Secure Door Lock Milestone 5

Team Members:

Name	Email
James Pabisz	jpabisz2020@my.fit.edu
Christopher Kiefer	ckiefer2019@my.fit.edu
Warren Smith	wsmith2019@my.fit.edu
Luke Bucher	lbucher2017@my.fit.edu

Faculty Advisor:

Dr. Marius Silaghi - msilaghi@fit.edu

Client:

Dr. Marius Silaghi - Graduate Professor at Florida Institute of Technology

Progress Matrix:

Task	Percent Completed	James	Christopher	Warren	Luke
Video Streaming to App	70%	20%	20%	20%	40%
Mobile App Unlock/Lock	70%	30%	20%	20%	30%
Facial Recognition Classification Visible on App	90%	20%	40%	20%	20%
Usability Testing	50%	40%	20%	20%	20%
Security Testing	30%	20%	20%	40%	20%
Project Board	70%	25%	25%	25%	25%

Task Discussion:

Video Streaming to App - The team integrated video feed from the door to the app. This allows the homeowner to verify that the facial recognition did the categorization correctly, which improves security.

Mobile App Unlock/Lock - The team integrated the ability of the homeowner to lock or unlock the door through the app. The communication pipeline between the door lock and the mobile app directly was established.

Facial Recognition Classification Visible on App - The team integrated AWS facial recognition technology into the smart door lock software, and used a combination of programming languages and frameworks to ensure that the classification results are visible on the mobile app. They also implemented features such as push notifications and alerts to enable the homeowner to verify the identity of the person trying to enter the property.

Usability Testing - The app has been tested for usability by the developers and a survey for further usability testing has been developed. So far usability has been measured in task completion time. The task used on the first round of testing was adding a user to the database.

Security Testing - The codebase was reviewed and all very common bugs were identified. Some automated testing and manual testing was done. There is only about 30-40% coverage currently.

Project Board - The board's design was created and all current information to be displayed was added.

Member Contributions:

James Pabisz:

- Designed and conducted usability tests for the app.
- Assisted in connecting the lock/unlock feature on the app.
- Make the first draft for the project board

Christopher Kiefer:

- Worked on integrating the facial recognition into the app
- Finished leftover tasks from previous milestones

Warren Smith:

- Finished the e-book page
- Contributed to Milestone 5 report
- Contributed to Milestone 5 presentation

Luke Bucher:

- Added connection between camera feed from lock and the app
- Established connection between lock/unlock button on the app and the lock.
- Worked on integrating AWS facial recognition into the backend.

Milestone 6 Task Matrix:

Task	James	Christopher	Warren	Luke
User Manual	40%	20%	20%	20%
Developer Manual	25%	25%	25%	25%
Demo Video	20%	20%	20%	40%
Revisions of Board and Print physical board	40%	20%	20%	20%
Progress Evaluation	20%	20%	40%	20%
Usability Testing	20%	40%	20%	20%
Security Testing	20%	20%	40%	20%

Milestone 6 Task Discussion:

- User manual: The team will create a document that outlines how to use the Secure Door Lock, aimed at the end user. It will provide step-by-step instructions on how to use the features and functions of the system, as well as any troubleshooting tips.

- Developer manual: The team will create a document that outlines how to develop and maintain the Secure Door Lock system. This will include technical details such as programming languages, frameworks, and libraries used, as well as best practices and guidelines for coding and testing. This document will also include troubleshooting tips aimed at developers.

- Demo video: The team will create a short video showcasing the Secure Door Lock. This will include a walkthrough of the key features and functionalities, as well as of the unique selling points or advantages of our system over other similar systems.

- Revision to project board: The team will update our project board to reflect any feedback that we received from our milestone 5 presentation. This will ensure that everyone is on the same page, that the board looks professional, and that it contains all the vital information.

- Project Evaluation: The team will assess the success of the project against the initial objectives and criteria set out in the project plan. This will involve gathering feedback from our client and team members, as well as analyzing metrics such as usability and security.

- Usability testing: The team will conduct testing with end-users to ensure that the Secure Door Lock is easy to use and meets their needs. This will involve gathering feedback through surveys, interviews, and observation, and then making changes to the design or functionality based on the results.

- Security testing: The team will conduct testing to ensure that the Secure Door Lock is in fact secure and protected against cyber threats. This will involve penetration testing, vulnerability scanning, or other security assessments to identify any weaknesses or vulnerabilities that need to be addressed. These will be addressed and then the system will likely go through one more round of Penetration Testing.

Meeting Dates:

Date	Topic

Faculty Advisor Feedback below:

Approval from Faculty Advisor

"I have discussed the milestone with the team. I have evaluated the progress and will assign a grade for this milestone."

Signature: _____ Date: _____

Evaluation by Faculty Advisor:

Score (0-10)

James	0	1	2	3	4	5	6	7	7.5	8	8.5	9	9.5	10
Chris	0	1	2	3	4	5	6	7	7.5	8	8.5	9	9.5	10
Luke	0	1	2	3	4	5	6	7	7.5	8	8.5	9	9.5	10
Warren	0	1	2	3	4	5	6	7	7.5	8	8.5	9	9.5	10