### **Weekly Team Task Report**

Report #20

Team: Team PiWatcher **Date:** 3/16/2021

**Project Title:** Automated IoT People Counting Infrastructure



Brigham Present On-time



Champ Present On-time









Seth **Brandon** Present Present On-time On-time

#### **Recent Meetings:**

- 3/10/2021 Weekly Work Meeting: Discussed requirements that are in questions and some of the questions that we need to ask Duane. Start talking about the new design for the backend that will work more effectively for the frontend.
- 3/11/2021 Client Meeting: Asked client questions about SSL encryption and some clarification on some the requirements that require CAS.
- 3/12/2021 Weekly Work Meeting: Created designs for the new date range querying along with the role management system.
- 3/15/2021 Weekly Team Meeting: Went over tasks from last week and discussed how the prototype demonstration will work and performed a dry run. Created and groomed tasks for the week.

# TASKS COMPLETED since last meeting:

Task Title:	Task Initiation:	Orig. Due	Status:			
PiWatcher-Docs: Peer Evaluation #2	3/8/2021	Date:	Complete (100%)			
		3/12/2021				
Who (%): Brandon (20%), Brigs (20%), Chan	np (20%), Josh (20%)	), Seth (20%)				
<b>Description:</b> Each team member finishes and submits their peer evaluations to the team mentor.						
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.						

Task Title:	Task Initiation:	Orig. Due	Status:			
PiWatcher-Docs: Write Introduction for	3/8/2021	Date:	Complete (100%)			
Software Testing Document		3/12/2021				
<b>Who (%):</b> Brigs (100%)						
<b>Description:</b> Write introduction that follows assignment guidelines and specifications.						
<b>Expected Outcome:</b> Above description is completed. The section is added onto the google document and flows						
well with the rest of the paper						

Task Title: PiWatcher-Docs: Unit Testing for IoT	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)		
Who (%): Brigs (100%)					
<b>Description:</b> Write about the libraries and tools that will be used to test the IoT device. Go over test related metrics					
and present a detailed plan for testing the IoT device.					
<b>Expected Outcome:</b> Above description is completed. The section is added onto the google document and flows					
wall with the rect of the paper					

Task Title: PiWatcher-Docs: Unit Testing for Frontend	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)		
Who (%): Brandon (100%)					
<b>Description:</b> Write about the libraries and tools that will be used to test the frontend device. Go over test related					
metrics and present a detailed plan for testing the frontend device.					
<b>Expected Outcome:</b> Above description is completed. The section is added onto the google document and flows well with the rest of the paper					

Task Title: PiWatcher-Docs: Unit Testing for Backend	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)		
Who (%): Brandon (100%)					
<b>Description:</b> Write about the libraries and tools that will be used to test the backend device. Go over test related metrics and present a detailed plan for testing the backend device.					
<b>Expected Outcome:</b> Above description is completed. The section is added onto the google document and flows					
well with the rest of the paper					

Task Title: PiWatcher-Docs: Integration Testing for IoT	<b>Task Initiation:</b> 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)
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**Who (%):** Brigs (100%)

**Description:** Present integration testing plan for the IoT plan. Explain how each test will be performed and how to ensure that the data will be correct.

**Expected Outcome:** Above description is completed. The section is added onto the google document and flows well with the rest of the paper

PiWatcher-Docs: Integration Testing for Backend	3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)		
Who (%): Brigs (100%)					
<b>Description:</b> Present integration testing plan for the Backend plan. Explain how each test will be performed and					
how to ensure that the data will be correct.					
<b>Expected Outcome:</b> Above description is completed. The section is added onto the google document and flows					

Task Title: PiWatcher-Docs: Usability Testing for Frontend	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)		
<b>Who (%):</b> Brandon (100%)					
<b>Description:</b> Present a usability testing plan and dicuss testing goals for the frontend. Explain the steps in the					
detailed plan on discuss how the plan with be executed.					
<b>Expected Outcome:</b> Above description is completed. The section is added onto the google document and flows well with the rest of the paper					

Task Title: PiWatcher-Docs: Usability Testing for IoT	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)			
Who (%): Brandon (100%)						
<b>Description:</b> Present a usability testing plan and dicuss testing goals for the backend. Explain the steps in the						
detailed plan on discuss how the plan with be executed.						
<b>Expected Outcome:</b> Above description is completed. The section is added onto the google document and flows						
well with the rest of the paper	•					

Task Title: PiWatcher-Docs: Usability Testing for Backend	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)		
Who (%): Brigs (100%)					
<b>Description:</b> Present a usability testing plan and dicuss testing goals for the backend. Explain the steps in the					
detailed plan on discuss how the plan with be executed.					
<b>Expected Outcome:</b> Above description is completed. The section is added onto the google document and flows well with the rest of the paper					

Task Title: PCI-Prototype-IoT: Branch clean up	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)		
<b>Who (%):</b> Josh (100%)					
<b>Description:</b> Clean up the branches on the GitHub repository to make it more maintanable.					
Expected Outcome: Above description is completed.					

