## **UQ** Robotics

## METR 4202 Sensing Lab Demonstration Assessment

Team №	Team Name:			Date:	8 / O	ct / 2014			
Member 1		Member 2	Member 2 Member 3		er 3				
Scene	Levels		Tasks			Shots	Total		
	The Babychino	$\Box$ Return the cup origin in pixe	el space (as clearly displayed on ar	n image)		1/2			
	Basic Level	<ul> <li>Identify the cup type (small,</li> <li>Metric range</li> </ul>	medium, or large)			1			
	Intermediate Level	$\Box$ + 3D metric location				2			
The First Customer	Advanced Level	<ul> <li>□ + 3D metric location (with</li> <li>□ + Fill level (empty or full)</li> <li>□ Potentially under low light</li> </ul>	high accuracy and precision)			3	3		
	Comments								
The Lunch Hour	Basic Level	<ul> <li>Identify the cup types</li> <li>3D metric locations of the majority of fluid receptacles</li> <li>[All cups are on the same plane (which may or may not be the plane of the origin frame)]</li> </ul>			1				
	Intermediate Level	<ul> <li>+ Accurate fill level determination</li> <li>+ Variations in placement height (i.e., cups might be on different planes)</li> </ul>			2				
	Advanced Level	<ul> <li>□ + Occluded cups</li> <li>□ + Shadowing (or other lighting variations)</li> <li>□ Robust performance?</li> </ul>			4				
	Comments								
	URL								
Open Source	Comments								

Scene	Levels	Tasks	Shots	Total				
The Happy Hour	Basic Level	<ul> <li>Identify the 3D cup location</li> <li>2D pixel glass location. [For the glass there might be (small) errors in localization ]</li> <li>Cups and glasses might at arbitrary in placement heights?</li> </ul>						
	Intermediate Level	<ul> <li>+ Accurate fill level determination (of both cups and glasses)</li> <li>Occlusion</li> </ul>	2					
	Advanced Level	<ul> <li>+ Accurate 3D metric localization of both cups and glasses</li> <li>Robust performance</li> </ul>	4					
	Comments							
Clean-up	Basic Level	<ul> <li>□ Determine the 3D metric location</li> <li>□ Orientation of cups</li> <li>1</li> </ul>						
	Intermediate Level	<ul> <li>□ + 2D (pixel) location of the glass(es)</li> <li>□ + Accurate fill level determination         [including half-full for glasses]</li> </ul>	2					
	Advanced Level	<ul> <li>+ Stacked cups</li> <li>+ Metric position and orientation of all cups</li> <li>At the end of the day, anything goes!</li> </ul>	4					
	Comments							
Comments								
Total Mark:								