



Computer Organization & Assembly Language

Spring 2024

Final Project

Duck Shoot Game

Deadline: May 15th, 2024

Instructions

- You are required to work in MASM615. Project incompatible of MASM615 will not be considered.
- Only Group of two (PAIR) is allowed.
- Cross Section groups are not allowed.
- User Interface is important in this project. Try to develop an attractive user interface.
- Use of extra features in the project is encouraged.
- Use good programming practices (well commented and indented code, meaningful variable names, readable code etc.).
- Only one group of the student submit the project in Zip File.
FORMAT: RollNo1_RollNo2.zip.
- Evaluation Criteria will be shared with you soon.
- You need to submit video of your full game
- **Copy/cheating case will be awarded an "F" grade in the course.**

Game Overview

Duckshoot is an arcade-style shooting game where players aim to shoot as many ducks as possible within a given time frame and limited bullets. The primary objective of Duck Shoot is to shoot ducks using a virtual gun as they fly across the screen.

Game Description

You've to make animated ducks that fly across the screen at varying speed and altitudes. A gun should be made to aim and shoot at the ducks, which is controlled by the cursor. There must be a scoreboard present, which counts the score when you shoot at the ducks. Players earn points for each duck successfully shot and the score is recorded on the scoreboard. The scoreboard displays the player's current score and the highest score as well. You'll have to make 3-4 rounds. There must be a timer present, displaying the remaining time for the current round. The game ends when the timer runs out. There must be a bar of lives present at the bottom of the screen.

Game Menu screen



Main Screen for Gameplay



Deliverables

Basic

- A title page should appear that displays the name of the game.
- It must also take the name of the user as input and the name is to be displayed on the screen.
- The second page should be menu driven.
- Third page should be your game. The user must be able to navigate back and forth from these screens.

Mode 1

It should have at least 3 rounds with 1 duck at a time

Mode 2

This level includes multiple ducks with limited bullets. Duck movement speed should be higher than Mode 1.

Final Game Requirements

File Handling

You are required to store all the score of all the players that have played the game. For this you will use file handling. You need to store the name and updated highest score in a file.

Bonuses

- Implement any feature different & better than original.
- Sound Effects
- Any meaningful creativity :)

Screens – Only for Reference

The following screens are given as an example. You can create your own screens which would include:

- Splash screen which has game intro/ logo (optional)
- Welcome Screen that takes your name input
- Game Menu screen
- Main Screen for Gameplay
- Pause Screen/Functionality
- Instructions Screen
- High Score and Players Names Display

Reference Game

<https://play.google.com/store/apps/details?id=com.tingtingstudio.duckshoot>

<https://www.youtube.com/watch?v=J3sfsP9W048>

Deadlines of Deliverables

Basic	01 st May, 2024
Mode 1	7 th May, 2024
Mode 2/ Final	15 th May, 2024
Demo	-