Task Title:	Task Initiation:	Orig. Due	Status:	
PCI-Prototype-Backend: Determine design	3/8/2021	Date:	Complete (0%)	
for querying date ranges		3/15/2021		
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**Who (%):** Champ (33%), Seth (33%), Josh (33%)

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well with the rest of the paper

**Description:** Create UML diagram for designing/restructuring the communication flow for querying MongoDB.

Create and groom tasks that are needed for the frontend/backend/IoT to sufficiently query the database

Expected Outcome: Above description is completed. UML diagram is uploaded onto the PiWatcher-Docs on GitHub and the new tasks that are needed are created and groomed.

Task Title: PCI-Prototype-Backend: Create design for Role Management System	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)
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**Who (%):** Champ (50%), Seth (50%)

**Description:** Create UML diagram and flow structure for how role management would work with the system. Determine the differences between admin/normal users and how that would work. Create and groom tasks that are needed to complete the Role Management System.

**Expected Outcome:** Above description is completed. UML diagram is uploaded onto the PiWatcher-Docs on GitHub and the new tasks that are needed are created and groomed.

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Frontend: Figure out SSL	3/8/2021	Date:	Complete (100%)		
encryption within the Nginx docker		3/15/2021			
container					
Who (%): Champ (50%), Seth (50%)					
<b>Description:</b> Discuss with Duane about SSL encryption. Create tasks needed for implement SSL (if needed).					
Expected Outcome: Above description is completed.					

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Frontend: Implement SSL	3/8/2021	Date:	Complete (100%)		
encryption		3/15/2021			
Who (%): Seth (100%)					
<b>Description:</b> Autogenerate SSL certificates within a docker container. Link SSL creation container with Nginx and					
serve frontend behind SSL encryption.					
Expected Outcome: Above description is completed. Pull request is created, reviewed, and accepted					

Task Title: SPIKE: Determine tasks for Design Review III	Task Initiation: 3/8/2021	Orig. Due Date: 3/15/2021	Status: Complete (100%)		
<b>Who (%):</b> Brandon (100%)					
<b>Description:</b> Determine tasks needed to complete Design Review III. Create and groom the tasks needed to					
complete DR3.					
<b>Expected Outcome:</b> Above description is completed. New tasks that are needed are created and put in the backlog.					

### This week's Tasks: Work plan for coming week

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Backend: Create	3/8/2021	Date:	In Progress (0%)		
functionality for new endpoint		3/22/2021			
(/auth/users/update)					
Who (%): Champ (100%)					
<b>Description:</b> Create the endpoint in the resources module. Create the functionality that updates the user and returns					
back the user account information as a response. If an error occurs, display it.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title: PCI-Prototype-Backend: Create functionality for new endpoint (/auth/users)	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)
Who (%): Champ (100%)			

**Description:** Create the endpoint in the resources module. Create the functionality that displays all the users that is currently in the database as a response. If an error occurs, display it.

**Expected Outcome:** Above description is completed. Pull request is created, reviewed, and accepted.

Task Title:	Task Initiation:	Orig. Due	Status:	
PCI-Prototype-Backend: Create	3/8/2021	Date:	In Progress (0%)	
functionality for new endpoint (/auth/signin)		3/22/2021		
<b>Who (%):</b> Champ (100%)				
<b>Description:</b> Update the endpoint to follow new design. Ensure that the correct response is sent and still works as				
intended.				
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.				

Task Title: PCI-Prototype-Backend: Create functionality for new endpoint (/auth/roles)	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)			
<b>Who (%):</b> Champ (100%)						
<b>Description:</b> Create the endpoint in the resources module. Create the functionality that displays all the roles that is						
currently in the database as a response. If an error occurs, display it.						
<b>Expected Outcome:</b> Above description is con	mpleted. Pull request	<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.				

