Milestone 6

for

Project Caesar

Version 1.0

Prepared by Jordan Alvarez, Caleb Benedick, Tyler Korte, and Julien Pinelli

Nov. 5, 2018

1. Contact Information

1.1 Team Members

Jordan Alvarez:
Email: alvarezj2015@my.fit.edu
Tyler Korte:
Email: tkorte2015@my.fit.edu
Caleb Benedick:
Email: cbenedick2014@my.fit.edu
Julien Pinelli:
Email: jpinelli2015@my.fit.edu

1.2 Client and Faculty Sponsor

Sponsor:

Dr. Eraldo Ribeiro
Department: School of Computing
Email: eribeiro@cs.fit.edu

Client:

Dr. Darby Proctor
Department: School of Psychology
Email: dproctor@fit.edu

2. Meeting Schedule

2.1 Client:

Team meeting with the project client occur every Monday at 5pm.

Meeting Dates:

- 11/13/2018

2.2 Sponsor:

Meetings vary dependant on sponsor and team schedules.

Meeting Dates:

-

3. Progress of Milestone 2

Task	Jordan	Tyler	Caleb	Julien	Completion %	To do
Documentation/ creating final sprint	**100%**	**0%**	**0%**	**0%**	**100%**	**Updates as Required**
Write Raspberry Pi to Arduino communication code	**100%**	**0%**	**0%**	**0%**	**100%**	**N/A**
Resize 3D printed dispenser	**0%**	**100%**	**0%**	**0%**	**100%**	
Finish stylizing the main menu program	**0%**	**0%**	**100%**	**0%**	**100%**	
Finish adding the final details from the client to the test program	**0%**	**0%**	**100%**	**0%**	**100%**	
Finish the arduino control code for the servos and IR sensors	**0%**	**100%**	**0%**	**0%**	**100%**	
Finish writing data collection code	**50%**	**0%**	**500%**	**0%**	**100%**	
Hardware Testing	**50%**	**50%**	**0%**	**0%**	**100%**	
Construct Hardware housing and performance	**100%**	**0%**	**0%**	**0%**	**100%**	

test						
Live test completed system at the brevard zoo	**25%**	**25%**	**25%**	**25%**	**100%**	

3.1 Progression Discussion

Documentation:

Existing Documents:

All documentation that had been previously completed by the team is currently being updated by Jordan. At this point the documentation has all been updated. Jordan will continue to update the documentation and the website as needed.

Team Management:

Jordan also has been acting as team manager and developed a final development sprint to ensure all of the pieces of the project were merged together correctly.

New Documents:

Jordan also created documentation the client requested which outlines the design and construction of the system. This documentation is intended to be used as an instruction manual on how to re-create this system once it is shared with the scientific community at large.

Write Raspberry Pi to Arduino communication code

Jordan was tasked with writing the code for the communications between the raspberry pi and the arduino. The communications are being done through the serial port on the arduino and pi. The code was written in kotlin to be easily mergeable with the main program code developed by Caleb.

Resize 3D printed dispenser:

Tyler was in charge of doing all the 3D modeling for the custom pellet dispenser. During the previous milestone the team discovered the 3d print dimensions were slightly too small for the needs of the system. In this milestone Tyler worked to resize the 3d model and then gave the models to Julien to get the dispenser re-printed.

Finish stylizing the main menu program:

Caleb has been the lead on the main menu and test program, writing the code in Kotlin. After the initial versions of these programs had been completed Caleb worked on making the menu more user friendly and stylized

Finish adding the final details from the client to the test program:

Caleb was also tasked to add in the final details given to the team regarding the functionality of the test program. Caleb has gone through the code and created the additions and modifications that were requested.

Finish the arduino control code for the servos and IR sensors:

Tyler was in charge of getting all of the arduino systems working on the hardware. Since the previous milestone Tyler has improved the original arduino code as well as fully integrating and testing the use of the 3d printed dispenser with the servo motors and IR sensors.

Finish writing data collection code:

Caleb’s last addition to the main code base is the data collection system the client had requested. This part of the code will track the number of correct and incorrect attempts as well as the time intervals between attempts. It will also record the location and name of the stimuli (image) used in the test. This information will be ported to a csv file that the user can take to analyze later.

4.2 Sponsor Remarks:

Sponsor Signature: _____ Date: _____

Jordan Alvarez	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Caleb Benedick	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Tyler Korte	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Julien Pinelli	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

Sponsor Signature: _____ Date: _____