

THE UNIVERSITY OF TOLEDO

EECS 3100 – Embedded Systems

Lab Project #7 Grading Chart

PROJECT #7	Team Member 1 Name: _____ Team Member 2 Name: _____		
Lab Section No: _____ Grader's Name: _____ Lab Instructor's Name: _____			
	Grader's Evaluation Comments	Max Points Achievable	Points Earned
PROCEDURES			
Code		30	
Code correctly reads the three inputs for the system.			
Code correctly outputs to the 8 LEDs.			
Code properly configures the PLL.			
Code properly configures the SysTick Timers.			
There is 1-1 mapping between the FSM data structure and the state graph.			
Code has no conditional branches (do-while, while-loop, if-then, or for-loops), except in SysTick_Wait and in SysTick_Wait10ms.			
Functionality to implement "2 Second Walk" Button Timing is in the code.			
Testing		20	
Logic analyzer screenshot while in simulation mode, when cars are present on both roads.			

Walk Behavior			
The green LED is turned on when pedestrians are allowed to cross.			
System accounts for pedestrian pressing and releasing button after 2 seconds.			
System eventually processes walk request.			
The walk sequence should be realistic, showing three separate conditions:			
<i>Walk:</i> Walk light should be on signifying the pedestrians may cross.			
<i>Warning:</i> The “don’t walk” LED flashes signifying that pedestrians need to hurry.			
<i>Don’t Walk:</i> The “don’t walk” LED should be on and constant.			
Don’t Walk Behavior			
The “don’t walk” LED flashes when the two traffic signals are red.			
The “don’t walk” LED is steadily on, while traffic signals process non-pedestrian traffic.			
Traffic Behavior			
The traffic signals should facilitate traffic flow only when there are no pending pedestrian requests.			
The traffic signals behave according to expected patterns, including transitioning between stop, warning, and go states.			
There is a delay on the warning (yellow) states.			
Traffic in one direction is not in go state until traffic in other direction is in stop state.			

Design		15	
Circuit diagram (with Student's name and date) is correct.			
All elements in circuit diagram appropriately labeled.			
Circuit diagram has three inputs (buttons).			
Circuit diagram has 8 outputs (LEDs).			
State count for the Moore FSM is compliant with the requirements.			
Moore FSM accounts for all possible transitions.			
Finite state machine drawing properly models the problem.			
FSM accounts for and does not allow accidents.			
REPORT		15	
Professionalism of the report – correct spelling, grammar, coherence, organization and presentation			
Report is computer-generated: 8.5x11 paper & one side used			
Cover sheet – Include Course Name, Lab Section, Submission Date, Team Member Names, and a Table of Contents.			
Project Progress – Discuss the degree of completeness of your project for each part in the section "Procedures". If any part is incomplete, state what has been and what needs to be accomplished.			
Team Member Contributions – Discuss in detail each team member's contributions for each part in Procedures in quantitative terms.			
Attachments – include all deliverables as listed in the project assignment document.			

TEAM POINTS SCORED			
DEMONSTRATION EVALUATION			20
Demonstration Score Team Member 1 (out of 20)			Points Scored
Demonstration Score Team Member 2 (out of 20)			
Team Member 1 Team Points + Individual Demo Points =	Interim Score:	Team Member 2 Team Points + Individual Demo Points =	Interim Score:
TEAM MEMBER CONTRIBUTIONS		<i>Individual grades may be reduced up to 100% of the team grade (resulting for a score of zero) for those team member(s) who failed to contribute their fair share to each and every phase/task/subtask of the project.</i>	
Team member contributions described in adequate detail in the report? If not, request students to provide one ASAP (by email).		<i>Comment below for each team member if his/her grade is being adjusted due to less than fair and equitable share of contributions for parts of the project. Then enter the adjustment value in points from 1 to a maximum of "Team Points Scored".</i>	
Team Member 1 Detailed assessment for contributions			Adjustment Value (in points)
Team Member 2 Detailed assessment for contributions			
LATE SUBMISSION DEDUCTION			
Number of Days Late: _____ × 20 pts per day = _____ Points (deduction for late submission) (Subtract 20 points for each day late)			
Team Member 1 Name: _____ (Team Points + Individual Demo Points) – (Individual Contribution Adjustment + Late Submission Deduction) = _____	Finalized Project Score:	Team Member 2 Name: _____ (Team Points + Individual Demo Points) - (Individual Contribution Adjustment + Late Submission Deduction) = _____	Finalized Project Score: