Course Project Documentation

CS 101 Project

ADVENTUROUS GAME

DEAD SOULS
TEAM:297

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1.Introduction:

- This software revisits the concepts of retro gaming using a Allegro5.0 graphics library.
- The game is of a dungeon of infinite coin collecting action while dodging mines .
- The game rekindles the fun of button mashing .
- This game is inspired by some modern retro games.
- The purpose of this game is to entertain the player.

PROBLEM STATEMENT:

1. In this project our main aim is to make people enjoy through software game.
2. This is one player game and this game allows user to move in four directions and collect coins.
3. The player has to choose the path to collect the coins without hitting the enemies.
4. We developed this project in 2D view showing the coins at random positions and enemies according to coin position to protect the coin.

REQUIREMENTS:

- Hardware requirements :-

  Any basic computing system .

- Software requirements :-

1) Linux Os .
2) Allegro5.0 graphics library.
3) Code::Blocks 13.12.

IMPLEMENTATION:

- Functionality:

  1.The main character and its interaction with the environment is governed in pixel based collision mode .

  2.The bmp images interact and disappear to give certain game effect.

  3.The player will move according to keyboard inputs given by the user.

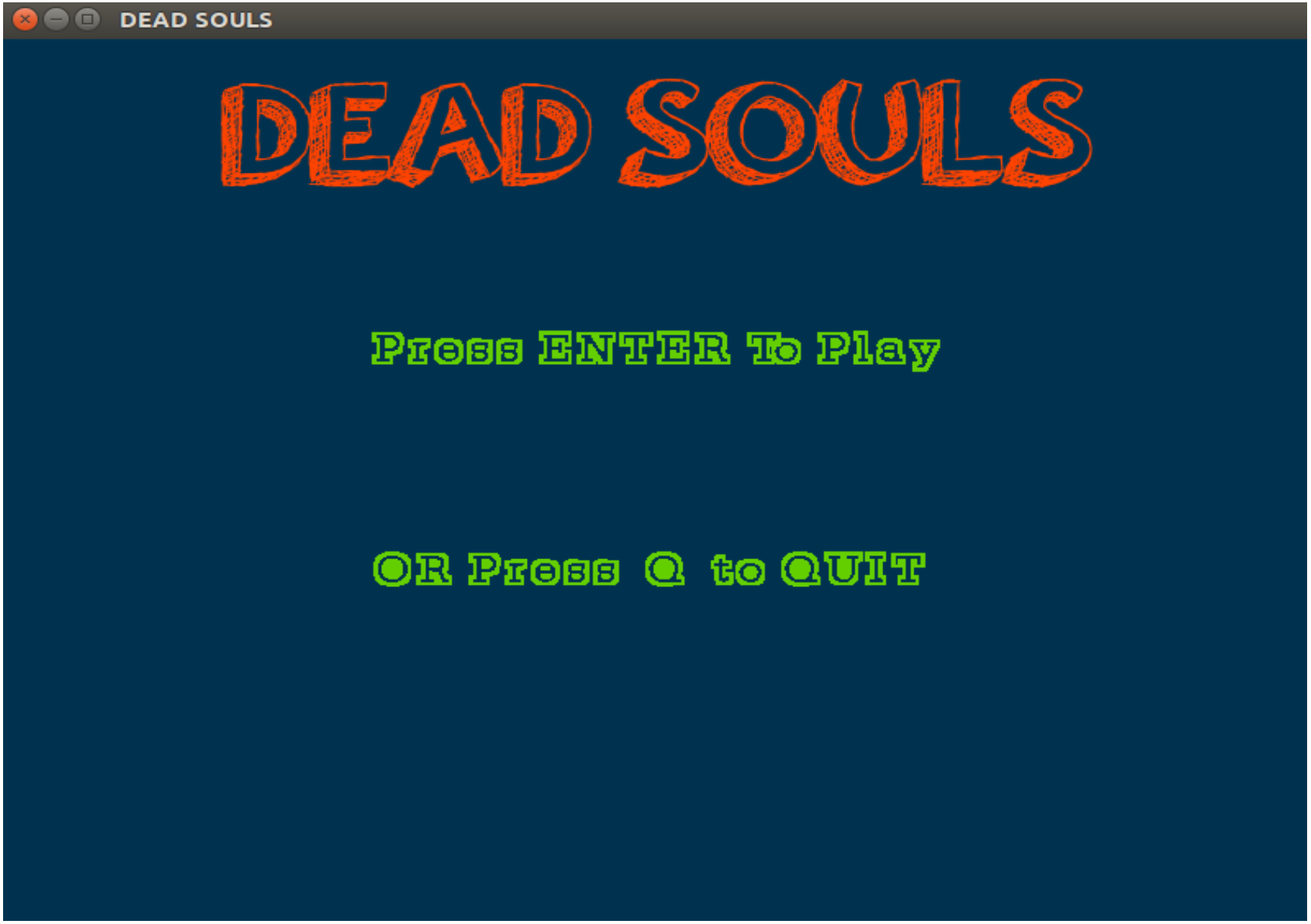
  4.The pixel collision function will determine the collision between images and after the collision, images will disappear.

