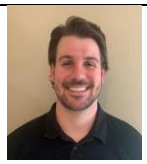
Weekly Team Task Report

Report #14

Team: Team PiWatcher	**Date:** 2/2/2021
Project Title: Automated IoT People Counting Infrastructure	

	**Brigham** Present On-time		**Champ** Present On-time		**Joshua** Present On-time		**Seth** Present On-time		**Brandon** Present On-time

Recent Meetings:

- **1/27/2021 – Weekly Team Meeting:** Task creation and task followup. Entire team got together to pair program and work on the image solution for people recognition and people counting

- **2/1/2021 – Weekly Team Meeting:** Team restrospective – discussed things team did well, didn't do well, and needs improvement on in the past month. Afterwards, finanlized tasks the were waiting in review and created new tasks for this week.

TASKS COMPLETED since last meeting:

Task Title: SPIKE: Figure out how to get CAS login screen with Duane	**Task Initiation:** 1/13/2021	**Orig. Due Date:** 1/19/2021	**Status:** Complete (100%) – Late (Waiting on status from Duane)
Who (%): Brigs (50%), Brandon (50%)			
Description: Work with Duane and ITS to figure how CAS can be implemented and gather the required resources.			
Expected Outcome: Gathered necessary documentation needed to get CAS implemented			

Task Title: PCI-Prototype-Backend: Research WSGI/Reverse proxy	**Task Initiation:** 1/13/2021	**Orig. Due Date:** 1/19/2021	**Status:** Complete (100%) – Late (Waiting on status from Duane)
Who (%): Champ (100%)			
Description: Research different WSGI servers that will be compatible with CAS login.			
Expected Outcome: WSGI and reverse proxy service is determined and comptabile with CAS login			

Task Title: SD-Doc: Draft Implementation Overview	**Task Initiation:** 1/13/2021	**Orig. Due Date:** 1/31/2021	**Status:** Complete (100%) – 1/31/2021
Who (%): Josh (100%)			
Description: Discuss the product we are building to solve client's problem and introduce the approach we are taking. Mention tools and techniques we will be using.			
Expected Outcome: Implementation overview page is added and is reviewed by Josh, Seth, and Brandon.			

Task Title: SD-Doc: Draft interface description for Web App Frontend	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 1/31/2021	**Status:** Complete (100%) – 1/31/2021
Who (%): Brigs (50%), Seth (50%)			
Description: Provide natural-language description of the responsibilities of the frontend component. Describe how the frontend components interact with each other to produce the needed results.			
Expected Outcome: Interface description for Web App Frontend is completed. The interface description is added onto the Software Design document. The page is reviewed by Brandon, Josh, and/or Seth.			

Task Title: SD-Doc: Draft interface description for Web App Backend	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 1/31/2021	**Status:** Complete (100%) – 1/31/2021
Who (%): Champ (100%)			
Description: Provide natural-language description of the responsibilities of the backend component. Describe how the frontend components interact with each other to produce the needed results.			
Expected Outcome: Interface description for Web App Backend is completed. The interface description is added onto the Software Design document. The page is reviewed by Brandon, Josh, and/or Seth.			

Task Title: SD-Doc: Draft interface description for IoT device	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 1/31/2021	**Status:** Complete (100%) – 1/31/2021
Who (%): Josh (100%)			
Description: Provide natural-language description of the responsibilities of the IoT component. Describe how the frontend components interact with each other to produce the needed results.			
Expected Outcome: Interface description for IoT device is completed. The interface description is added onto the Software Design document. The page is reviewed by Brandon, Josh, and/or Seth.			

Task Title: SD-Doc: Draft architectural overview	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 1/31/2021	**Status:** Complete (100%) – 1/31/2021
Who (%): Josh (100%)			
Description: Explain each section of the architectural diagram and tie in how it all works overall.			
Expected Outcome: Architectural overview is created and onto the Software Design Document. The page is reviewed by Brandon, Josh, and/or Seth.			

Task Title: SD-Doc: Draft UML Diagrams for Web App Frontend	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 1/31/2021	**Status:** Compelete (100%) – 1/31/2021
Who (%): Brigs (50%), Seth (50%)			
Description: Create UML diagram that describes the modules that go into developing the Web App Frontend.			
Expected Outcome: UML diagram is created and onto the Software Design Document. The page is reviewed by Brandon, Josh, and/or Seth.			

Task Title: SD-Doc: Draft UML Diagrams for Web App Backend	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 1/31/2021	**Status:** Complete (100%) – 1/31/2021
Who (%): Champ (100%)			
Description: Create UML diagram that describes the modules that go into developing the Web App Backend.			
Expected Outcome: UML diagram is created and onto the Software Design Document. The page is reviewed by Brandon, Josh, and/or Seth.			

Task Title: SD-Doc: Draft UML Diagrams for IoT device	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 1/31/2021	**Status:** Complete (100%) – 1/31/2021
Who (%): Josh (100%)			
Description: Create UML diagram that describes the modules that go into developing the IoT device.			
Expected Outcome: UML diagram is created and onto the Software Design Document. The page is reviewed by Brandon, Josh, and/or Seth.			

