

Portfolio

Commercial Works

Adventure Kit – Unreal Development Kit



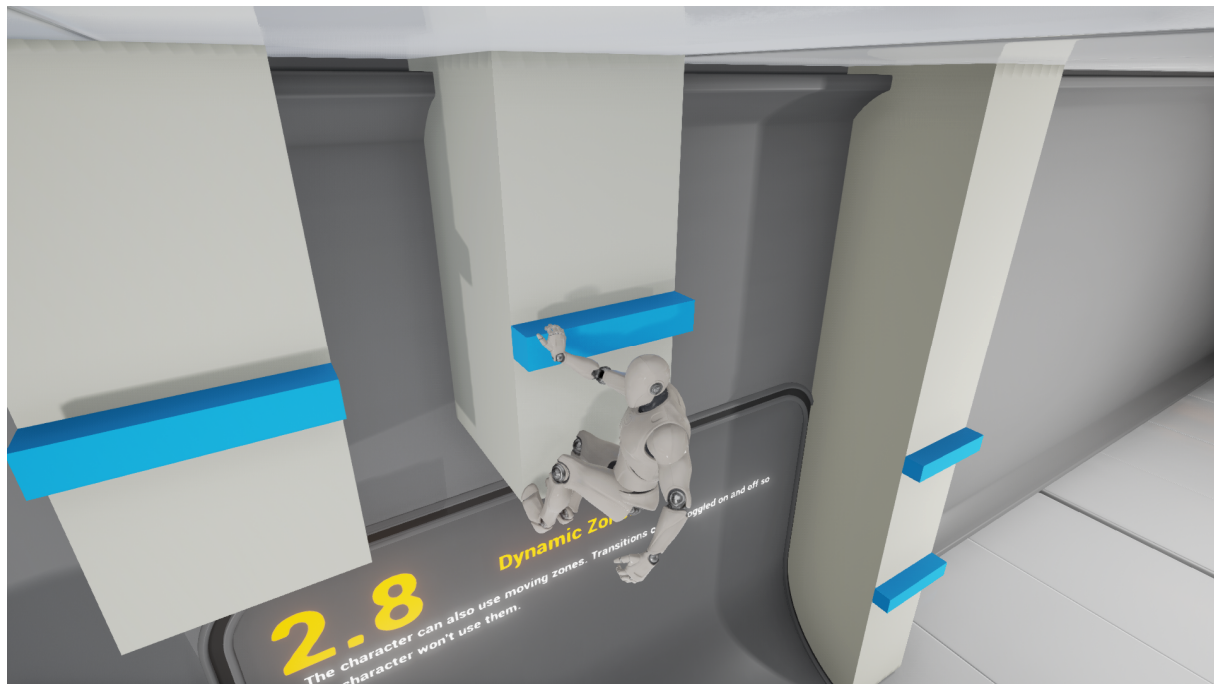
The Adventure Kit is a framework for UDK to enable others to create games in the classical style of *Tomb Raider* or *Zelda Windwaker*. It includes such mechanics as climbing ledges, walls and ceilings, using levers, balancing and others.

