

ASSIGNMENT II-1

BASIC GAMEPLAY PROGRAMMING

In this assignment, you are asked implement a basic 3rd person gameplay on the level designed in Assignment I in Unreal Engine 5. Players must collect pieces of wood from the beach and light a fire in 60 seconds in order to survive. A counter UI must show the number of woods collected. Bringing 5 pieces of wood to the campfire site will light the fire.

Requirements

- Use the tropical island level you created for Assignment I.
- Create a campfire site on the island where players need to bring 5 pieces of wood to light the fire.
- Design and implement an **objectives UI** that will show the current objective or message (such as “Not enough wood.”).
- Display the objective when the game starts: ““You must collect 5 pieces of wood in 60 seconds to survive.”
- Implement a **countdown timer** of 60 seconds on the screen showing the remaining time. If the player cannot light a fire in 60 seconds, display: “You have died of hypothermia.”
- Start the countdown timer 5 seconds after the game starts.
- **Collecting woods** should be implemented by touch or collision detection, similar to how Mario collects coins and Sonic collects rings. You can **update an integer variable for item counter system**.
- Display a **counter UI** for the woods collected.
- When players go near the campfire site, they should be able to light the fire if they have 5 woods collected.
- **Collectable system** should check the number of items collected. If players don't have enough woods to light the fire, display a message saying: "Not enough wood".
- When the campfire is lit, display a message saying: “You survived the night.” in the **objectives UI**. And the game ends.
- Record an in-game walkthrough video of maximum 60 seconds. The file size should not exceed 120 MB¹. You can use OBS or NVIDIA ShadowPlay to capture the video.

Resources

Do not be overwhelmed by the number of the tutorials listed below. They are quite short and to the point, taking less than 45 minutes in total, plus an additional 32 minutes of bonus introduction video.

- Objectives UI | [How to make an Simple Mission Objective System in Unreal Engine 5](#)
- Countdown timer | [How to Make a Simple Countdown in Unreal Engine 5](#)
- Trigger delays | [How To Use DELAY NODES in Unreal Engine](#)
- Collectable system to trigger events | [Collect 'X' Items To Win / Open A Door | Collectable System](#)
- Collect woods | [How to make a Pick Up Item in Unreal Engine 5](#) / [How to add sound to a Pick Up Item](#)
- Update integer variable for item counter system | [How to create an Item Counter In Unreal Engine 5](#)
- Counter UI | [How to create a HUD for your Pick Up Items in Unreal Engine 5](#)
- *Bonus:* Blueprints Overview | [Blueprint For Beginners in Unreal Engine 5 | 2023 - Learn in 30 Mins!](#)

Deadline

2023-03-16 09:30 – If you can't upload the file directly to Ninova, you can submit the downloadable video file link (uploaded to Google Drive, OneDrive or Yandex.Disk) on Ninova before the deadline.

If you have any questions, don't hesitate to contact us on [Discord](#).

¹ You can use Adobe Premiere/Premiere Rush or HandBrake with "Web > Creator 1080p60" preset to optimize the video size (H.264 coding format, .mp4 container format, 60 FPS framerate, 8Mbps target bitrate, 48 kHz AAC stereo audio).