



**TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS**

**A PROJECT PROPOSAL ON
Tetris: The Classic Puzzle Game**

Submitted by:

**AASHISH KARKI (078BCT004)
ANUP ARYAL (078BCT015)
APIL CHAUDHARY (078BCT017)**

SUBMITTED TO:

**DEPARTMENT OF ELECTRONICS AND COMPUTER
ENGINEERING
IOE, Pulchowk Campus
Kathmandu Nepal**

July 19, 2023

ACKNOWLEDGEMENT

We express our sincere gratitude to all those who suggested building this game for sharpening our Object Oriented Programming skills.

Our special thanks go to our lecturer, Daya Sagar Baral, for his guidelines, suggestions, and instructions, which have served as a contributor towards the inception of this project.

We sincerely thank the Department of Electronics and Computer Engineering, Pulchowk Campus, for giving us an opportunity to work on this project to expand our knowledge of Object Oriented Programming and working in a team.

1 INTRODUCTION

Tetris, an iconic and enduring puzzle game, has captured the hearts of gamers around the world since its inception in 1984. Created by Russian game designer Alexey Pajitnov, Tetris challenges players with a deceptively simple objective: fitting different-shaped blocks, known as tetrominoes, together to form complete lines. Yet, beneath its straightforward premise lies an addictive and exhilarating experience that has stood the test of time.

Gameplay :

Tetrominoes: The game consists of various tetrominoes, each made up of four connected squares arranged in different shapes. The seven tetrominoes are: I, J, L, O, S, T, and Z.

Falling Blocks: Tetrominoes fall from the top of the playing area one at a time. You have the ability to move and rotate the tetrominoes as they descend.

Movement and Rotation: You can move the falling tetrominoes horizontally (left or right) using the arrow keys or buttons. You can also rotate them clockwise or counterclockwise to fit them into available spaces using the up arrow key or designated rotation buttons.

Clearing Lines: The primary goal is to create complete horizontal lines by filling all the spaces within a row. When a line is entirely filled, it clears from the screen, and you earn points.

Scoring: The more lines you clear at once, the higher the points you earn. Clearing multiple lines simultaneously is known as a "Tetris" and yields the highest points.

Leveling Up: As you accumulate points or clear a certain number of lines, you advance to higher levels. With each level, the tetrominoes fall faster, increasing the game's difficulty.

Game Over: The game ends when the stack of falling tetrominoes reaches the top of the playing area. If you can't clear lines fast enough, the stack will reach the top, and the game will be over.

Controls:

The controls for Tetris are usually straightforward:

Left Arrow: Move tetromino left

Right Arrow: Move tetromino right

Down Arrow: Accelerate the fall of the tetromino

Up Arrow: Rotate tetromino clockwise or counterclockwise

2 OBJECTIVES

THIS IS OBJECTIVES

3 PROPOSED SYSTEM

3.1 DESCRIPTION

3.1.1 background

THIS IS DESCRIPTION

3.2 SYSTEM BLOCK DIAGRAM

THIS IS SYSTEM BLOCK DIAGRAM

4 METHODOLOGY

THIS IS METHODOLOGY

5 PROJECT SCOPE

THIS IS PROJECT SCOPE

6 PROJECT SCHEDULE

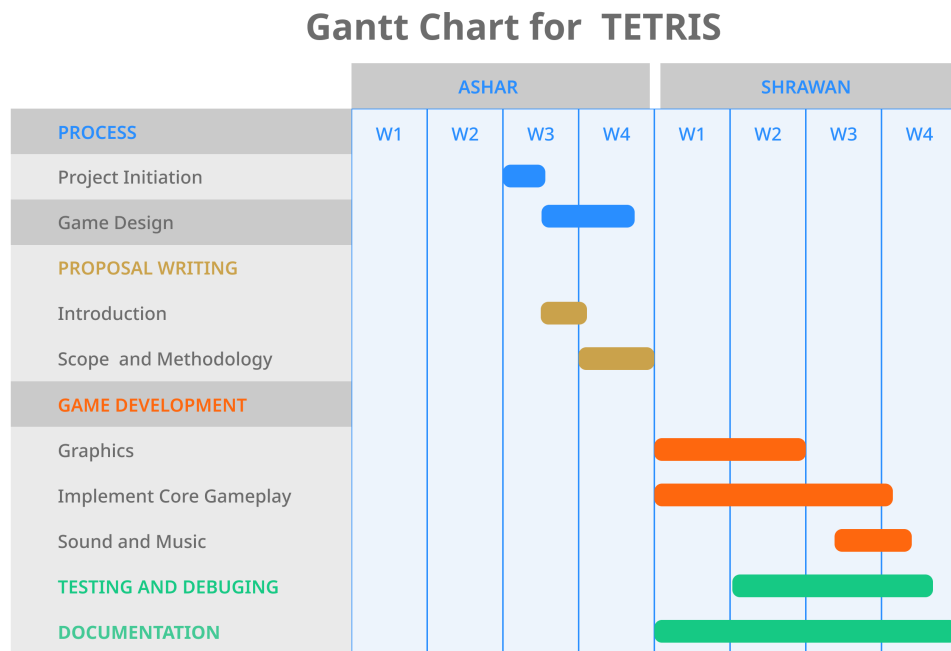


Figure 1: Gantt Chart for OOP Project : TETRIS