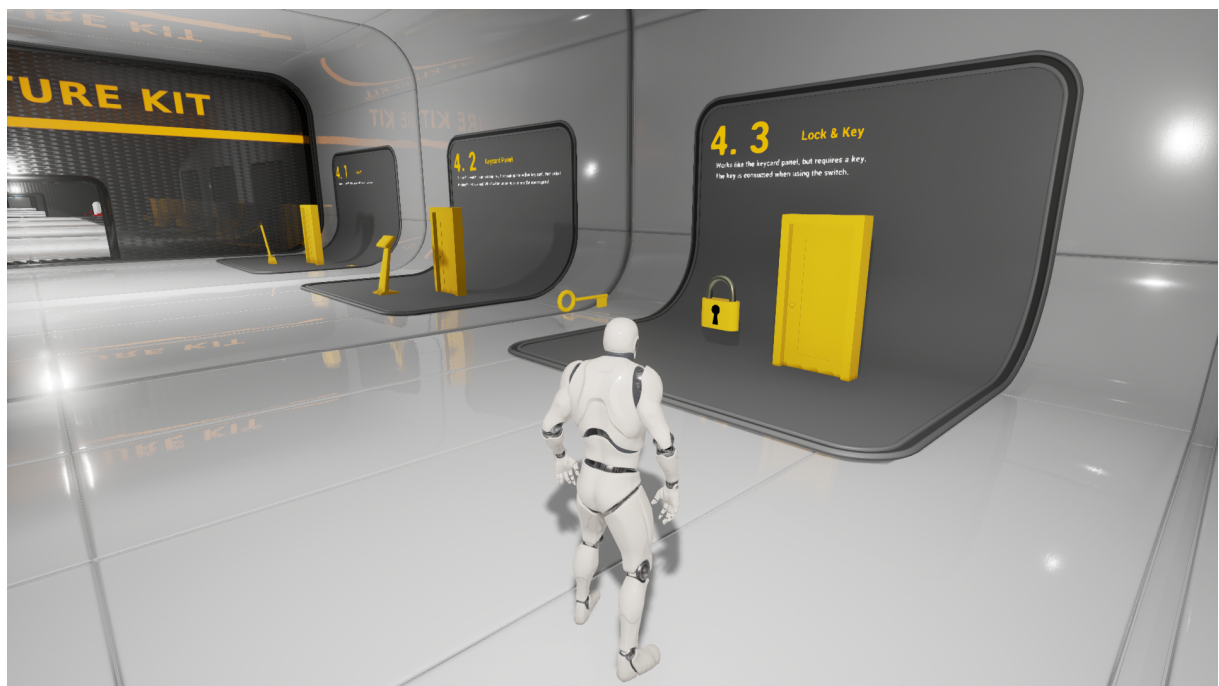
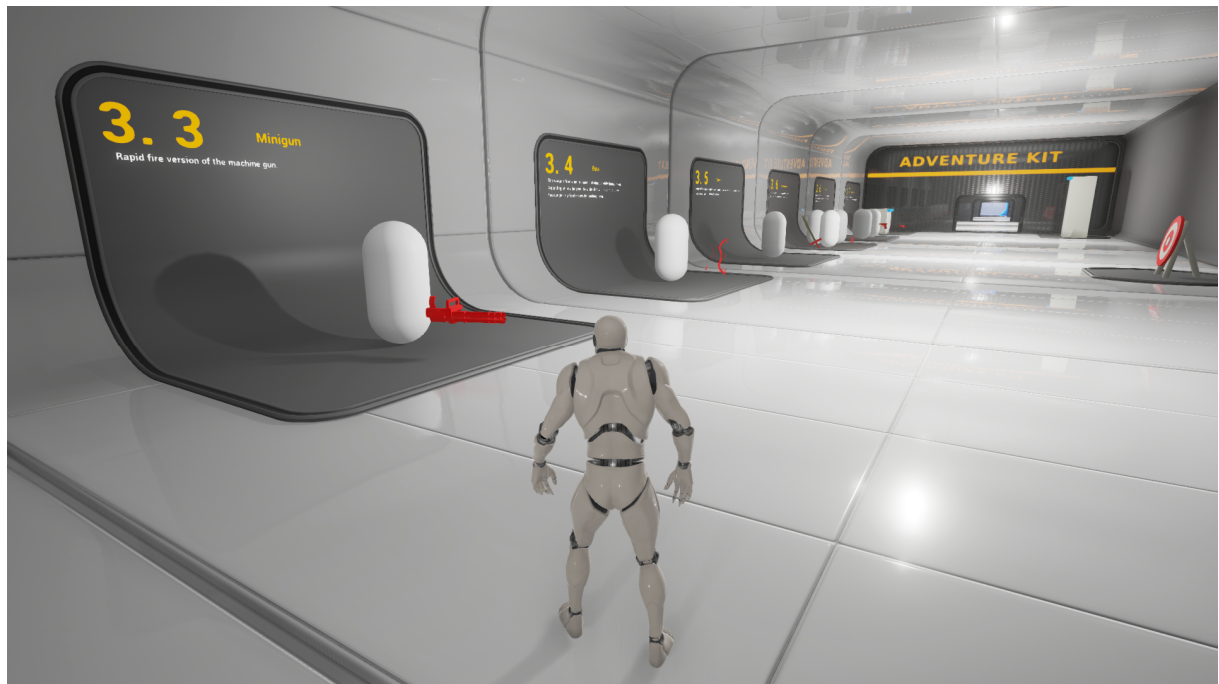
<http://freetimestudio.net/software/unreal-development-kit/5-adventure-kit>

