CSCI 3308 Software Development Methods and Tools
Project Part 1

Who: Bradley Arnot
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Title: Robotic Arm

Description: We are planning on using an Arduino and SparkFun's other products to build a robotic arm. We want it to be able to move and pick objects up.

Vision Statement: A robotic arm built from scratch.

Motivation: There are applications for robotic arms everywhere in society including medical and manufacturing purposes.

Risks: Limited knowledge of Arduino, relatively small team, relatively small time period, scheduling conflicts, if we can't access the right parts

Mitigation Strategy: Attending Aduino workshops, shorter sprints to attend to blocks faster

VCS: github
https://github.com/candeladd/Methods-Tools_ProjectFall2015.git

List of requirements:

User Requirements			
ID	**Description**	**Agile Sizing**	**Priority**
US-01	As a user, I want a robotic arm that will pick objects up.	20	High
US-02	As a user, I want a robot that is easy to control.	15	Medium
US-03	As system designers, we want to provide an interactive interface so that users can easily use a robot for whatever they need.	15	Medium

Functional Requirements			
ID	**Description**	**Agile Sizing**	**Priority**
FN-01	As system developers, we want to read in the user's commands to move the robot.	8	High
FN-02	As system developers, we want to design an easy to use controller for users to interact with the robot.	11	High
FN-03	As system developers, we want to make sure the robot arm is strong enough to pick up everyday objects.	5	High

Non-Functional Requirements			
ID	**Description**	**Agile Sizing**	**Priority**
NF-01	As system developers, we want the robot to function normally every time the user needs it.	11	Low
NF-02	As system developers, we want some form of container to cover exposed electronic and other metal parts for the robot.	8	Low

Methodology: Mashup of Agile and Waterfall, 1 week sprints to mitigate blocks

Project Tracking Software: Freedcamp, and Slack for communication
https://freedcamp.com/Laurens_Projects_Dz5/Software_Method_3iw/todos

Project Plan Part 1:

To-Do list

- Tasks for week of 9/20
- ~~Attend Arduino Workshop on 9/22~~ completed on Sep 23, 2015 medium Everyone
- Develope Arduino application
- Data analysis
- EVERYONE READ in progress high Everyone
- ~~Submit Part 1~~ completed on Sep 28, 2015 Kelsey D. due **Sep 24, 2015**
- ~~Arduino Workshop part II~~ completed on Oct 1, 2015 medium Brad A. due **Sep 29, 2015**
- Purchase Arduino parts/email department for rentals in progress high Everyone due Oct 2, 2015
- Push new tasks to repository Kelsey D. due Oct 2, 2015
- Research Robotic Arm tutorials medium Everyone due Oct 6, 2015
- Meetings high Everyone due Oct 8, 2015
- Step 1 of building robot Everyone due Oct 8, 2015
- Project Part 2 high Everyone due Oct 13, 2015
- Step 2 due Oct 22, 2015