

# Snake Game Project Report

Pooya Nasiri

2015

## 1 Introduction

The Snake Game is a classic arcade game where players control a snake that grows longer as it consumes food items, while avoiding collisions with walls and the snake's own tail. This project aims to develop a Snake Game using C# in Visual Studio, with features including single-player and two-player modes, classic and unlimited gameplay options, and customizable settings for colors.

## 2 Project Overview

- **Language:** C#
- **IDE:** Visual Studio
- **Target Platform:** Windows

## 3 Features

- Single-player mode
- Two-player mode
- Classic mode
- Unlimited mode
- Customizable settings

## 4 Implementation Details

- **Language:** C#
- **Graphics:** Utilize libraries such as Windows Forms or WPF for GUI
- **Game Logic:** Implement snake movement, collision detection, food generation, and score tracking

- User Input: Handle keyboard input for controlling snake direction
- Multiplayer: Implement logic for simultaneous control of two snakes in two-player mode
- Settings: Create user interface for adjusting game settings, such as colors

## 5 Future Enhancements

- Sound effects and background music
- Additional game modes or challenges
- Enhanced graphics and animations
- High scores leaderboard

## 6 Conclusion

The Snake Game project demonstrates the implementation of a classic arcade game with various gameplay modes and customizable settings using C# in Visual Studio. With further enhancements and refinements, it has the potential to provide an engaging gaming experience for players of all ages.

## 7 References

- Microsoft Docs for C# programming and Visual Studio development
- Online tutorials and forums for game development with C#
- Official documentation for libraries and frameworks used in the project