Adventure Kit – Unreal Engine 4

Due to the release of the new Unreal Engine and the positive reception of the UDK kit I decided to create a second and more improved version for UE4. This version includes more features such as an inventory system, flexible movement system, weapons and game templates so users have a base to build upon. It launched early 2016 and was met with an even better response than the previous one.

<http://freetimestudio.github.io/Adventure-Kit/>





Project Phoenix – Unity 3D / Unreal Engine 4

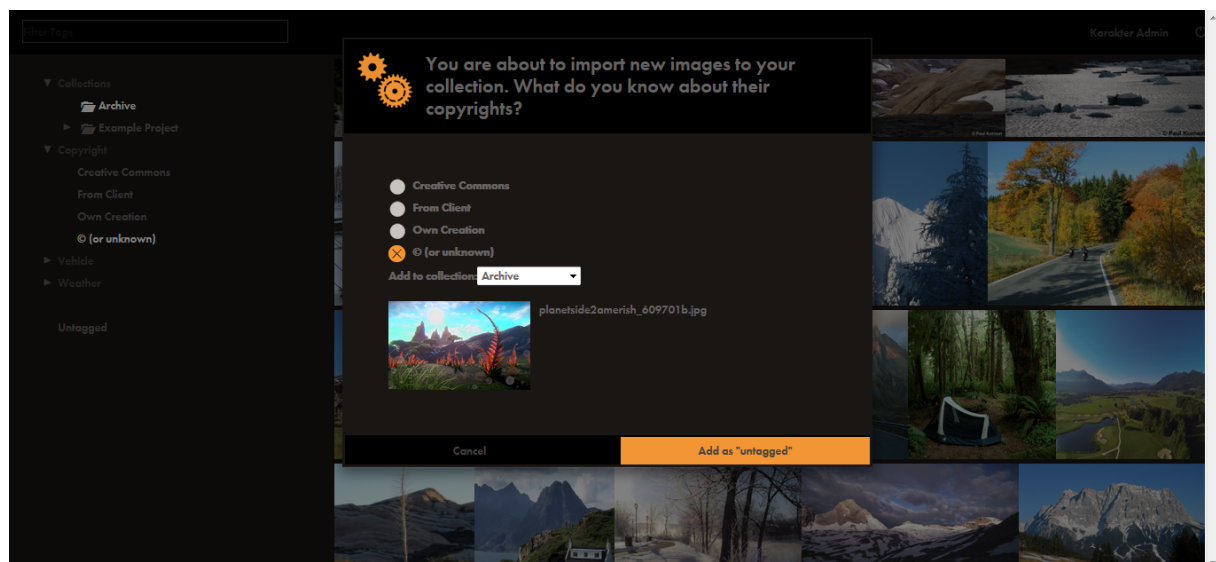
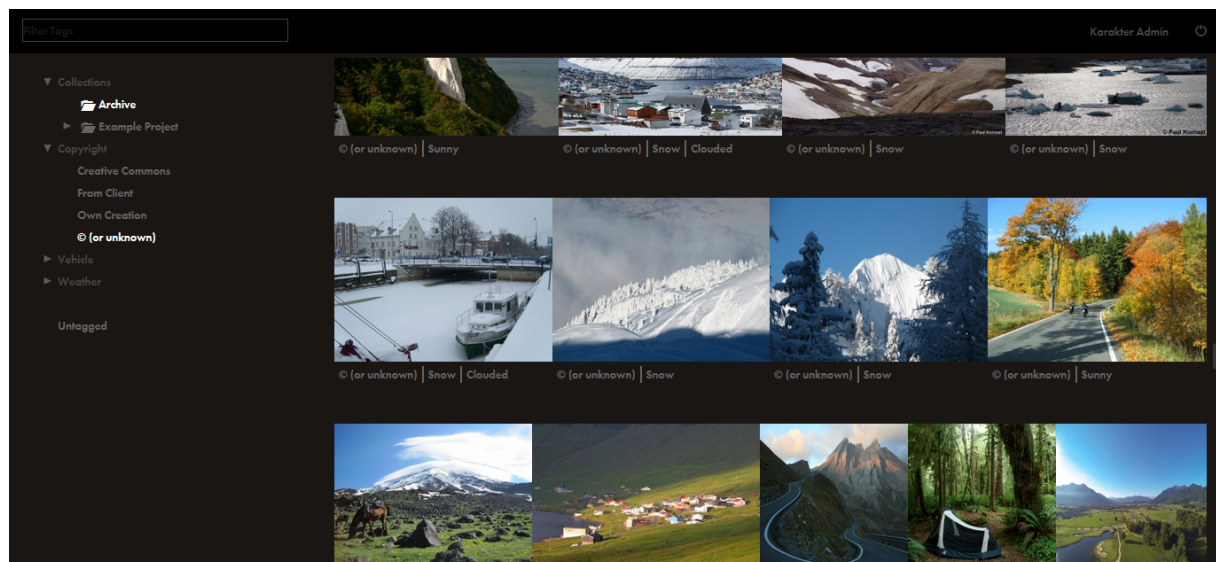
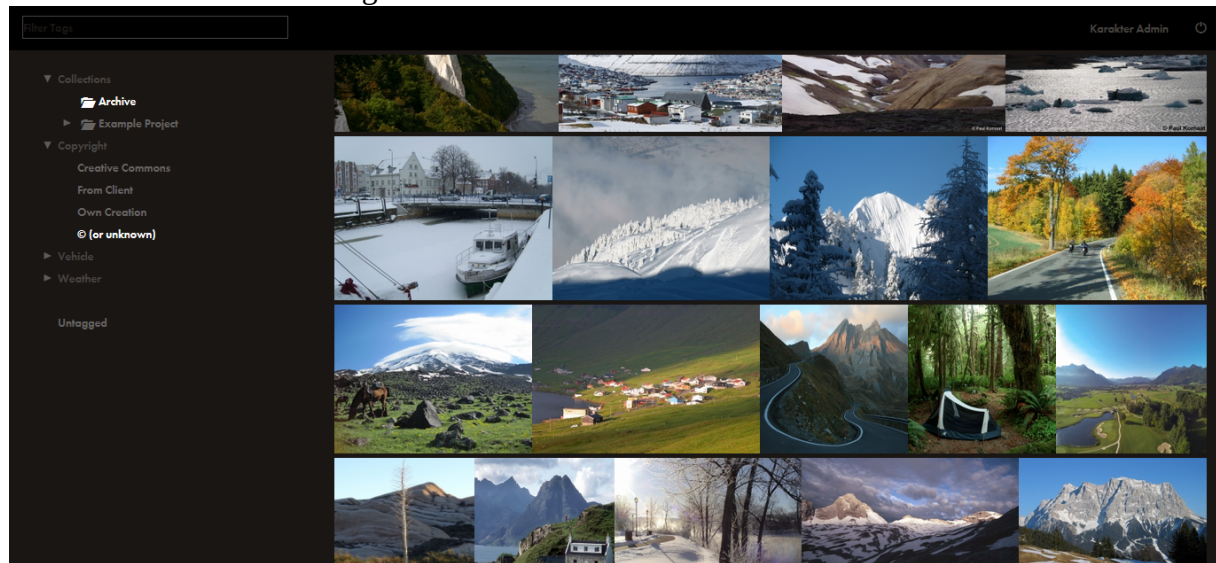
During my bachelor program I was the main gameplay programmer for Project Phoenix. The game is a blend of traditional JRPG- and RTS-games. I helped create a vertical slice prototype in Unity and later ported the project to the Unreal Engine 4.





