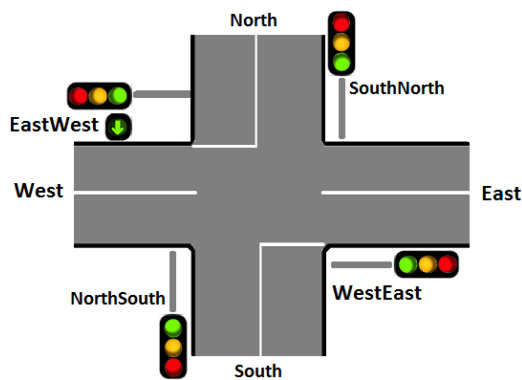# Traffic Light Controller

Project 4 | Modern Digital System Design | Texas Tech University

Project Description

Implement a traffic light controller for a four-way intersection. Your implementation should include 12 total LEDs (3 for each lane of the intersection. The light sequence should transition on an input clock controlled by a momentary push button switch. *Your traffic light may adhere to either the American (Red – Yellow – Green – Red) or the International (Red – Yellow – Green – Yellow – Red) standard sequence.*

Submission Requirements

You must demonstrate your **working** project to the instructor before proceeding on to Project 5. Prior to your demonstration, upload a .PDF file containing your digital schematic, drawn in KiCAD, to Blackboard.

During your demonstration, to receive a mark for completion, you must complete the following objectives:

- Demonstrate the functionality of your project.
- Explain the inner workings of your circuit including the use of flip-flops and other logic gate circuits that you implemented.

All projects must be demonstrated by 5:00 PM on the Last Day of Classes.