University Name: Bilkent University

Department: Computer Science

Course Code: CS 223

Course Name: Digital Design

***Mine Sweeper Game***

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Report Submission Due Date : March 13, 2016

**Description Of The Project**

**Abstract:**

This project implements the classic game mine sweeper with our own take on it. Instead of the highly competitive and theoretically skill based game we all know we have decided it would be better to make this game a game of chance and intuition combined.

When the user starts the game, s/he will try to find a place that does not hide a bomb. The place with the bomb will chose randomly. If the led does not keep a bomb, just the place that user wants to give a chance will light on the led board. This process will continue until either the all places that does not hide the bom will be found or the bomb will be found. If the game ends by finding a bomb, then the user will see a message that states the game has end.

**Inputs:**

Slide Switches

**Outputs:**

Led lights

Four digits 7- segment display

**Input-Output Relation:**

At the beginning of the game all led lights will be off. When the user give the signal by the help of switches on Basys 3, the led lights will respond and reveal area.

At the end of the game, we will see a message on the four digits 7- segment display related to the user’s situation of winning. If the user wins, the message will be “W”, if not the message will be “L”.

**Equipment To Be Used:**

CS223 Beti Board

Basys 3

VGA display

**The Deliverables Of The Project**

**Name of Deliverable Date of Delivery**

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| Project Proposal Report | ***(13/03/17)*** |
| Project Progress Report | ***(10/04/17)*** |
| Project Final Report  SystemVerilog Code, The Oral Presentation Of The Project, Peer Grading Form | ***(08/05/17)***  ***(08/05/17)*** |
| Project Demo | Will be sheculed by the instructor or the TA’s. |