

# **NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL**

*DEPARTMENT OF INFORMATION TECHNOLOGY*



**COURSE – Unix Programming and Practice  
COURSE CODE - IT202**

**A Project Report  
on**

**ARKANOID**

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# **ABSTRACT**

- Arkanoid is an arcade game.
- The title refers to a doomed mother ship from which the player's ship, the Vaus, escapes.
- The player controls the "Vaus", a space vessel that acts as the game's "paddle" which prevents a ball from falling from the playing field, attempting to bounce it against a number of bricks.
- The ball sticks to the bricks causes the brick to disappear.
- When all the bricks are gone the player sets the high score.
- This game can be played on any unix terminal.
- Running a file is enough for this game to run.
- This game has a cool interface to play and comes with a good introduction interface.

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# 1. INTRODUCTION

The title refers to mother ship from which the player's ship escapes. This game uses different types of bricks, a variety of level layouts, and visual layering and depth. The player controls the "**Vaus**", a space vessel that acts as the game's "paddle" which prevents a ball from falling from the playing field, attempting to bounce it against a number of bricks. The ball striking a brick causes the brick to disappear. When all the bricks are gone, the player wins the game and sets a new highscore.

## **2. METHODOLOGY AND** **FRAMEWORK**

### **2.1 System Requirement**

**Language\_:** Shell Script

**Platform :** Unix

**RAM :** 128MB(min)

**Processor :** Pentium 2 and Above

**Processor speed :** Above 500MHz

### **2.2 Algorithm and techniques**

This game is done based on placing cursors in a empty unix terminal. To place a cursor at a required position, we use tput command. We specify the required dimentions for the ball to move inside the block and whenever it touches the block frame it moves in the opposite direction against the entry direction. At each time we determine the x – y co-ordinates to place the ball at the position. We take the input from the keyboard to move the vagus in preventing the ball touching the ground.

# **3. IMPLIMENTATION**

## **3.1 List Of Main Unix Commands**

- **tput**
- **kill**
- **stty**
- **sleep**
- **IFS (Internal Field Seperator)**
- **clear**

**tput:**

tput setab [1-7] - Set a background color using ANSI escape

tput setb [1-7] - Set a background color

tput setaf [1-7] - Set a foreground color using ANSI escape

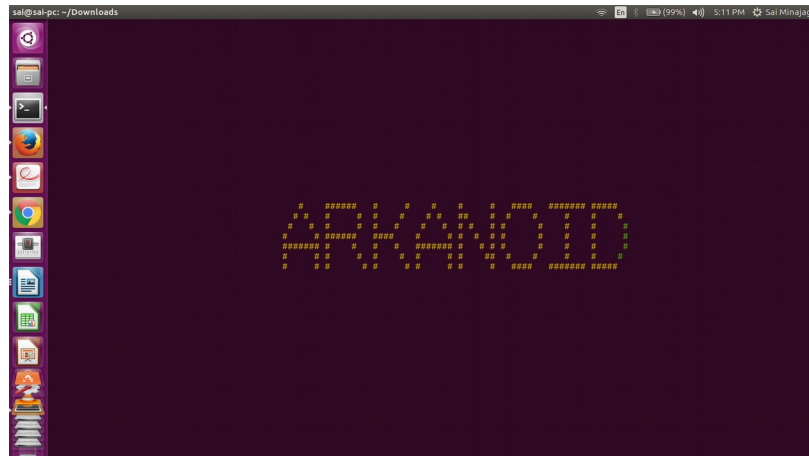
tput setf [1-7] - Set a foreground color

tput civis - removes cursor

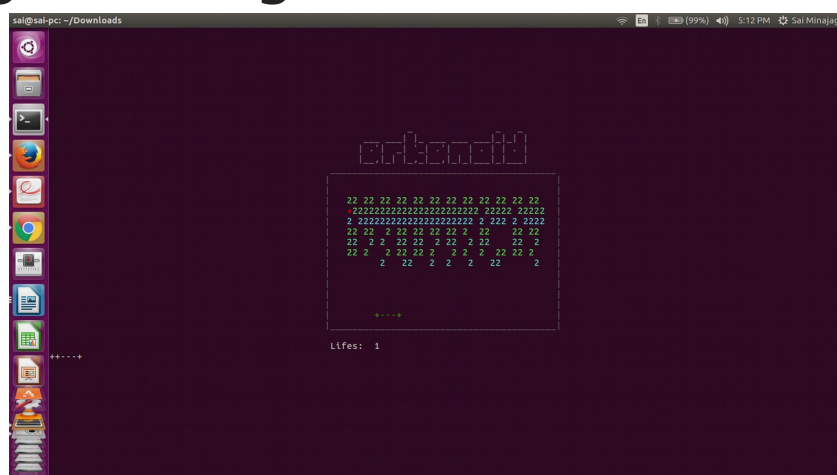
tput cnorm - gets back cursor

## 4. RESULTS AND ANALYSIS

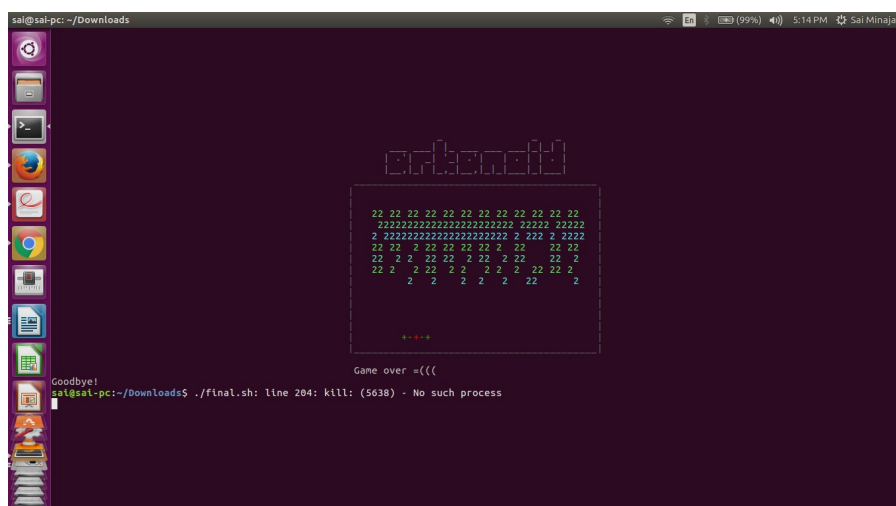
### 1. Starting of Arkanoid :



### 2. Progress of game Arkanoid



### 3. End



## **5. References**

[1] tput and its arguments

[http://linuxcommand.org/lc3\\_adv\\_tput.php](http://linuxcommand.org/lc3_adv_tput.php)

[2] Arkanoid Gaming

<https://en.wikipedia.org/wiki/Arkanoid>

[3] Unix Text Book

<https://www.google.co.in/SumitabhaDas>

**\*\*\*\*\*THE END\*\*\*\*\***