

Florida International University
School of Computing and Information Sciences

Software Engineering Focus

Virtual Roll Call Briefing 5.0

Final Deliverable

Senior Project Fall 2018

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Abstract

The Village of Pinecrest Police Department, like many other police departments, participates in Roll Call – an intradepartmental briefing in which shift supervisors share the day’s pertinent information with officers. This informative meeting serves to keep officers up to date with necessary information prior to them going out on patrol. One section of the day’s pertinent information relayed consists of Watch Orders. Watch Orders are notices of locations for officers to visit while on patrol that require police presence. While the information relayed in the briefing is essential to an officer’s duties, officers often are unable to attend an in-person roll call due to various circumstances such as court obligations and time-sensitive assignments occurring during roll call. Additionally, in a roll call, the day’s important information is usually communicated through paper or vocal means. Should information need to be shared during the middle of any given shift, there isn’t a streamlined way to share this data in real-time.

To overcome meeting interferences and utilize the latest technologies available, the Village of Pinecrest Police Department revolutionized the way they carry out their daily roll call. The Virtual Roll Call Briefing web application was developed and implemented to replace antiquated in-person meetings. This application provides supervisors with the ability to upload documents for officers in specific shifts, allowing officers to review the information in real-time. Supervisors also have the ability to hold officers accountable to the information they are required to review using View Logs, a spreadsheet that details which officers have viewed which documents. The application also provides a method to view all the day’s Watch Orders with a Google Maps API powered map feature so that they can optimize their drive time by visiting locations in similar zones and locations in the same trip. All of this information is updated in real-time for officers to view while they are out on patrol, allowing for less time in the department and more time out in the community.

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INTRODUCTION

As a daily function of police departments, the first fifteen minutes of an officer's shift are spent at the police station to take part in a roll call briefing. This briefing allows the shift supervisor to relay the day's information to keep officers up-to-date when out on the field. Information communicated ranges from the latest area reports and assignments to intradepartmental matters and watch orders.

Current System

The current in-person roll call briefing requires officers to be physically present. As the information relayed during this briefing is essential to the officers' daily duties, it can be very problematic, inconvenient, and potentially dangerous for an officer to miss out on a given day's roll call. Officers often miss roll calls due to job-specific tasks such as court appearances and other shift assignments. To review the material from roll call, officers have to recall information from the memory of a voice-relayed message or, in the event of a time-sensitive matter, have to rifle through many of the day's distributed paper documents.

Purpose of New System

These in-person roll call briefings just aren't efficient enough for any community's officers. Virtual Roll Call Briefing is a web application that replaces these in-person meetings with a convenient online repository that can be updated throughout the day to get the latest information out to officers while they are out on patrol. Instead of starting the day at the station, officers are out on patrol, spending more vital time in the community they protect and serve.

Version	Description of Change	Authors	Date
1.0	First Version, Initial System Design.	Shalisha Witherspoon Shonda Witherspoon Ivana Rodriguez	11/27/2016
2.0	The second release of the VRC app and the main objective was to fix some bugs from previous version as well as develop some new critical features that could make the application usable for the first time in production. New Features: -Document Status and Confirmation -Document Log and Log Report. -Archive Documents	Eric Fernandez Oscar Yannelli	7/17/2017
3.0	The third version of the project, which focuses on adding new features to enhance the usability and utility of the VRC app.	Juan Lopez Jean Faustin	12/1/2017
4.0	The forth version of the project has great additions to VRC. Listed below are some of the most relevant enhancements and new features of this release: -Enhanced view document feature by creating visibility layer based in shifts. -Improved system security by enforcing session timeout. -Added flexibility to control system settings like map position and timeout period. -Ability to track visited locations. -Ability to archive "Done" documents. -Improved Watch Order Form.	Darilys Pereira Lopez Juan Hernandez	4/20/2018
5.0	This iteration includes bug fixes from previous iterations concerning Watch Orders (adding, viewing, and tracking) and View Logs. Added new feature Reference Documents	Grace Deehl Darrell Garth	12/7/18

USER STORIES

The following section provides the detailed user stories that were implemented in this iteration of the Virtual Roll Call Briefing project. These user stories served as the basis for the implementation of the project's features. This section also shows the user stories that are to be considered for future development.

Implemented User Stories

- **VRC-5:** Fix 'View Logs' - Not Showing Data
- **VRC-7:** Document 'Unpin' Function Not Working
- **VRC-10:** Add a knowledge base 'Reference Documents'
- **VRC-19:** Add 'Delete' Button to manually remove documents
- **VRC-41:** Refactor 'Add Watch Orders'
- **VRC-43:** Refactor 'Add Batch Watch Orders'
- **VRC-45:** Refactor 'View Watch Orders'
- **VRC-46:** Refactor 'Tracking Watch Orders'
- **VRC-50:** 'Watch Order' Zone Filter on Map
- **VRC-51:** Add 'Delete' Button to manually remove 'Watch Orders'

Pending User Stories

- **VRC-9:** Wishlist features

PROJECT PLAN

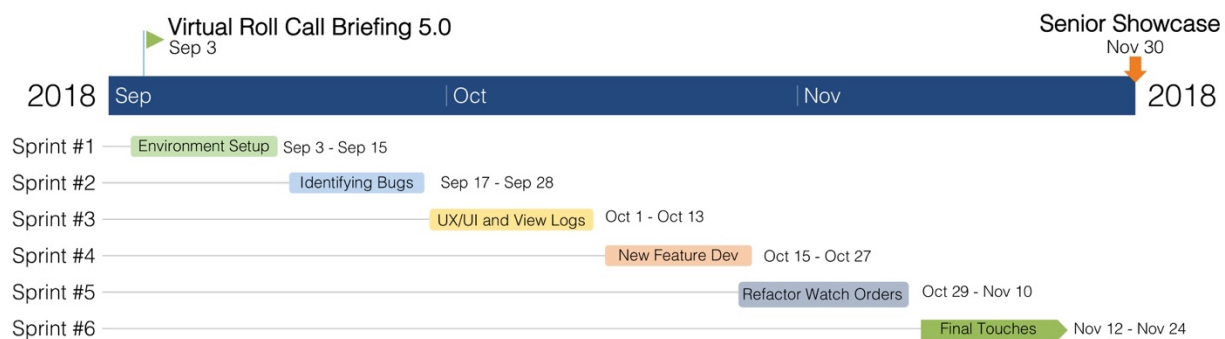
This section describes the planning that went into the realization of this project. This project incorporated the agile development techniques which requires planned sprints. This section will detail the sprint plans as well as describe the components, both software and hardware, chosen for this project.