Task Title:	Task Initiation:	Orig. Due	Status:			
PCI-Prototype-Backend: Reorganize	3/8/2021	Date:	In Progress (0%)			
resources folder.		3/22/2021				
<b>Who (%):</b> Champ (100%)						
<b>Description:</b> Reorganize the resources such that it follows the current design.						
Expected Outcome: Above description is completed. Pull request is created, reviewed, and accepted.						

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Backend: Create	3/8/2021	Date:	In Progress (0%)		
functionality for new endpoint		3/22/2021			
(/data/building/room/weekly)					
Who (%): Josh (100%)					
<b>Description:</b> Grab weekly data from the database and send data off in a response to the front end. Ensure a failed					
response is sent if failure occurs.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title:	Task Initiation:	Orig. Due	Status:			
PCI-Prototype-Backend: Create	3/8/2021	Date:	In Progress (0%)			
functionality for new endpoint		3/22/2021				
(/data/building/room/daily)						
Who (%): Josh (100%)						
<b>Description:</b> Grab daily data from the database and send data off in a response to the front end. Ensure a failed						
response is sent if failure occurs.						
Expected Outcome: Above description is completed. Pull request is created, reviewed, and accepted.						

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Backend: Create	3/8/2021	Date:	In Progress (0%)		
functionality for new endpoint		3/22/2021			
(/data/building/room/live)					
Who (%): Josh (100%)					
<b>Description:</b> Grab live data from the database and send data off in a response to the front end. Ensure a failed					
response is sent if failure occurs.					
Expected Outcome: Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Backend: Create	3/8/2021	Date:	In Progress (0%)		
functionality for new endpoint		3/22/2021			
(/data/building/room/yearly)					
Who (%): Josh (100%)					
<b>Description:</b> Grab yearly data from the database and send data off in a response to the front end. Ensure a failed					
response is sent if failure occurs.					
Expected Outcome: Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title: PCI-Prototype-Backend: Create functionality for new endpoint (/data/building/room/quarterly)	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)		
Who (%): Josh (100%)					
<b>Description:</b> Grab quaterly data from the database and send data off in a response to the front end. Ensure a failed					
response is sent if failure occurs.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Backend: Create	3/8/2021	Date:	In Progress (0%)		
functionality for new endpoint		3/22/2021			
(/data/building/room/monthly)					
Who (%): Josh (100%)					
<b>Description:</b> Grab monthly data from the database and send data off in a response to the front end. Ensure a failed					
response is sent if failure occurs.					
Expected Outcome: Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Backend: Create	3/8/2021	Date:	In Progress (0%)		
functionality for new endpoint		3/22/2021			
(/data/building/rooms)					
Who (%): Josh (100%)					
<b>Description:</b> Grab all room names for a building from the database. Send the data off in a response to the front end					
and ensure that a failed response is sent if a failure occurs.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title: PCI-Prototype-Backend: Update endpoint (/data/buildings)	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)		
Who (%): Josh (100%)					
<b>Description:</b> Update endpoint so that it follows the new REST API design.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title: PCI-Prototype-Backend: Implement SSL encryption	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)		
Who (%): Seth (100%)					
Description: Autogenerate SSL certs within a docker container. Link the SSL creation container to Gunicorn and					
serve the backend behind an SSL ecryption.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title:	Task Initiation:	Orig. Due	Status:			
PCI-Prototype-Frontend: Update codebase	3/8/2021	Date:	In Progress (0%)			
for new endpoint URL design		3/22/2021				
Who (%): Seth (100%)						
<b>Description:</b> Update requests for grabbing rooms and grabbing data for the graph.						
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.						

Task Title: PCI-Prototype-Frontend: Update dashboard formatting and mobile support	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)		
<b>Who (%):</b> Seth (100%)					
<b>Description:</b> Create regular expression for password form requirement and implement it into the frontend.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title:	Task Initiation:	Orig. Due	Status:		
PCI-Prototype-Frontend: Update navigation	3/8/2021	Date:	In Progress (0%)		
bar formatting		3/22/2021			
Who (%): Seth (100%)					
<b>Description:</b> Add admin button for admin functionality and place the previous time card component within the					
navbar. Ensure that the navbar resizes correctly on both desktop and mobile.					
Expected Outcome: Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title: PCI-Prototype-Frontend: Research methods of favoriting selected charts	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)		
Who (%): Seth (100%)					
<b>Description:</b> Research methods of saving fovorited charts and design the charts favoriting functionality.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

Task Title: PCI-Prototype-Frontend: Create admin view for handling user permissions	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)		
Who (%): Seth (100%)					
Description: Link to admin page through the navbar. Pull users from newly created user endpoint and on user select					
display privileges in modal. On submit, send selected privileges to database.					
<b>Expected Outcome:</b> Above description is con	Expected Outcome: Above description is completed. Pull request is created, reviewed, and accepted.				

