Abstract

Atmos Energy Corporation has contracted an entertainment development team to create products which inform the general public about the benefits and safe usage of Atmos resources. Their corporation has delved heavily into public image and instruction on how one safely deals with underground pipelines and natural gas-related events. As the world continues to be fueled by significant energy corporations like Atmos Energy, it becomes more and more necessary to instruct the population on what precautions they need to take to enhance their interaction with energy deliverance methods. The primary interaction device is the Atmos Energy 811 hotline, which anyone may use to have a company associate detail whereabouts on underground pipelines, be they gas, water, electricity or other resources. Our Atmos Adventure video game is a firm, confident step in educating the youth on how to deal precisely with these issues through fun activities that embody the Atmos spirit.

Our project involves the prototyping of educational minigames which coexist through the usage of a hub world, wherein the player accrues points to achieve high scores and win medals. The game must be able to run on a variety of computers and present different difficulty levels which correspond to various age groups.

Game Play

Treasure Hunt
The Atmos trainee has a fun task to dig in a backyard to find treasure. The trainee must race against non-playable characters while avoiding obstacles around the yard. Either the player or the NPC can set traps to move and stun a victim. The trainee will exercise calling 811 once more to locate utility lines as not to dig and destroy them.

Cul-de-sac Champion
The Atmos trainee goes around a cul-de-sac to complete requests from homeowners. Specific requests require explicit actions to be completed. Some of the requests are finding busted pipes, marking pipes, and surveying the land. The trainee will exercises how to detect a gas leak and calling 811 before digging.

Pipe Placer
The Atmos trainee is tasked to install utility lines for a homeowner. They must place tiles representing segments of a utility line, going from the source line to the homeowner’s intake. The trainee must exercise the rule to call 811 before digging; otherwise, they will run into the problem of destroying other utility lines.

Impact

The Atmos video game was designed primarily to educate children about natural gas safety. The messages to convey emphasize how to detect, respond and prevent a gas leak as why to avoid digging in backyards or other recreational areas. In the last 10 years dedicated PSA’s have reduced pipeline incidents by 40% and while less than 1% of these cases resulted in a fatality or serious injury most of these could have been avoided with proper knowledge of natural gas safety. Since the game revolves around the concept of a minigame driven storyline our secondary objective is to reinforce contextual and problem-solving skills through each individual mini-game which test an orthogonal subset of skills. The eventual release will be directed not only to the Atmos official website but to other flash game websites, school-accessible educational programs, as well as appearances on apple/android app store where it can be downloaded for free.

Results

Treasure Hunt

Cul-de-sac Champion

Pipe Placer

Character Tutorials

Summary And Results

Atmos Energy seeks to educate children about safety when using natural gas. To this end, they have created two characters, Gus and Rosie, to teach children about safety practices for natural gas.

Our project involved drafting a storyboard for Gus and Rosie to teach children safety concepts in a video game that is designed for young children to play and learn. To achieve this, we have created a prototype that features 3 games to teach a specific safety concept using the provided characters. We measured our success based on the completion of 2 working mini games, and exceeded the requirement by providing 3 working games. We also met the requirement to gain approval from Atmos for our completed games.