Hardware and Software Resources

The following is a list of all hardware and software resources that were used in this project:

- WAMP: Windows, Apache, MySQL, and PHP **or** MAMP: Mac, Apache, MySQL, and PHP
 - Web Server: Apache2
 - Database Server: MySQL
- Back-End: PHP 5.5.9
- Front-End: HTML5, CSS3, JavaScript, Angular JS, and the Bootstrap Framework
- Application tested for use in Apple's Safari, Google Chrome, and Mozilla Firefox

Sprint Plans



Sprint #1 September 3rd – 15th, 2018

During the initial sprint, developers worked to setup the necessary frameworks and applications with the existing software code. As well, developers reviewed training material to work with new programming languages and frameworks.

Sprint #2September 17th – 28th, 2018**User Story VRC-7: Document ‘Unpin’ Function Not Working**

*“As an **Officer**, I would like to be able to **unpin documents** so that I am able to remove unwanted documents that no longer need prioritization.”*

Acceptance Criteria

- Officers can pin/unpin documents in any given category.

Sprint #3October 1st – 13th, 2018**User Story VRC-5: Fix ‘View Logs’ - Not Showing Data**

*“As a **Supervisor**, I would like to be able to **use the view logs** so that I am able to view which officers have reviewed which documents.”*

Acceptance Criteria

- Officers can pin/unpin documents in any given category.

User Story VRC-19: Add ‘Delete’ Button to manually remove documents

*“As a **Supervisor**, I would like to be able to **manually remove documents** so that I am able to easily delete documents.”*

Acceptance Criteria

- Officers can delete documents in any given category.

Sprint #4October 15th – 27th, 2018**User Story VRC-10: Add a knowledge base ‘Reference Documents’**

*“As a **Supervisor** I would like to be able to **add documents to a Reference Document repository** so that **officers have a hub of documents to access at all times out on the field.**”*

Acceptance Criteria

- Admin/Supervisor/Officer profile showcases 'Reference Documents' as new menu tab
- User is able to select 'Manage Reference Documents' and add/edit/remove documents.

Sprint #5

October 29th – November 10th, 2018

User Story VRC-41: Refactor ‘Adding Watch Orders’

Mid-way through October 2018, product owners Jason Cohen and Frank Alvarado alerted us that supervisors had lost the ability to add watch orders in their current iteration of the application - Virtual Roll Call 4.0.

*“As a **Supervisor** I would like to be able to **add watch orders to the database** so that **officers can view and track them on the Google Maps ‘View Watch Orders’ feature.**”*

Acceptance Criteria

- Resolve issues that are causing this bug
- Supervisor profile showcases "Manage Watch Orders" tab
- "Manage Watch Orders" page can successfully take addresses and add them to the Watch Orders table.

Sprint #6

November 12th – 24th, 2018

User Story VRC-43: Refactor ‘Adding Watch Orders’ via Batch File

*“As a **Supervisor** I would like to be able to **add watch orders in a .csv file** so that **adding multiple watch orders is a more efficient process.**”*

Acceptance Criteria

- Resolve issues that are causing this bug
- Supervisor profile showcases "Manage Watch Orders" tab
- "Manage Watch Orders" page has the "Batch Add Watch Orders" button

User Story VRC-45: Refactor ‘View Watch Orders’

*“As an **Officer** I would like to be able to **view Watch Orders** so that **I can know which ones to visit throughout the course of my shift.**”*

November 30th, 2018

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Acceptance Criteria

- Resolve issues that are causing this bug
- Officer profile showcases ‘View Watch Orders’
- The ‘View Watch Orders’ page showcases accurate up-to-date ‘Watch Orders’

User Story VRC-46: Refactor ‘Tracking Watch Orders’

*“As an **Officer** I would like to be able to **track Watch Orders** so that I can **keep track of which Watch orders I’ve visited and which are remaining to be visited throughout the course of my shift.**”*

Acceptance Criteria

- Resolve issues that are causing this bug
- Officers can ‘select’ Watch Orders and log out / log back in and still see the respective selected Watch Orders
- Selected Watch Orders are removed from the visible Map

User Story VRC-50: ‘Watch Order’ Zone Filter on Map

*“As an **Officer** I would like to be able to **track Watch Orders on a color-coded map** so that I can **keep track of which Watch Orders are in which zones, thus making my traveling time on patrol more efficient.**”*

Acceptance Criteria

- Google Maps map showcases shaded polygons indicating Zones 1-5 in Pinecrest

User Story VRC-51: Add ‘Delete’ Button to manually remove ‘Watch Orders’

*“As a **Supervisor** I would like to be able to **have a button to delete Watch Orders** so that I can **remove Watch Orders in a user-friendly way.**”*

Acceptance Criteria

- Delete button appears next to each Watch Order under ‘Manage Watch Order’ tab

SYSTEM DESIGN

This section contains information on the design decisions that went into this project. The architecture patterns are outlined and explained. The entire system is shown in a package diagram and the subsystems are explained. Finally, the design patterns used in the project are discussed.

