

# Falling Up

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## Background & Purpose

In 2015, a group of students in the Anthropology department set out to convey the effect of Alzheimer's using interactive media. Despite having no prior experience, the team elected to develop a video game. The result of this venture is *Falling Up*, an interactive exploration into living with Alzheimer's disease.

*Falling Up* tells the story of an elderly man living in the Meadowlark Hills Retirement Community, who for years has lived with Alzheimer's. He relies on the instructions of his wife to perform even the most basic of tasks, and has forgotten much of his past. *Falling Up* strives to generate empathy and understanding from the player — especially those players that have little prior experience with Alzheimer's disease.

The product of the students' work was full-featured, but technically flawed. Our development team has set out to make the game more stable, reliable, and full-featured. We've set out to port the game to many platforms (Mac, Windows PC, Android, Google Cardboard, Oculus Rift) despite an initial release that was on Windows PC only.

## Results

The current version of *Falling Up* is scaleable, extensible, and technically sound. It contains a slew of improvements that build upon the groundwork laid by the Kansas State Anthropology department.

Implementation tools include:

- **Game Design:** Unreal Engine, Blender, & Handbrake.
- **Development Logistics:** Git, Trello, & Google Drive.

Our development team essentially rebuilt *Falling Up* from the ground up in order to improve technical performance and probability. Assets and map layouts from the original version were reused (after being reassembled), but game logic and scripting were replaced entirely. The resulting software is drastically more reliable, and far easier to add or improve upon than the original version.

*Falling Up* is currently in Alpha (prerelease) version. Development releases are open source on Github, and licensed under the MIT license. Distribution will remain noncommercial, with distribution targeted at promoting Alzheimers education and awareness.

## Conclusion

Our team gained a tremendous amount of practical game development experience throughout the porting and polishing process. The current implementation serves as a useful educational tool, and an example of the power of interactive media. We plan on continuing the development process in the months to come.

## Recommendations for Future Work

Development of *Falling Up* will continue into the fall of 2017. The following developments are planned:

- Make the virtual halls of Meadowlark Hills more true-to-life through the insertion of additional assets.
- Improve game frame rate on Android to allow a smoother gameplay experience on Google Cardboard.
- Port *Falling Up* to the HTC Vive virtual reality headset, and set up distribution through the Steam game distribution platform.

- Add additional story elements, and improve some of the existing gameplay scripts.
- Create interactive gameplay instructions, development documentation, and a web platform for distributing future releases.