Image Tagging Software – PHP / JavaScript

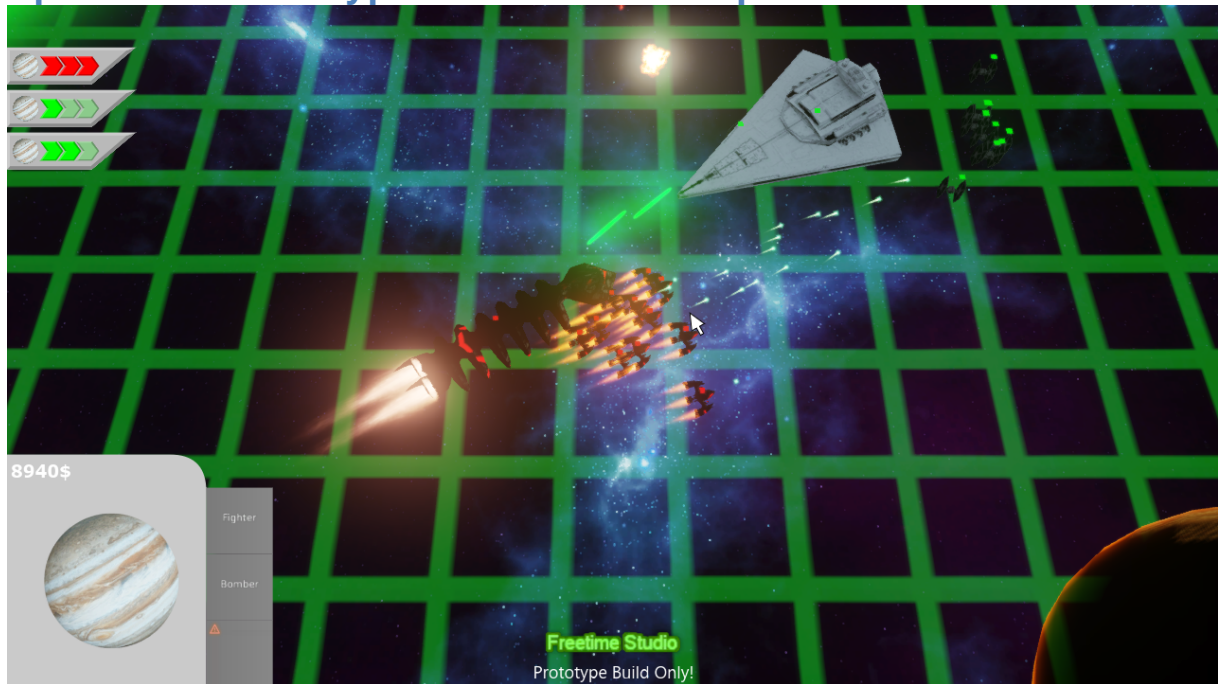
This is a freelance project where I developed a web based application to upload and archive images used as concept art references. The software offers project-based collections and tags as well as user access management.



A web based custom calendar application to organize photographer's appointments for a company operating throughout Germany. The software allows managers to make appointments only visible to involved persons and features email updates for each change.

Personal Projects

Space RTS Prototype – Unreal Development Kit



This prototype has been created during the summer break. Two or more factions fight for dominance over the orbits of planets. Each player builds their base and produces ships to capture other orbits. Each ship has energy and life. Energy is used up to fire or travel in warp speed which is why players have to be smart about sending troops when planets align. It is a proof of concept that was not further developed since the gameplay didn't feel as satisfying as envisioned. <http://freetimestudio.net/software/unreal-development-kit/29-space-rts-prototype>