Architectural Patterns

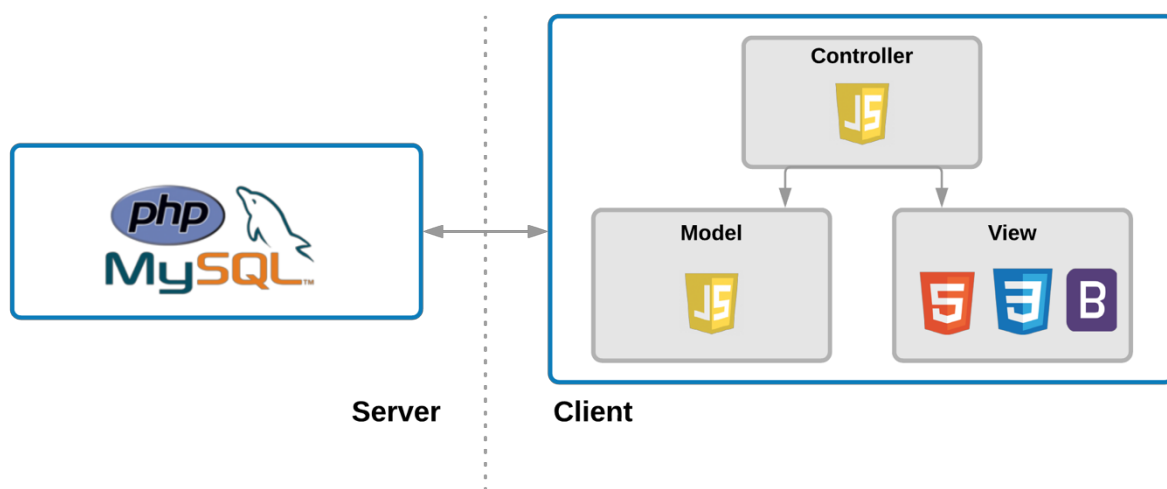


Figure 1.1: Client-Server and Model-Viewer Controller

Client-Server

Virtual Roll Call Briefing utilizes the Client-Server model. In an application distributed internally as this one is, the client and server communicate with one another through the internet. When the client makes a request to the server, the server responds with the requested data or function. This setup is optimal for the client as Virtual Roll Call is hosted on a Windows Server virtual machine, thus conserving the client's machine's resources. As well, clients can access the application anywhere by remoting into the Virtual Machine that hosts the application. Clients are able to use the application and perform actions through the server.

Deployment Diagram

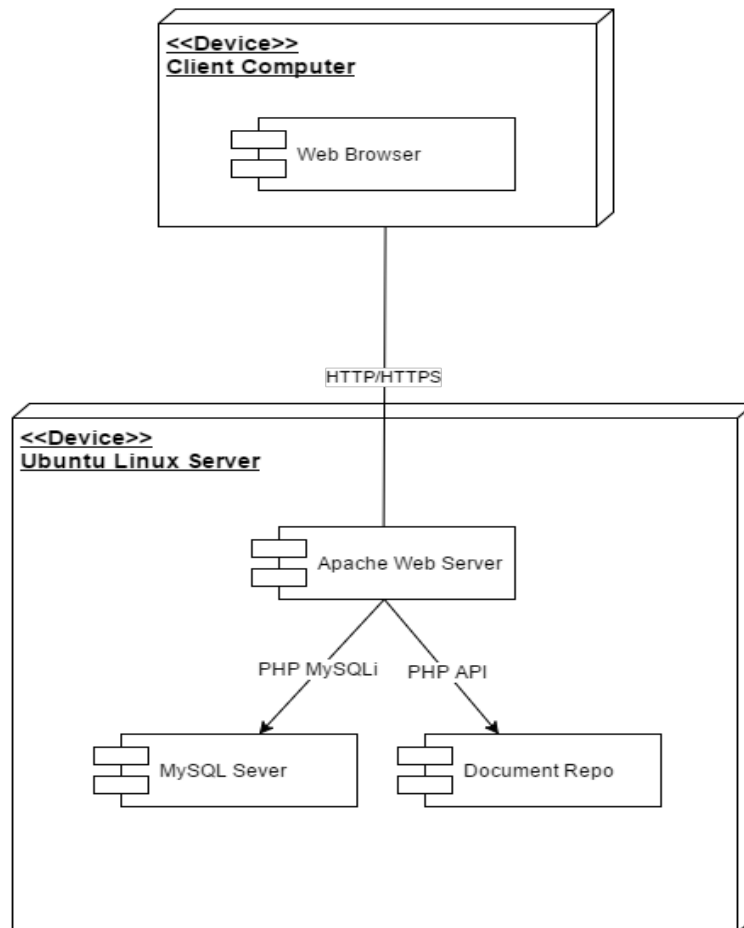


Figure 1.3: Deployment Diagram from Virtual Roll Call Briefing 4.0 Report

SYSTEM VALIDATION

User Story VRC-5: Fix ‘View Logs’ - Not Showing Data

*“As a **Supervisor**, I would like to be able to **use the view logs** so that **I am able to view which officers have reviewed which documents**.”*

Acceptance Criteria: Officers can pin/unpin documents in any given category.

Unit Test

- Test case ID: VRC-5-1
- Description/Summary of Test: View logs
- Pre-condition:
 - Supervisor logged in with valid credentials
 - Document previously uploaded to system
 - Document needs to be access by an officer
- Expected Results: Document viewed by the officer should show in the logs view
- Actual Result: All documents loaded into the database show up in the logs view
- Status (Fail/Pass): Pass

Integration Test

- Test case ID: VRC-5-2
- Description/Summary of Test: Update viewDocument stored procedure
- Pre-condition:
 - Parting from cursor based stored procedure, create a new optimized query
- Expected Results: Logs show in client view
- Actual Result: Document logs show in client view, but require a date filtering condition
- Status (Fail/Pass): Pass

User Story VRC-7: Document ‘Unpin’ Function Not Working

*“As an **Officer**, I would like to be able to **unpin documents** so that **I am able to remove unwanted documents that no longer need prioritization**.”*

Acceptance Criteria

- Officers can pin/unpin documents in any given category.

User Story VRC-10: Add a knowledge base 'Reference Documents'

*“As a **Supervisor** I would like to be able to add documents to a **Reference Document repository** so that **officers** have a **hub of documents** to access at all times out on the field.”*

Acceptance Criteria

- Admin/Supervisor/Officer profile showcases 'Reference Documents' as new menu tab
- User is able to select 'Manage Reference Documents' and add/edit/remove documents.

Unit Test

- Test case ID: VRC-10-1
- Description/Summary of Test: Add Reference Documents in Reference Documents screen
- Pre-condition:
 - Supervisor logged in with valid credentials
 - Actions taken from within reference document screen
 - Is_Reference categories need to have been created for the Reference Document screen in the Admin Profile
- Expected Results: A new reference document should be added to the database and displayed in ViewReferenceDocument panel
- Actual Result: Document was added to Reference Document screen included the assignment of a category. Document displays in reference document repository
- Status (Fail/Pass): Pass

Integration Test

- Test case ID: VRC-10-2
- Description/Summary of Test: Add Reference Documents in Reference Documents Ensure integration with virtual_roll_call database
- Pre-condition:
 - Supervisor logged in with valid credentials
 - Actions taken from within reference document screen
 - Is_Reference categories need to have been created for the Reference Document screen in the Admin Profile
 - All References to database need to have been created to store new document
- Expected Results: As a new document gets added on the client side of the application, the server side should also be updated with a reference to said document
- Actual Result: Document was added to application front end and shows up in the back end as well (database record found)
- Status (Fail/Pass): Pass

User Story VRC-19: Add 'Delete' Button to manually remove documents

*“As a **Supervisor**, I would like to be able to **manually remove documents** so that I am able to **easily delete documents**.”*

Acceptance Criteria

- Officers can delete documents in any given category.

