Green University of Bangladesh
Department of Computer Science and Engineering (CSE)

Faculty of Sciences and Engineering

Semester: (Fall , Year:2021), B.Sc. in CSE (Day)

LAB PROJECT PROPOSAL

Course Title: Digital Logic Design Lab

Course Code: CSE 204 Section: DB

Student Details

	Name	ID
1.	Jihad	202002082
2.	Shah Jalal	202002071

Submission Date : 26 / 11 /2021

Course Teacher's Name : Mr. Mozdaher Abdul Quader

[For Teachers use only: Don't Write Anything inside this box]

Project Proposal Status

Marks: …… Signature: .....

Comments: ..... Date: .....

TABLE OF CONTENTS

1. TITLE OF THE PROJECT PROPOSAL

Automatic night light control using Logic Gates

2. EXICUTIVE SUMMARY

In this project, we will build a night light circuit using a NAND gate chip. A night light circuit is a circuit in which a light will turn on when the environment becomes dark. It is a popular commercial product that is used in many places such as for backyard lights for when it gets dark for automatic illumination.

3. PROJECT DESCRIPTION

The circuit is very basic. The component that will allow us to detect light is a photoresistor. We will use a photoresistor's light-sensing ability to detect whether the circuit is exposed to darkness or bright light. How this works is that a photoresistor's resistance changes in proportion to the amount of light it is exposed to. In darkness, it has very high resistance. In bright light, its resistance drops dramatically. If placed in a voltage divider circuit with a fixed resistor, we can exploit this resistance-altering behavior so that when connected to a NAND gate, we can produce a HIGH output when the photoresistor is exposed to bright light and a LOW output when the photoresistor is exposed to darkness

4. HUMAN RESOURCE

- Jihad (ID : 202002082)
- Jalal (ID : 202002071)

5. PROJETCS BUDGET

- BREADBOARD ---------- 100 TK
- 74hc00n IC ---------- 105 TK
- 9V Battery ---------- 53 TK
- GL5537 ---- 34 TK
- LED ---------- 15 TK
- 330 Ohm Resistors ---------- 5 TK
- 6.8k Ohm Resistors ---------- 10 TK
- Wires ---------- 30 TK

Total = 352 TK

6. CONCLUSION

All of this will be explained in detail above how exactly this works. But realize that a photoresistor's resistance-changing ability allows us to distinctly know whether it is exposed to darkness or bright light. Knowing this,

.