Task Title: PCI-Prototype-IoT: Analyze saved images	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 2/1/2021	**Status:** Complete (100%) – 1/27/2021
Who (%): Brigs (20%), Champ (20%), Josh (20%), Brandon (20%), Seth (20%)			
Description: Take saved images and feed them into model. Get results from the model displayed on the screen.			
Expected Outcome: Able to analyze saved images and get results displayed. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-IoT: Implement image capture and saving	**Task Initiation:** 1/25/2021	**Orig. Due Date:** 2/1/2021	**Status:** Complete (100%) – 1/27/2021
Who (%): Brigs (20%), Champ (20%), Josh (20%), Brandon (20%), Seth (20%)			
Description: Research and find a different model that analyzes only people. Determine here is a model needs to be trained.			
Expected Outcome: Determined if a model needs to be trained and/or found a different model that analyzes only people. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-Frontend: Condense contexts and implement a reducer	**Task Initiation:** 1/13/2021	**Orig. Due Date:** 1/26/2021	**Status:** Complete (100%) – Late (Josh sick, reassigned to work on IoT) 2/1/2021
Who (%): Seth (100%)			
Description: Condense down the multiple contexts and implement a reducer to streamline code base			
Expected Outcome: Pull request is created, reviewed, and accepted.			

This week's Tasks: Work plan for coming week

Task Title: PCI-Prototype-IoT: Setup Jetson Nano & Get Demo Running	**Task Initiation:** 1/13/2021	**Orig. Due Date:** 1/19/2021	**Status:** In Progress (80%) – Late (Picked up hardware from Duane 2/2/2021)
Who (%): Josh (100%)			
Description: Install Jetson Nano Operating system and attempt to get a working demo and gather some statistics for performance.			
Expected Outcome: Jetson Nano OS is installed and provide feedback on the performance of the demo.			

Task Title: PCI-Prototype-IoT: Test different models and collect metrics	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Seth (33.3%), Brigs (33.3%), Josh (33.3%)			
Description: Find other models and test those models on our useable demo. Gather and collect metrics on the performance of certain models.			
Expected Outcome: Metrics were collected on models and direction for the device is determined. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-Backend: Setup and configure MongoDB	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Brandon (100%)			
Description: Setup and configure MongoDB with Flask such that the information is stored on our local machine instead.			
Expected Outcome: MongoDB is setup and configured locally and the pull request is created, reviewed, and accepted.			

Task Title: SPIKE: Determine feasibility of restructuring codebase	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Seth (33.3%), Brigs (33.3%), Josh (33.3%)			
Description: Revisit demo in IoT repository and discuss feasibility of current code base. Determine is Josh's version of the code base and determine if we should pivot to that or use current solution. Create new stories for reworking codebase			
Expected Outcome: Feasibility is determined and new stories are created on the Kanban board.			

Task Title: SD-Doc: Revise document with team mentor changes	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Brandon (100%)			
Description: Go over recommended changes by the team mentor and revise issues with the document.			
Expected Outcome: Document is revised and reviewed by Josh, Seth, and Brandon.			

Task Title: PCI-Prototype-IoT: Setup scheduler for IoT Device	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Josh (100%)			
Description: Create scheduler file and add scheduling functionality with the image capture and sending data to the backend.			
Expected Outcome: Scheduler functionality is implemented and works as intended. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-IoT: Connect IoT device to Web Backend	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Josh (50%), Brandon (50%)			
Description: IoT device sends updated counts through REST endpoint and ensure that the data is inside the database.			
Expected Outcome: IoT device is able to communicate with the backend and update the database. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-Frontend: Implement a dummy login page	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Seth (100%)			
Description: Create login page components and structure CSS. Setup router to dashboard from login.			
Expected Outcome: Login page components and structured CSS is connected. Router is setup and routes user to application dashboard upon login. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-Frontend: Implement a map for building search and selection	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Seth (100%)			
Description: Obtain coordinates for all NAU buildings and implement a map for building selection. Ensure that the selection is connected to the overall context.			
Expected Outcome: Coordinates are obtained and are mapped for building selection. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-Backend: Setup flask configuration handling	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Champ (100%)			
Description: Create configuration that sets up a development, testing, and production environment. Update README.md, Dockerfile, etc. if necessary. Once configuration is setup, ensure that PCI REST API still works as intended.			
Expected Outcome: Flask configuration handling is setup. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-Backend: Service folder structure reorganization	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Champ (100%)			
Description: Restructure services folder to follow UML diagram.			
Expected Outcome: Services folder is restructured. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-Backend: Setup password based endpoint authentication	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Champ (100%)			
Description: Utilize Flask-HTTPAuth to protect endpoints utilizing password based authentication. Ensure that the PCI REST API still works as intended.			
Expected Outcome: REST Endpoints are secured with password based authentication. Pull request is created, reviewed, and accepted.			

Task Title: PCI-Prototype-Backend: Gather building names	**Task Initiation:** 2/1/2021	**Orig. Due Date:** 2/8/2021	**Status:** In Progress (0%)
Who (%): Champ (100%)			
Description: Add fucntionality to MongoDB Manager Service (MMS) to gather a list of building names that the system has entries for.			
Expected Outcome: Buildings that have entries are returned. Pull request is created, reviewed, and accepted.			

Upcoming Tasks: Planning

Task Title: Start implementation of Login Authentication System	**Who (%):** Champ (50%), Seth (50%)	**Rough Due Date:** 2/16/2021
Description: Start development of Login Authentication System on both the backend and the front end.		

Task Title: Design Review Presentation II	**Who (%):** Champ (20%), Seth (20%), Brandon (20%), Josh (20%), Brigs (20%)	**Rough Due Date:** 2/26/2021
Description: Start creating design review draft presentation		

Other Problems / Other Issues:

- No problems or issues so far.