

Project Proposal – Asset Index

1. Introduction

The increase of graphical detail in AAA video game development requires creation of tens of thousands of highly detailed assets. Creating such assets is an expensive and a time consuming process and thus it is important to be able to reuse them as much as possible.

Since the release of Quantum Break Remedy has been working on multiple game projects simultaneously with each project having different sets of assets and thus it has become cumbersome for artists in different projects to check what assets are available and which of them can be reused.

To promote the reusability of the assets we need a solution that allows artists to easily discover and use the assets between our game projects without having download the full game projects from the source control with hundreds of gigabytes of data each.

The project will allow the students to experience a sneak peek into the game industry and potentially create a big impact on the workflows for our artists. Highly motivated groups will be able to work on our proprietary tools and engine providing valuable experience for those interested in the game industry.

2. Project Goals

The main goals of the project are:

- Help artists to search and discover assets between game projects
- Help artists, producers and designers to add metadata (e.g. “tags”) to assets to manage the assets
 - For example, categorize assets based on e.g. type or tag assets that cannot be used in other projects

Some of the possible stretch goals are:

- Building a workflow for artists to bring assets from one project to another
- Integrating some features of the application to our level editing tools and/or engine

3. Technologies

The bulk of the work will involve working on a web application. We have already set up all the required infrastructure and have a simple version up and running. This will help the group to get up and running immediately. We’re open to discussing alternative tech stacks if the group feels that they would get better results with something else. The current tech stack is:

- Backend is a .Net Core application (C#) with a REST API
 - Running on Linux
 - Has access to a lot of code from our internal C# tools framework
- Frontend is done with Vue.js

Groups with higher ambitions could also create integration between the web application and our tools and engine, or to improve the web application even further.

- Game Development tools are done in both C# (WPF) and C++ (MFC)
- Northlight Engine is C++
- It might be possible to take the solution to a whole new level with machine learning and Promethean AI (<https://www.prometheanai.com/>)

4. Requirements for the students

- **Implementation work must be done on-site at Remedy office in Niittykumpu with hardware provided by Remedy**
 - Possibility to take company laptops home TBD
- Minimum viable product can be achieved with web development basics.
- The scope of the project very flexible and can be adjusted based on the skills and enthusiasm of the team
- All code and documentation should be written in English.
- C++, C# and WPF experience is a plus
- Experience of using game development tools (e.g. Unity or Unreal Engine 4) and/or DCCs (e.g. 3ds Max, Maya or Photoshop) is a plus.

5. Legal Issues

Intellectual Property Rights (IPR): The client gets all IPRs to the results.

Confidentiality: The client will share some confidential information with the students. Signing NDA **provided by Remedy** is required.

6. Client

Remedy will provide the group a room and hardware to work with at the Remedy office. The product owner will be available for guiding the group throughout the project.

We have allocated time from our other personnel to help out the group regarding programming, UX and mapping out the requirements from our artists.

Remedy Entertainment Plc

Remedy is a Finnish video game developer known for games such as Max Payne, Alan Wake, Quantum Break and most recently Control. We are based in Espoo and currently employ around 230 people. We're currently working on multiple game projects using our proprietary game engine called Northlight.

Client Representative

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