Testing Strategy and Data:

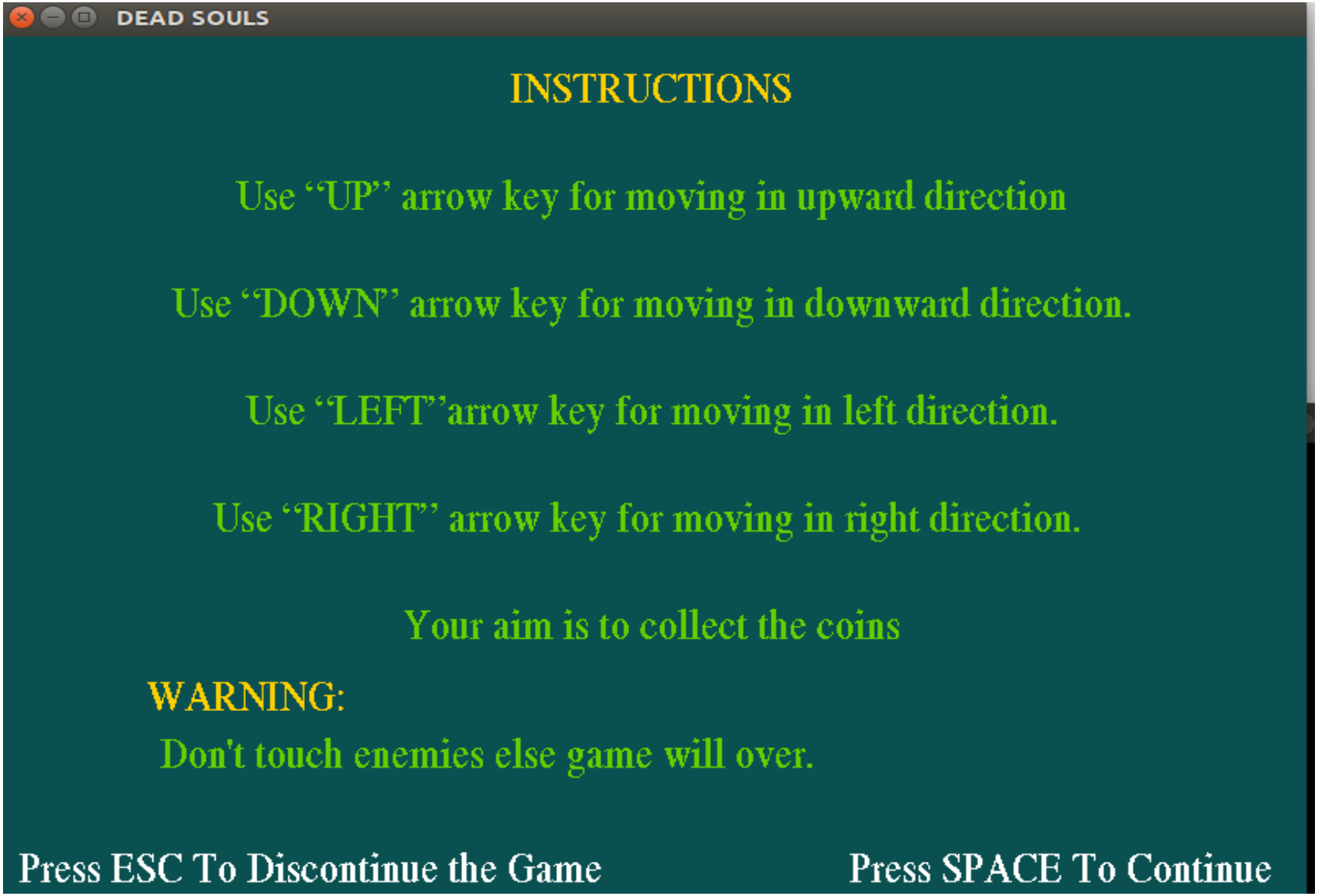
The Allegro5.0 graphics library allows to check whether display is initialized or not for game window and shows an error message box.

The code has been written to ensure that images of character , coins and enemeis doesn't go outside the game window.