Unit Test

- Test case ID: VRC-19-1
- Description/Summary of Test: Delete Documents
- Pre-condition:
 - Supervisor logged in with valid credentials
 - Document previously uploaded to system
- Expected Results: Supervisor can click the 'Delete' icon and the document will be removed from the document list.
- Actual Result: Supervisor can click the 'Delete' icon and the document will be removed from the document list.
- Status (Fail/Pass): Pass

Integration Test

- Test case ID: VRC-19-2
- Description/Summary of Test: Delete Documents
- Pre-condition:
 - Supervisor logged in with valid credentials
 - Document previously uploaded to system
- Expected Results: Supervisor can click the 'Delete' icon and the document will be removed from the document list.
- Actual Result: Supervisor can click the 'Delete' icon and the document will be removed from the document list.
- Status (Fail/Pass): Pass

User Story VRC-41: Refactor 'Adding Watch Orders'

Mid-way through October 2018, product owners Jason Cohen and Frank Alvarado alerted us that supervisors had lost the ability to add watch orders in their current iteration of the application - Virtual Roll Call 4.0.

*“As a **Supervisor** I would like to be able to **add watch orders to the database** so that **officers can view and track them on the Google Maps ‘View Watch Orders’ feature.**”*

Acceptance Criteria

- Resolve issues that are causing this bug
- Supervisor profile showcases "Manage Watch Orders" tab
- "Manage Watch Orders" page can successfully take addresses and add them to the Watch Orders table.

Unit Test

- Test case ID: VRC-41-1
- Description/Summary of Test: Add Watch order
- Pre-condition:
 - Supervisor logged in with valid credentials
- Expected Results: Supervisor can add a Watch Order through given single add form.
- Actual Result: Supervisor can add a Watch Order through given single add form.
- Status (Fail/Pass): Pass

Integration Test

- Test case ID: VRC-41-2
 - Description/Summary of Test: Add Watch Order with Invalid Address
 - Pre-condition:
 - Supervisor logged in with valid credentials
 - Expected Results: Supervisor enters Watch Order with Invalid Address and user is prompted to re-enter form.
 - Actual Result: Supervisor enters Watch Order with Invalid Address and user is prompted to re-enter form.
 - Status (Fail/Pass): Pass

User Story VRC-43: Refactor ‘Adding Watch Orders’ via Batch File

*“As a **Supervisor** I would like to be able to **add watch orders in a .csv file** so that **adding multiple watch orders is a more efficient process.**”*

Acceptance Criteria

- Resolve issues that are causing this bug
- Supervisor profile showcases "Manage Watch Orders" tab
- "Manage Watch Orders" page has the "Batch Add Watch Orders" button

Unit Test

- Test case ID: VRC-43-1
- Description/Summary of Test: Add Watch Order via Batch
- Pre-condition:
 - Supervisor logged in with valid credentials
- Expected Results: Supervisor can add a Watch Order through .csv file upload.
- Actual Result: Supervisor can add a Watch Order through .csv file upload.
- Status (Fail/Pass): Pass

Integration Test

- Test case ID: VRC-43-2
 - Description/Summary of Test: Add Watch Order with Invalid Address
 - Pre-condition:
 - Supervisor logged in with valid credentials
 - Expected Results: Supervisor can add a Watch Order through .csv file upload.
 - Actual Result: Supervisor can add a Watch Order through .csv file upload.
 - Status (Fail/Pass): Pass

User Story VRC-45: Refactor ‘View Watch Orders’

*“As an **Officer** I would like to be able to **view Watch Orders** so that I can know which ones to visit throughout the course of my shift.”*

Acceptance Criteria

- Resolve issues that are causing this bug
- Officer profile showcases ‘View Watch Orders’
- The ‘View Watch Orders’ page showcases accurate up-to-date ‘Watch Orders’

Unit Test

- Test case ID: VRC-45-1
- Description/Summary of Test: View Watch Orders
- Pre-condition:
 - Officer logged in with valid credentials
- Expected Results: Officer can view active watch orders.
- Actual Result: Officer can view active watch orders.
- Status (Fail/Pass): Pass

Integration Test

- Test case ID: VRC-45-2
- Description/Summary of Test: View Watch Orders
- Pre-condition:
 - Officer logged in with valid credentials

- Expected Results: Officer can view active watch orders.
- Actual Result: Officer can view active watch orders.
- Status (Fail/Pass): Pass

User Story VRC-46: Refactor ‘Tracking Watch Orders’

*“As an **Officer** I would like to be able to **track Watch Orders** so that I can **keep track of which Watch orders I’ve visited and which are remaining to be visited throughout the course of my shift.**”*

Acceptance Criteria

- Resolve issues that are causing this bug
- Officers can ‘select’ Watch Orders and log out / log back in and still see the respective selected Watch Orders
- Selected Watch Orders are removed from the visible Map

Unit Test

- Test case ID: VRC-46-1
- Description/Summary of Test: Track Watch Orders
- Pre-condition:
 - Officer logged in with valid credentials
- Expected Results: Officer can view active watch orders.
- Actual Result: Officer can view active watch orders.
- Status (Fail/Pass): Pass

Integration Test

- Test case ID: VRC-46-2
- Description/Summary of Test: Track Watch Orders
- Pre-condition:
 - Officer logged in with valid credentials
- Expected Results: Officer can track active watch orders.
- Actual Result: Officer can track active watch orders.
- Status (Fail/Pass): Pass

User Story VRC-50: ‘Watch Order’ Zone Filter on Map

*“As an **Officer** I would like to be able to **track Watch Orders on a color-coded map** so that I can **keep track of which Watch Orders are in which zones, thus making my traveling time on patrol more efficient.**”*

