



Unreal Programmer Task

We appreciate your interest in the position and your enthusiasm for our upcoming projects! As part of our interview process, we assign a task to assess the participant's skills, creativity, and compatibility with our dynamic team. Team building is fundamental to our values, and we are seeking developers who bring exceptional ideas and seamlessly integrate with our team.

We look forward to seeing how your talents can enhance our team and shape the future of our game projects!

Introduction

We appreciate your interest in participating in this programming interview task. This assignment should be completed within 48 hours of receiving these instructions, allowing for a fair evaluation of all candidates.

If you require an extension beyond the initial 48 hours, please notify us in advance. Keep in mind that the assessment considers development time, so only request additional time if you are confident it will significantly improve the end result.

The primary objectives of this task are to evaluate the candidate's abilities in the following areas:

- Unreal Engine and C++ (no blueprints used)
- The project must be developed using Unreal Engine version 5.3 or newer
- Code organization and file structuring
- Comprehension of game design and aesthetics
- Adherence to schedule
- Ability to complete tasks with open-ended instructions

For this specific interview, it is crucial to undertake the task using only C++ programming instead of blueprints. It is important to note that tasks created using a blueprint will not be graded and evaluated. With design and aesthetics being appreciated, they are not the focal point of the task. It is important to show the C++ knowledge.

Rest assured that none of your work, concepts, or code produced during the interview stage will be used in any of our projects.

Interview Task

Before you begin, ensure that the prototype is designed in 3D. Both the executable and Unreal Engine project should be available on GitHub for review.



- Create a functional Skateboarding Simulator Game; it should feature full control of the character skateboarding, as well as the speed-up, slow-down and jump functions; it should allow us to move around a small designed park or street side.
- Required features:
 1. Movement Functionality
 2. Small Designed Level with Jumping obstacles
 3. Jumping- *Utilize any Jump animation from Mixamo.*
 4. Pushing Functionality - *Speed up*
 5. Slow Down Functionality
 6. Points system - *for every obstacle jumped over*
- Design a suitable UI for the prototype
- Utilize either pre-made assets or create your own for this task
- If using pre-written code from other projects, clearly specify the sections implemented during the interview, as we want to understand what was created during the interview period.

Basic Format

- Utilize GitHub for the interview, making incremental commits during development instead of one large commit at the end.
- The game build should be shared via Gmail for easy playtesting. Please send a zipped copy of the .exe file to the specified email address provided at the bottom. Name the file as '**YOUR NAME_TASK**'.

Clear unused assets before sending the files, or we won't be able to clone them for testing.

Don't post the built files inside GitHub; they take up unnecessary space.

- Provide a 300-word document explaining the system, your thought process during the interview, and a personal assessment of your performance. Indicate the number of hours spent on each task and the total time invested in the assessment. Attach this document as a PDF on GitHub.
- Aim to deliver the highest quality game possible, as quality is a priority for our team. Thoroughly playtest the game before submission.

Once completed, send the link to the interviewer and email it to the company's email

As an additional resource, we have included some **optional free assets** for you to use if needed. You can find it at them on these links:

City Street Props

<https://marketplace-website-node-launcher-prod.ol.epicgames.com/ue/marketplace/en-US/product/8162a702d7c747e9ac544dff38af78c8>



City Park Environment Collection LITE

<https://www.unrealengine.com/marketplace/en-US/product/city-park-environment-collection-lite?sessionInvalidated=true>

Mixamo Skateboarding Animations

<https://www.mixamo.com/#/?page=1&query=skateboard>

Skateboard Model <https://www.turbosquid.com/3d-models/skate-max-291632>

Once completed, send the link to the **interviewer email** and mail it to the company's email: **hiring@ngp.careers**

Within the next few days, we will provide feedback along with the results. We wish you the best of luck and encourage you to enjoy the process!