Project Plan
Group #3: S.P.O.T.
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First Stage :: GUI and Web Interface Design :: Due Week 1
• Implement GUI for the upgraded "Entertainment Player"
• Ensure remote access
• Ensure access to video stream for processing
• Proof of Concept (POC)
• Unit Analysis Testing (UAT)

Second Stage :: Object Recognition and Localization :: Due Week 3
• Process an image and create regions of interest around a mouse click
• Distance algorithm with respect to Localization
• Use other sensors such as IR to verify distance
• POC
• UAT

Third Stage :: Path Planning and Obstacle Avoidance :: Due Week 6
• Design first step routine to start motion of robot towards the object
• Keep track of displacement from start to approximate the finish
• Plan ahead for any obstacles that may have already been seen
• Use IR to range objects greater than 600mm away
• Use Image Processing to do obstacle avoidance after objects break the 600mm plane
• Ensure (as best as possible) obstacle avoidance doesn't alter the goal succession
• POC
• UAT

Fourth Stage :: Project Completion and Testing :: Due Week 8
• Combine all 3 previous stages to create our final product
• UAT as each stage is installed
• Full Testing Analysis
• Presentation finalization

Our project will require that all groups members work on the project stages together due to the amount of work and testing in each stage. However, as stages close to an end members will begin to shift to the next stage as workload allows. Timelines are lose and not definite due to not completely knowing how involved each task will be with regards to writing actual code to interface with the robot. (Therefore, all items listed above subject to change.)