**COEN 317**

**Microprocessor Systems**

**EXPERIMENT #1**

**Introduction to the ZYNQ ZC702**

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**Section :**

"I certify that this submission is my original work and meets the Faculty’s Expectations of Originality",

# Objectives

The objectives of the lab are to become familiar with the Xilinx ZC702 development board and Xilinx software tools. Additionally, it is to become familiar with the PlanAhead tools, the Xilinx Platform Studio, and the SDK.

# Introduction

# In this lab, we are asked to create the “Hello World” program using the PlanAhead and SDK for the Xilinx ZC702 development board.

PlanAhead is a tool used to add design sources such as VHDL program or Intellectual Property to the hardware. The Xilinx Platform Studio customizes the processor hardware and programmable logic while the SDK is used to program the processor through a C or C++ GNU compiler.

For more information, please refer to the lab manual.

# Results

This lab is more directed to introduce us to the procedure and setup. For that reason, there isn’t much to show in terms of results nor much processes to explain. The lab required us to follow the detailed steps of how to setup the programs and what to write. In the end, I managed to get my “Hello World” program to run successfully and was able to see my cout on the terminal as shown in Figure 19 of the lab manual.

The following is my main.cc code:

#include <iostream>

using namespace std;

int main()

{

cout << "Hello World from Zynq PS" << endl;

return 0;

}

# Conclusion

In conclusion, the objectives of the lab were met. I managed to learn how to run a program using the Xilinx ZC702 board and receive its output on the computer. I also managed to gain experience and practice with PlanAhead and Xilinx Platform Studio.