

# Abstract

This thesis explores the development of a real-time strategy (RTS) game using Unity's Data-Oriented Technology Stack (DOTS) and the C# programming language. RTS games offer captivating real-time battles, requiring players to control multiple units with distinct traits. Traditional object-oriented design often leads to redundant data in memory, but DOTS presents a new data-oriented architectural style that enhances game design.

The goal is to build a game environment where a player can control his clan units, capable of building, gathering, and fighting against computer-driven enemies. The thesis highlights the benefits of ECS through DOTS, such as efficient memory utilization and support for multithreaded code. Through this study, we demonstrate the potential of data-oriented technology, a new approach to designing RTS games, addressing exciting challenges encountered during development.