Acceptance Criteria

- Google Maps map showcases shaded polygons indicating Zones 1-5 in Pinecrest

Unit Test

- Test case ID: VRC-50-1
 - Description/Summary of Test: View Zones on Watch Order Map
 - Pre-condition:
 - Officer logged in with valid credentials
 - Expected Results: Zone boundaries indicated on map.
 - Actual Result: Zone boundaries indicated on map.
 - Status (Fail/Pass): Pass

Integration Test

- Test case ID: VRC-50-2
 - Description/Summary of Test: View Zones on Watch Order Map
 - Pre-condition:
 - Officer logged in with valid credentials
 - Expected Results: Zone boundaries indicated on map.
 - Actual Result: Zone boundaries indicated on map.
 - Status (Fail/Pass): Pass

User Story VRC-51: Add ‘Delete’ Button to manually remove ‘Watch Orders’

*“As a **Supervisor** I would like to be able to **have a button to delete Watch Orders** so that I can **remove Watch Orders in a user-friendly way.**”*

Acceptance Criteria

- Delete button appears next to each Watch Order under ‘Manage Watch Order’ tab

Unit Test

- Test case ID: VRC-51-1
 - Description/Summary of Test: Delete Watch Order
 - Pre-condition:
 - Supervisor logged in with valid credentials
 - Expected Results: Supervisor can delete a Watch Order.
 - Actual Result: Supervisor can delete a Watch Order.
 - Status (Fail/Pass): Pass

Integration Test

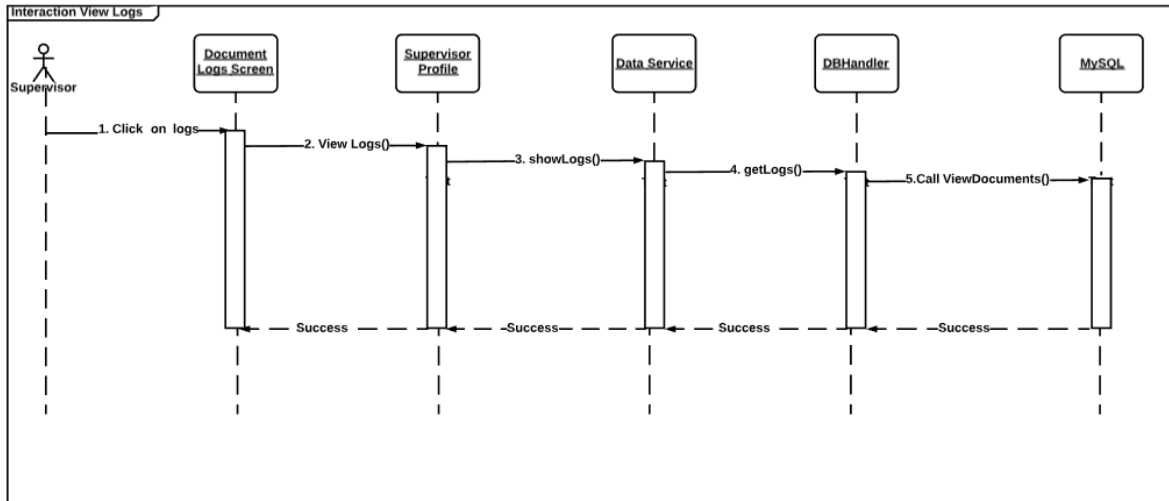
- Test case ID: VRC-51-2
 - Description/Summary of Test: Delete Watch Order
 - Pre-condition:
 - Supervisor logged in with valid credentials

- Expected Results: Supervisor can delete a Watch Order.
- Actual Result: Supervisor can delete a Watch Order.
- Status (Fail/Pass): Pass