Task Title: PCI-Prototype-Frontend: Query database between dates for graph display	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)		
Who (%): Seth (100%)					
<b>Description:</b> Create function to query the database between dates for the graph to display.					
<b>Expected Outcome:</b> Above description is completed. Pull request is created, reviewed, and accepted.					

PiWatcher-Doc: Design Review 3 Introduction	3/8/2021	<b>Date:</b> 3/22/2021	In Progress (0%)	
<b>Who (%):</b> Brigs (100%)				

Description: Create introduction slide that introduces each team member, client, and faculty mentor.

Expected Outcome: Above description is completed.

Task Title:	Task Initiation:	Orig. Due	Status:	
PiWatcher-Doc: Design Review 3 Solution	3/8/2021	Date:	In Progress (0%)	
Overview		3/22/2021		
<b>Who (%):</b> Brigs (100%)				
<b>Description:</b> Create overview slide that outlines plan that will fix the problem that the client is having.				
Expected Outcome: Above description is completed.				

Task Title: PiWatcher-Doc: Design Review 3 Requirements Specification Review	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)	
<b>Who (%):</b> Brigs (100%)				
<b>Description:</b> Create requirements specification slide that outlines the key requirements and outlines the specific				
capabilities of the product.				
Expected Outcome: Above description is completed.				

Task Title:	Task Initiation:	Orig. Due	Status:	
PiWatcher-Doc: Design Review 3	3/8/2021	Date:	In Progress (0%)	
Architecture and Implementation Review		3/22/2021	-	
Who (%): Brigs (100%)				
<b>Description:</b> Create architecture and implementation slide that outlines the overall architecture and implementation				
of the solution.				
Expected Outcome: Above description is completed.				

Task Title: PiWatcher-Doc: Design Review 3 Prototype Review	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)	
<b>Who (%):</b> Brigs (100%)				
<b>Description:</b> Create prototype review section that outlines the overall architecture and implementation of the				
solution.				
Expected Outcome: Above description is completed.				

Task Title: PiWatcher-Doc: Design Review 3 Challenges and Resolution	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)	
<b>Who (%):</b> Brandon (100%)				
<b>Description:</b> Create challenges and resolution slide that outlines the challenges that we have had and the resolutions				
that the team has done.				
Expected Outcome: Above description is completed.				

Task Title: PiWatcher-Doc: Design Review 3 Schedule	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)	
<b>Who (%):</b> Brandon (100%)				
<b>Description:</b> Create a schedule slide that outlines the teams current schedule along with some of the things that we				
have done and what is upcoming.				
Expected Outcome: Above description is completed.				

Task Title:	Task Initiation:	Orig. Due	Status:	
PiWatcher-Doc: Design Review 3 Testing	3/8/2021	Date:	In Progress (0%)	
Plan		3/22/2021		
<b>Who (%):</b> Brandon (100%)				
<b>Description:</b> Create a testing plan slide that outlines the teams current testing plan and the key elements of what is				
going to tested and the what results we are expecting from it.				
Expected Outcome: Above description is completed.				

Task Title: PiWatcher-Doc: Design Review 3 Conclusion	Task Initiation: 3/8/2021	Orig. Due Date: 3/22/2021	Status: In Progress (0%)	
<b>Who (%):</b> Brandon (100%)				
<b>Description:</b> Create a conclusion slide that summaries the problem and how our solution solves that problem.				
Expected Outcome: Above description is completed.				

# **Upcoming Tasks: Planning**

Task Title: Milestone IV:	<b>Who (%):</b> Champ (20%), Seth	<b>Rough Due Date:</b> 4/23/2021		
Software Testing & Product	(20%), Brandon (20%), Josh (20%),			
Finanlization	Brigs (20%)			
<b>Description:</b> Write software modules needed to complete the capstone project.				

Task Title: Capstone	<b>Who (%):</b> Champ (20%), Seth	<b>Rough Due Date:</b> 4/26/2021	
Presentation	(20%), Brandon (20%), Josh (20%),		
	Brigs (20%)		
<b>Description:</b> Write capstone presentation for UGRADS.			

### Other Problems / Other Issues:

• No problems or issues so far.