SACAD: John Heinrichs Scholarly and Creative Activity Days

Volume 2023 Article 2

4-17-2023

Ace In Space

Zero Junker
Fort Hays State University, kmjunker@mail.fhsu.edu

Katelyn Blanco
Fort Hays State University, klblanco@mail.fhsu.edu

Honesty Beaton
Fort Hays State University, h_beaton@mail.fhsu.edu

Matthew Boyea
Fort Hays State University, m_boyea@mail.fhsu.edu

Kevin Martinek
Fort Hays State University, k_martinek@mail.fhsu.edu

See next page for additional authors

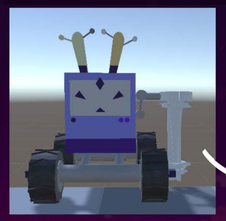
Ace In Space

Authors

Zero Junker, Katelyn Blanco, Honesty Beaton, Matthew Boyea, Kevin Martinek, and Audrey Caleb

Abstract

Videogame development is an intense process that includes the creation of layouts, characters, art, and logic. In our Video Game Creation class, we have been continuously learning valuable skills to implement our game, “Ace In Space.”
Research Objectives: Understand 3D design for both characters and objects utilizing Sketchup (a 3D modeling software for objects and characters) and Unity (a game engine that uses the C# programing language), along with implementing and understanding the C# programming language using Visual Studio Code to develop our game “Ace In Space”.



MK-7 Drilling Rover Ver.1

MK-7 Drilling Rover Ver.3

AC3 model

Introduction

Battle enemy bots and gather resources to upgrade your skills in this 3D action-packed platformer!
It is the late 22nd century. Two warring global powers, the Hearts and the Clubs, now rule Earth and compete for resources. Robots are sent into space to mine rare minerals from near-earth asteroids. Aeros is home to fierce territorial disputes. AC3-2, the Hearts’ special service scouting rover, is on its way back to HQ with samples from a new target mining location on Aeros. Suddenly, it falls into an underground enemy mine full of hostile robots. Now damaged and in unfamiliar territory, AC3-2 must fight its way through hordes of enemy bots using the resources of Aeros in hopes of escape.

Research Design

Research Questions: How does learning game design strengthen valuable skills that can be used both in life, and in future careers? What can we learn from developing our own videogames?
Role of Researcher: Using our own creativity, online resources, and lessons learned during class on the fundamentals of Unity, Sketchup, and C# coding, we were tasked with envisioning and executing our game “Ace In Space.”
Anticipated Limitations of Future Research: Game design is an ever-changing opportunity, with game engines continuing to be updated and 3D modeling programs improving each day. Game development is rapidly continuing to expand and becoming more accessible each year, allowing more people to invest in potential career opportunities in game design and development. Additionally, the ways in which game design improves creativity, teamwork, and problem-solving skills is something that the growing industry of game design will need to continue to research.

Findings

Exposure to new tools like Unity and SketchUp developed our problem solving and teamwork skills. We worked as a team to develop and improve in the areas of character and level design, programming, and visual effects.Through developing "Ace In Space," we have successfully developed and broadened our skillsets.

Concept Art

Conclusion

Game Development is a useful skill that utilizes many sought-after qualities, such as creativity, problem-solving, time management, communication skills, and technical knowledge. When explored in an academic setting, these skills can be facilitated within students in an engaging and exciting way.

INSTITUTE FOR NEW MEDIA STUDIES

Katelyn Blanco, Honesty Beaton, Matthew Boyea, Audrey Caleb, Kevin Martinek, Zero Junker
Institute For New Media Studies, Dr. Gordon Carlson

ACE IN SPACE

Alone, the heart of cards