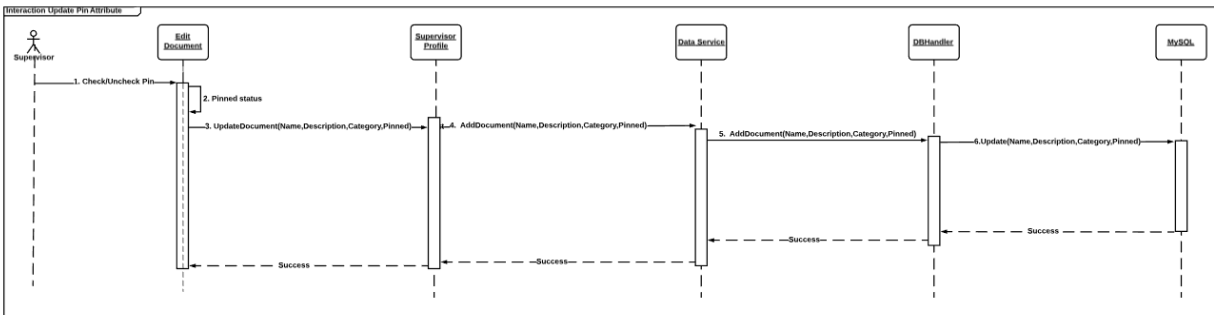
APPENDIX

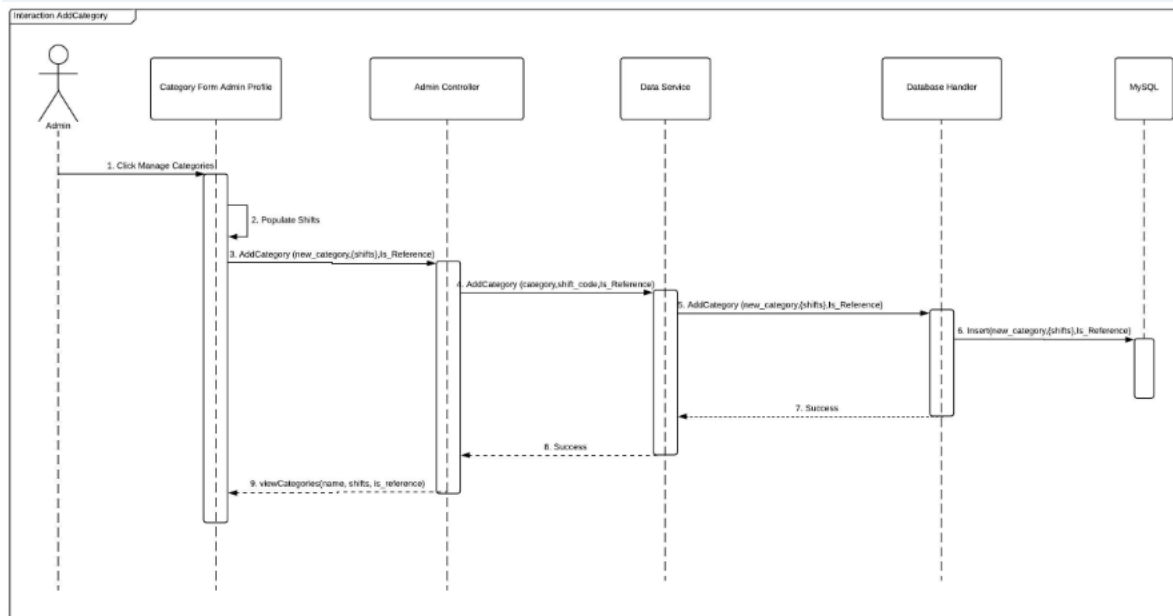
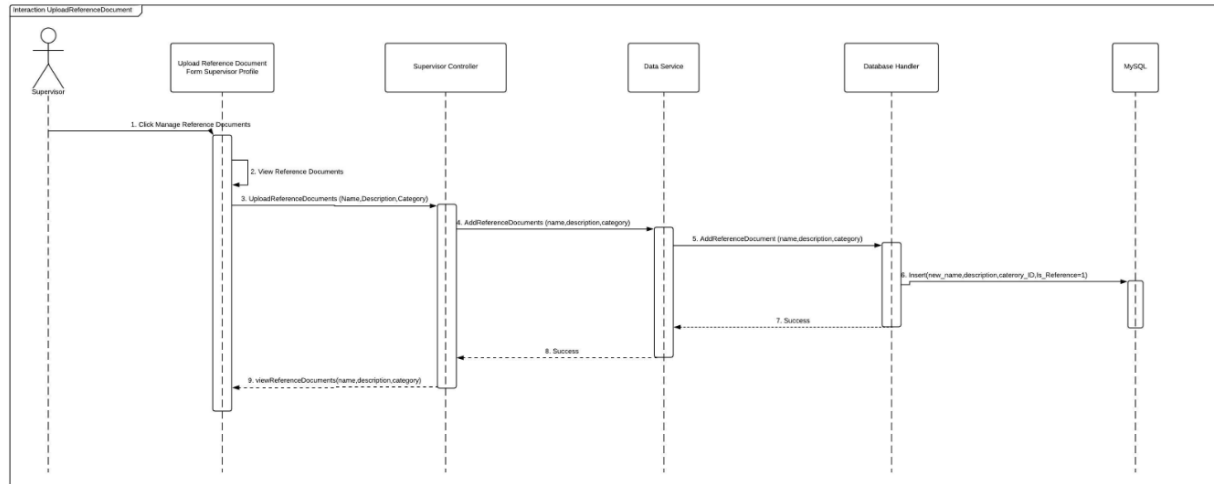
Appendix A - UML Diagrams

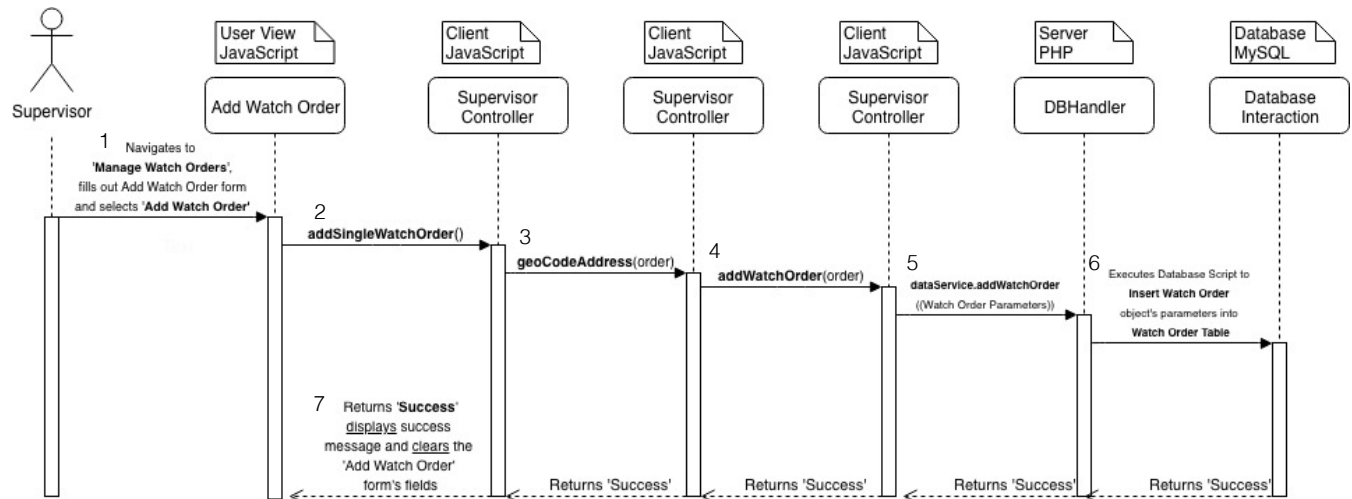
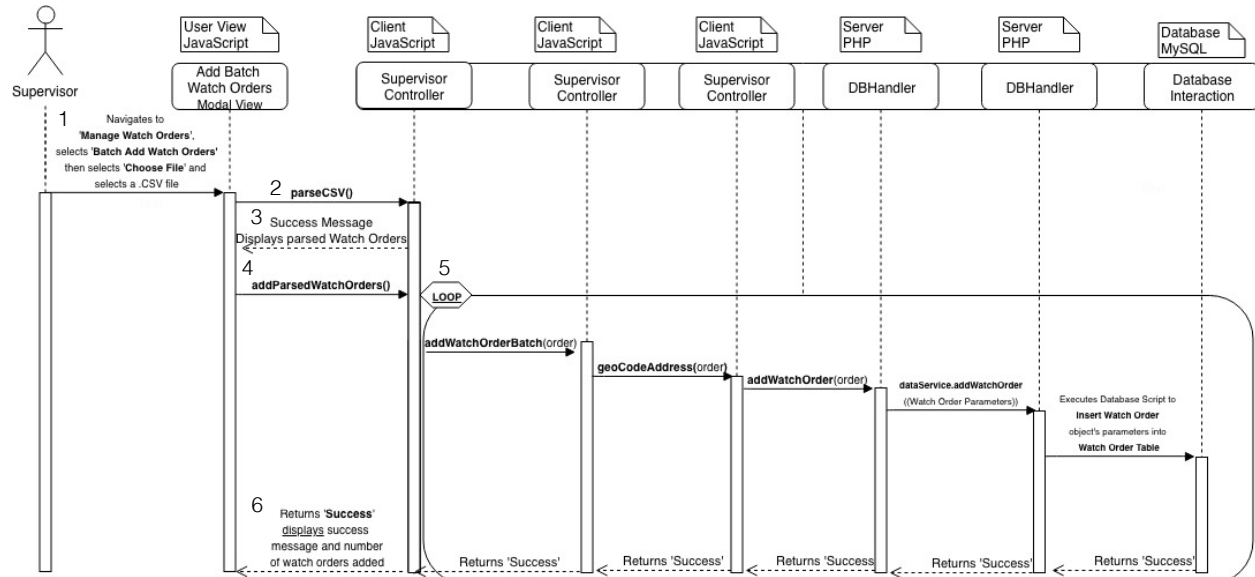
VRC-5: Fix 'View Logs' - Not Showing Data

