspects required by the material mentioned or the constructive solution adopted.

TROUBLESHOOTING

The following problem descriptions should help you if UPWOOD does not run properly on your system.

Before you start, please make sure your computer meets the required minimum configuration in the System Requirements section. In many cases outdated technology or faulty or not-updated drivers are the cause of program errors.

Should you encounter problems with the sound or graphics, please ensure you have the most recent drivers installed. Please check with the hardware manufacturer's website for your graphics and sound card to ensure you have the most up to date drivers.

SUPPORT

It is impossible for any company to test every possible PC configuration. Occasionally there could be a

problem with the game on your computer.

When you contact support please have the following information on hand as well as the game's minimum system requirements:

- Precise error message and a description of the problem
- CPU and processor speed
- Amount of RAM
- Manufacturer and description of the graphic card
- Operating System