

AI- Project

Modified Concept Doc and 1st Milestone Progress

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Outline

- 1 Modified Goal Statement
- 2 Modified Technology and Architecture
- 3 Demo
- 4 Milestones

- **Collaborative Task:**

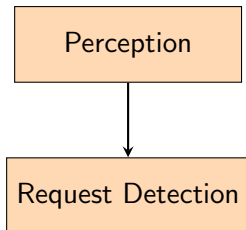
Robot has to pick up a raw material from Location A and drop it in Location B. The robot hibernates until the human completes his/her task and ask for the next raw material.

Human will be waiting for the raw material in Location B and when he gets the raw material, Human performs his analysis on the object and after he is done with the task, he will ask for the raw material.

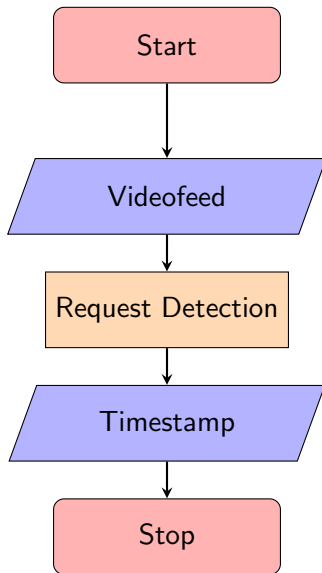
Our goal is to reduce idle time of human, we do this by predicting his *task* time so that the robot can complete its part without any delay for the human side.

Modified architecture

- **Request Detection** uses python libraries, mainly OpenCV, to detect hand gesture from the videofeed, the timestamp is send as the output.



Perception



Milestones

Schedule Planning	
Date	Expected Work
2 nd February, 2017	Implementation of Perception module in Python
9 th February, 2017	Implementation of Intention Prediction/Evaluation in Python
16 th February, 2017	Implementation of Planner in Python
23 rd February, 2017	Implementation of Action Renderer in Python
9 th March, 2017	Integrating all components and Testing
16 th March, 2017	Rendering actions using ROS/SWI-Prolog/Robot Studio for a simple task
23 th March, 2017	First Draft Submission