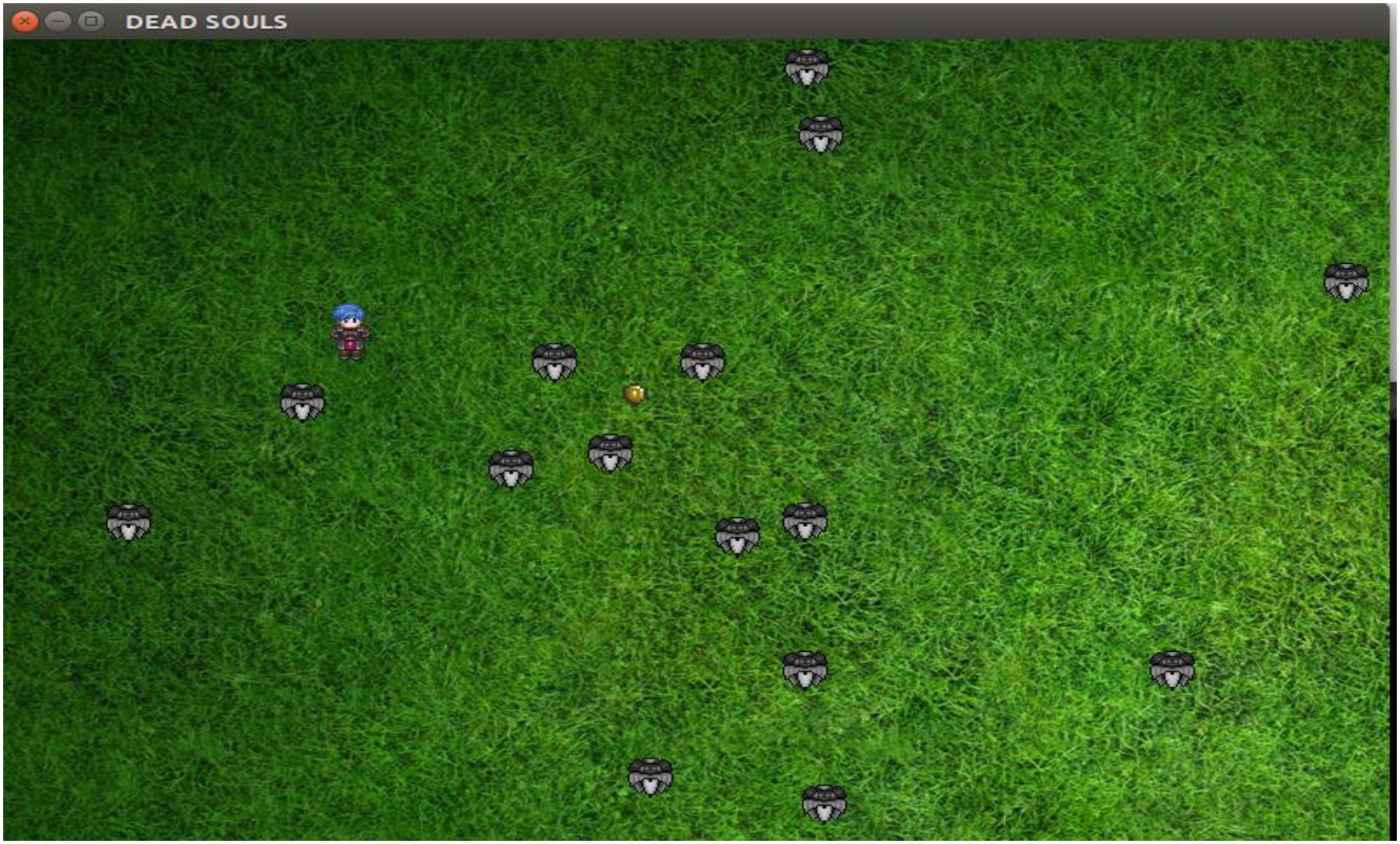
Initial Game Window:



Instruction Window:



Game Display:The character has to move to collect the coins without touching the enemies.



Game Over Window:If the character touches the enemies then this window will appear showing Score and the game will over.

Discussion of System:

A) What are worked as per plan?

1. Choose the graphics library:

We choose the Allegro graphics library to make the game's graphics more attractive.

2. Choose the operating system:

We choose the Ubuntu Linux OS to work on project because the compiling speed is higher than windows.

3. Making of Project code:

The entire code was made out of allegro which facilitated easier code manipulation.

- B)Changes made in plan:

  1.UbuntuOS installation:

  We initially thought of working with Simplecpp graphics library in Windows but graphics is not that much good in Simplecpp as Allegro graphics library.So we installed UbuntuOs with Allegro graphics library.

  Probable Reason:

  We installed UbuntuOs because Allegro graphics library was not working in Windows.

Future Work:

- This game can be extended to 3-D by using proper graphics library.
- We can include extra features like jumping , some gravity effects and fighting with the enemies.
- The player will be able to shoot bullets and kill enemies.
- The enemies can be able to move and also we can increase the difficulty of the game.

Conclusions:

- The project is a simple collect-em-all type game made which progresses endlessly until the player is hit by a enemy.

References:

1) Allegro tutorials
https://www.youtube.com/watch?v=IZ2krJ8Ls2A&list=PL6B459AAE1642C8B4

2) Allegro installation and working guide

https://www.allegro.cc/files/

3)UbuntuOS installation

http://www.ubuntu.com/download/desktop/install-ubuntu-desktop