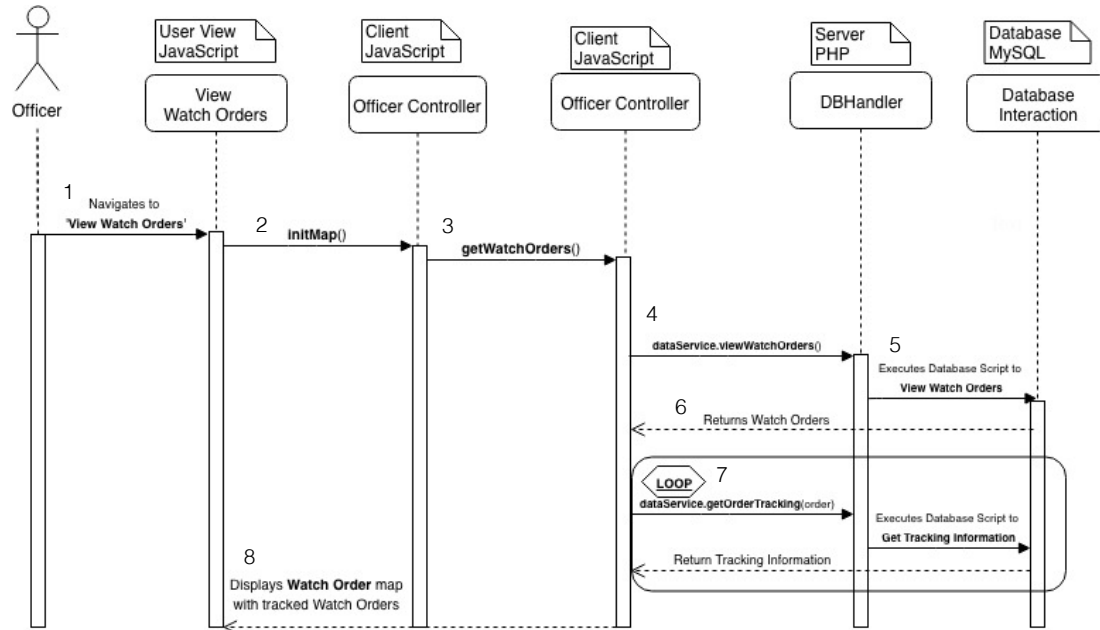
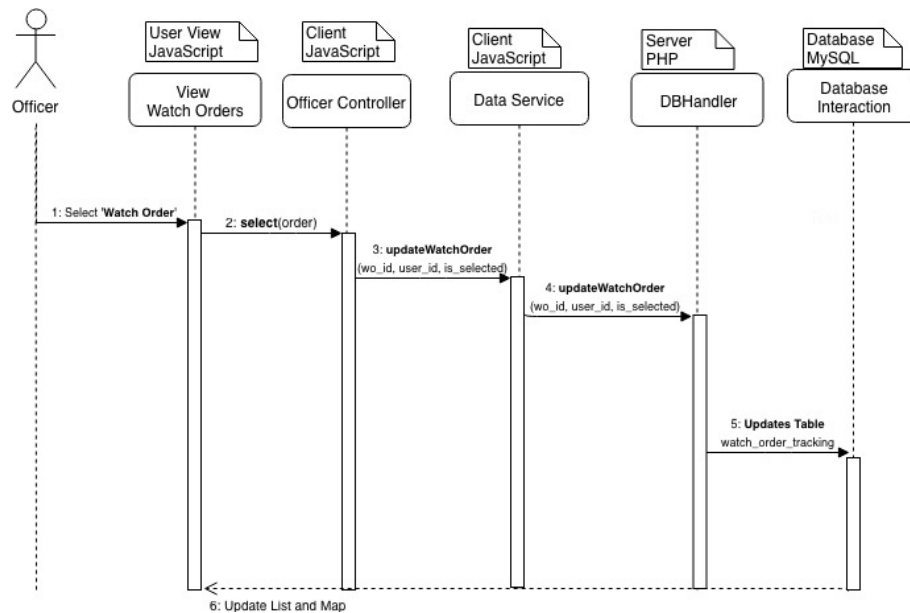


VRC-7: Document 'Unpin' Function Not Working



VRC-10: Add a knowledge base ‘Reference Documents’

VRC-41: Refactor 'Add Watch Orders'**VRC-43: Refactor 'Add Batch Watch Orders'**

VRC-45: Refactor 'View Watch Orders'**VRC-46: Refactor 'Tracking Watch Orders'**

Appendix B – User Interface Design

Virtual Roll Call Briefing

Pinecrest Police Department



Login

Username

admin

Password

Login

Figure Screenshot 1-1: Front Page prompting user for login.