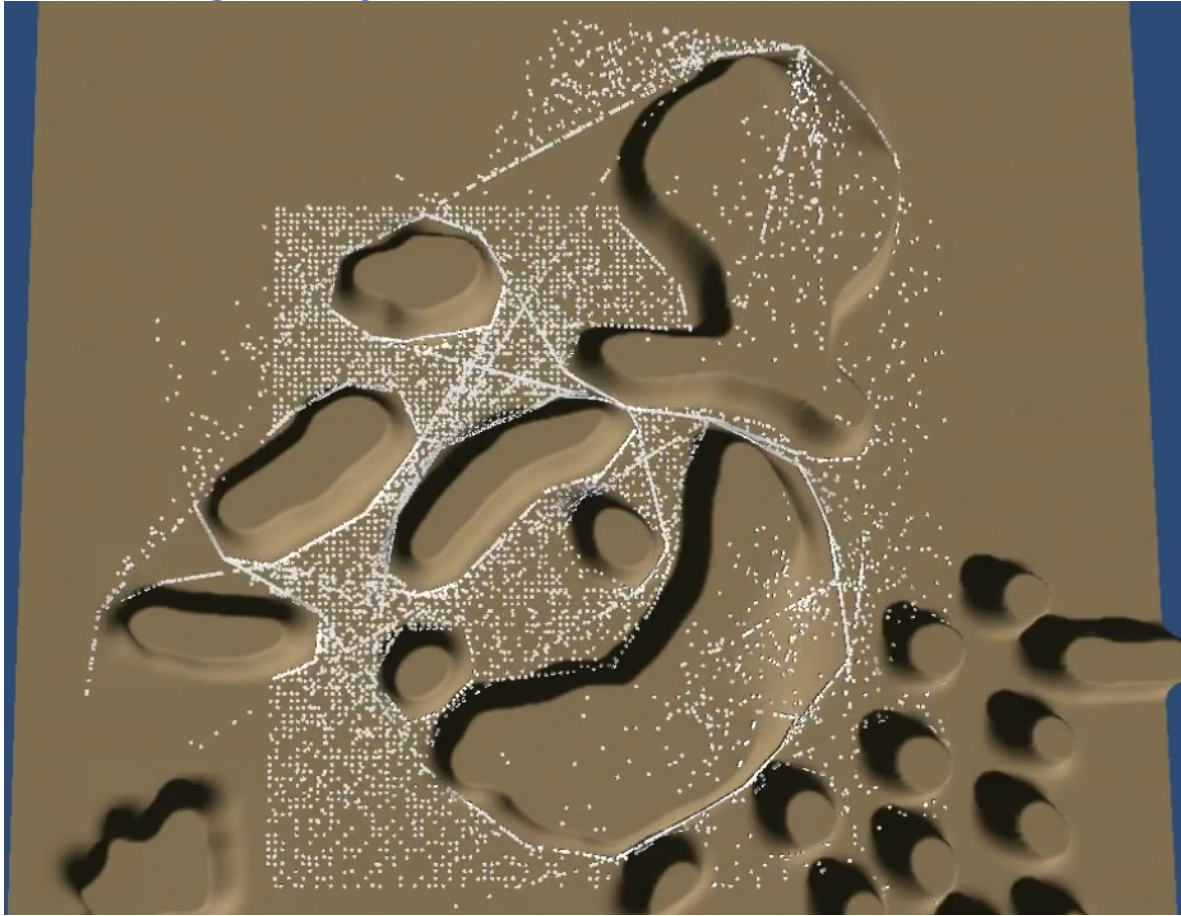
Tortuga – Unity 3D



Tortuga is a board game invented by Vincent Everaert. I created a digital version of it complete with network multiplayer as well as single player against an AI opponent. The code was written by me, but most assets are third party.

<http://freetimestudio.net/software/unity-3d/50-tortuga>

Pathfinding – Unity 3D



Custom pathfinding implemented in Unity: It uses the A-Star algorithm based on a navigation mesh and multithreading for faster calculation. To handle large amounts of units it drops each path calculation that takes too long to start calculation for a new unit. That way the units start moving faster and the user experiences smoother interactions due to the short response times between command and action.

<http://freetimestudio.net/software/unity-3d/32-custom-navmesh-pathfinding>