

FACULTY OF ELECTRICAL ENGINEERING

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DUNGUN TERENGGANU

GAMES TIMER

DIPLOMA OF ELECTRICAL ENGINEERING

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In name of ALLAH

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INTRODUCTION

Games such as Articulate and Pictionary are provided with a sand timer to time the interval available for a player to take his turn. Timers like this give no audible indication at the end of the timed period and have the disadvantage that the next player has to wait for the sand to run through, even when the first player has finished his turn.

The brief is to design an electronic replacement for the sand timer which will provide instant reset, a visible indication of the time remaining, audible indication of the time remaining, audible indication at the end of the timed period, and moderately accurate timed periods of 30 seconds, 1 minute, 2 minutes, and 3 minutes.

Additional features which can be decided upon at the outset include 9V PP3 battery operation, modest current consumption to give useful battery life, size and weight convenient for this application and attractive appearance.

PROBLEM STATEMENT

Most of games that is played based on player turns usually required device to count the time needed for each player turns. There are not much devices that available in market nowadays which is suitable for these types of games. We come out with an idea which is to design a games timer for this purpose. If we succeed in this project, these games will be able to played fairly and efficiently.

PROJECT OBJECTIVE

The objectives of this project are to design a Games Timer and also to analyze the operation of Games Timer, steps taken to answer the raised problem, and list of tasks needed to complete our tasks.

SCOPE

The timer can count up to only 3 minutes. We use the 555 Timer to counting the period taken by the output. This IC have short timing interval. The alternative method to timing the long interval we use a CMOS Integrated Circuit that called 4060B. The parameters in this circuits like resistors R and capacitors C will be modified so that we get the desired value of R and C in order to get the accurate timing. This circuit will be simulated in MultiSim engineering software. All the results will be obtained in this report. Our games timer must be manually triggered to get it function.