1. PROJECT OBJECTIVE

Designing a user interactive game entitled **Road Runner** using LPC2148.

2. GAMEPLAY

a. User presses start button to start the game.

b. Wolves come for the rabbit.

c. The rabbit jumps to dodge the wolves. The jump is controlled using a button.

d. If rabbit collides with wolf, game over message is displayed.

e. Player score is updated as he dodges the wolves.

f. Once the game is over, reset button is hit to restart the game.

3. IMPLEMENTATION DETAILS

3.1 HARDWARE DETAILS

a. LPC 2148 blue board.

b. Nokia 5110 LCD display: 48 X 84 pixels matrix LCD controller with PCD 8544 driver, operating at 3.3V. It is a low power consumption screen which comes with background light. The background light can be enabled/disabled using a button.

The PCD8544 is a low power CMOS LCD driver, designed to drive a graphic display of 48 rows and 84 columns. The PCD8544 interfaces to microcontrollers through a serial bus interface. The PCD8544 is manufactured in n-well CMOS technology.

c. RF module (transmitter / receiver): it is used for accessing the gaming controls in a wireless mode. It is connected to a 6F22 9V battery for power supply.

d. Inbuilt DACR register on development board to generate sound effects.