KANSAS STATE UNIVERSITY
Computer Science

Falling Up

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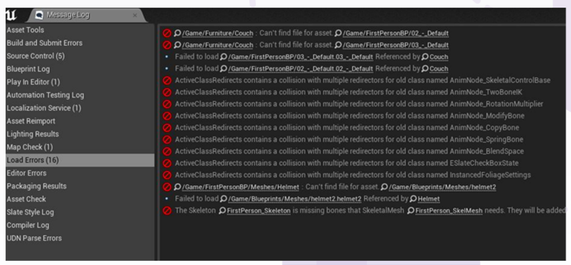
History

Falling Up was originally intended to serve as a glimpse into what it is like to live with Alzheimer's disease. A group of students in the Anthropology department spent a semester living in the Meadowlark Hills retirement home to learn more about the disease. They then, with no prior programming experience, decided to try and create this game. At the beginning of the Fall semester, their professor, Dr. Michael Wesch, came to us asking for help in completing it.

Objectives

- Optimize game performance, increase stability, and resolve graphical issues.
- Remove game breaking bugs, while increasing the number of available platforms.
- Make Falling Up more interactive through the use of virtual reality technologies.



Original implementation included many technical errors.

Solution

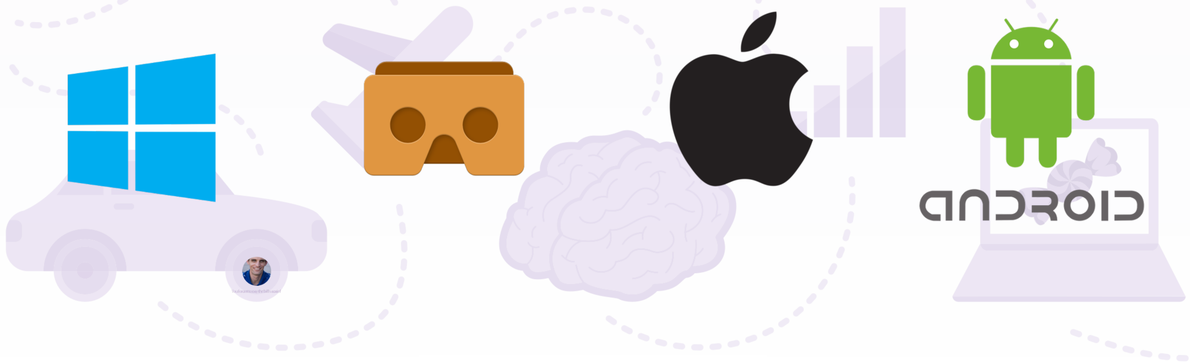
Improved Start Screen

Halls of Meadowlark Hills

Apartment Living Area

Meadowlark Hills Bedroom

Platforms



Problem Analysis

We originally determined that rebuilding the existing solution would make it difficult for us to meet our deadline. Ultimately, however we determined it was necessary to rebuild the project in order to make mobile and VR development feasible.

Constraints

- Limited processing power of mobile devices
- Minimum required frame rate for consistent virtual reality experience
- 2 GB repository size limit
- March deadline for virtual reality exhibit
- Differing control input for virtual reality devices

Alternate Solutions

We could have used other game engine softwares, such as Unity or Cryengine. We also could have decided to scrap what they did and instead of using blueprints, we could have written it in C++.

unity

CRYENGINE 3