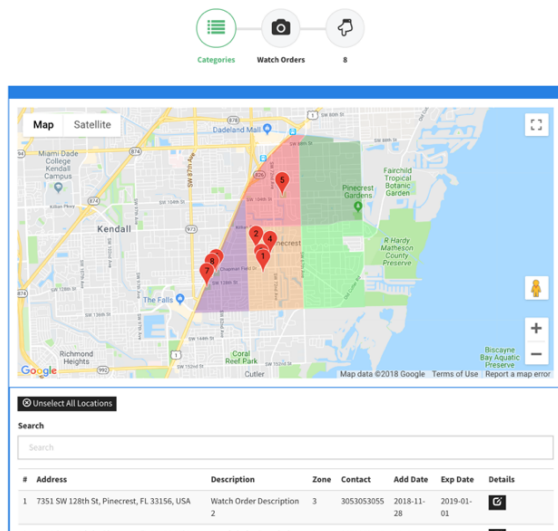


Figure Screenshot 1.2: Watch Orders displayed on 'View Watch Order' page.

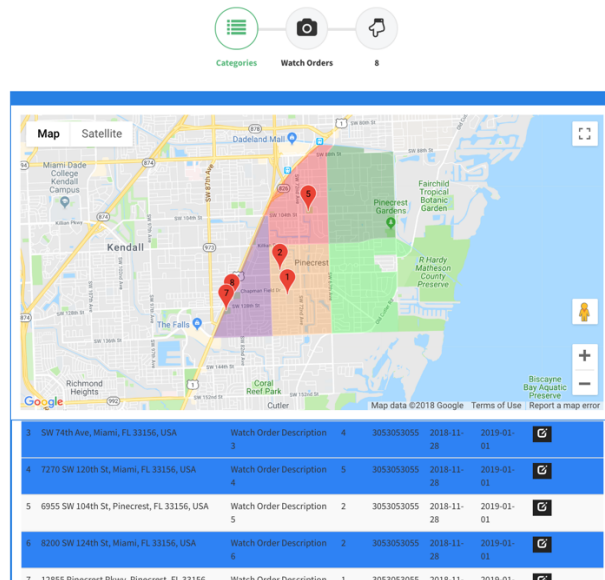


Figure Screenshot 1-3: Watch Orders selected, showcasing that orders 3, 4, and 6 have been removed from scope.

Virtual Roll Call Briefing Administrator Supervisor Dashboard Reference

Reference Document Library

Collection					
Search					
Search					
#	Document Name	Category	Upload Date	Uploaded By	Open
1	Rule+100	Code	2018-11-03	admin Default	
2	Scrumm	Code	2018-11-05	Cap Harris	
3	This is a voucher	Code	2018-11-08	admin Default	
4	Voucher-5	Code	2018-11-10	Cap Harris	
5	Payment	Rules	2018-11-11	admin Default	

Figure Screenshot 1.4: Reference Document view, showcasing several documents listed under ‘Code’

Virtual Roll Call Briefing Administrator Supervisor Dashboard Reference

User Management

Document Categories

Site Settings

Archive Documents

Shift Management

Unit Management

Batch Add Users

Add User

First Name

Last Name

Username

Password

Shift

Role

Add User

Edit User

Search

Figure Screenshot 1.5: User Management from the Admin Profile view

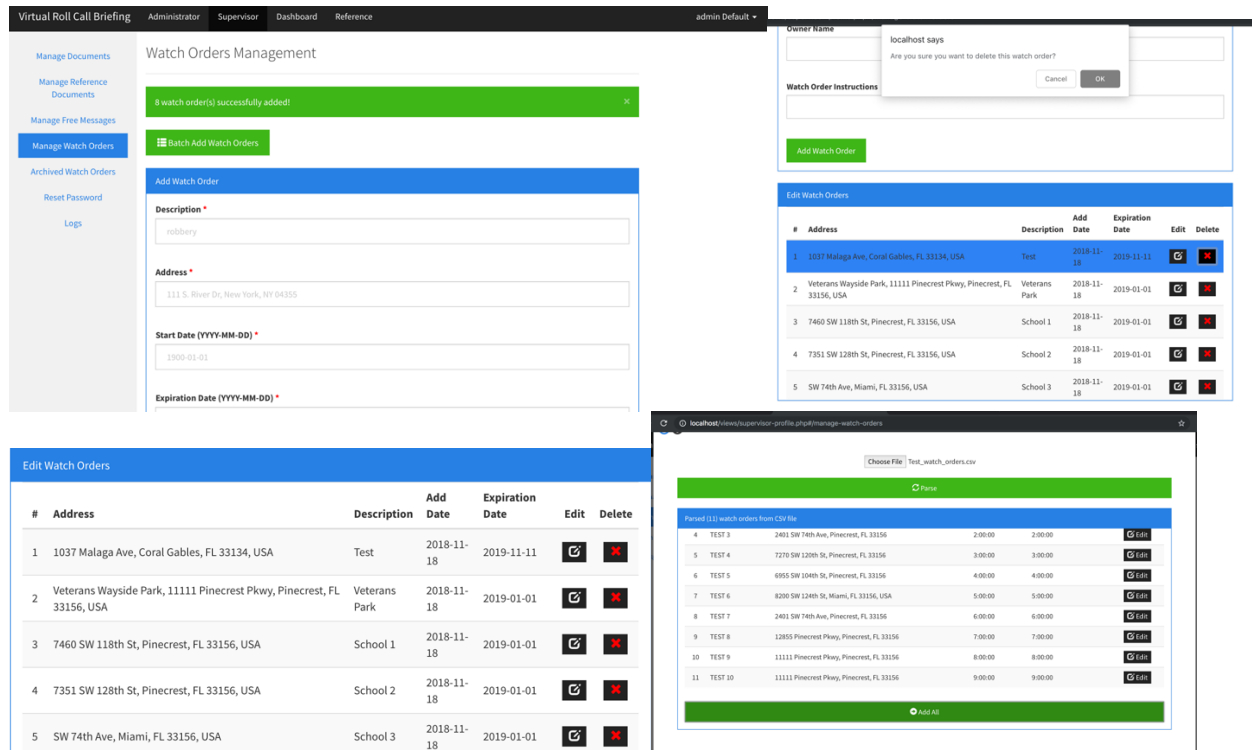


Figure Screenshots 1.6, 1.7, 1.8, & 1.9: From the Supervisor view, showcasing the Manage Watch Orders feature.

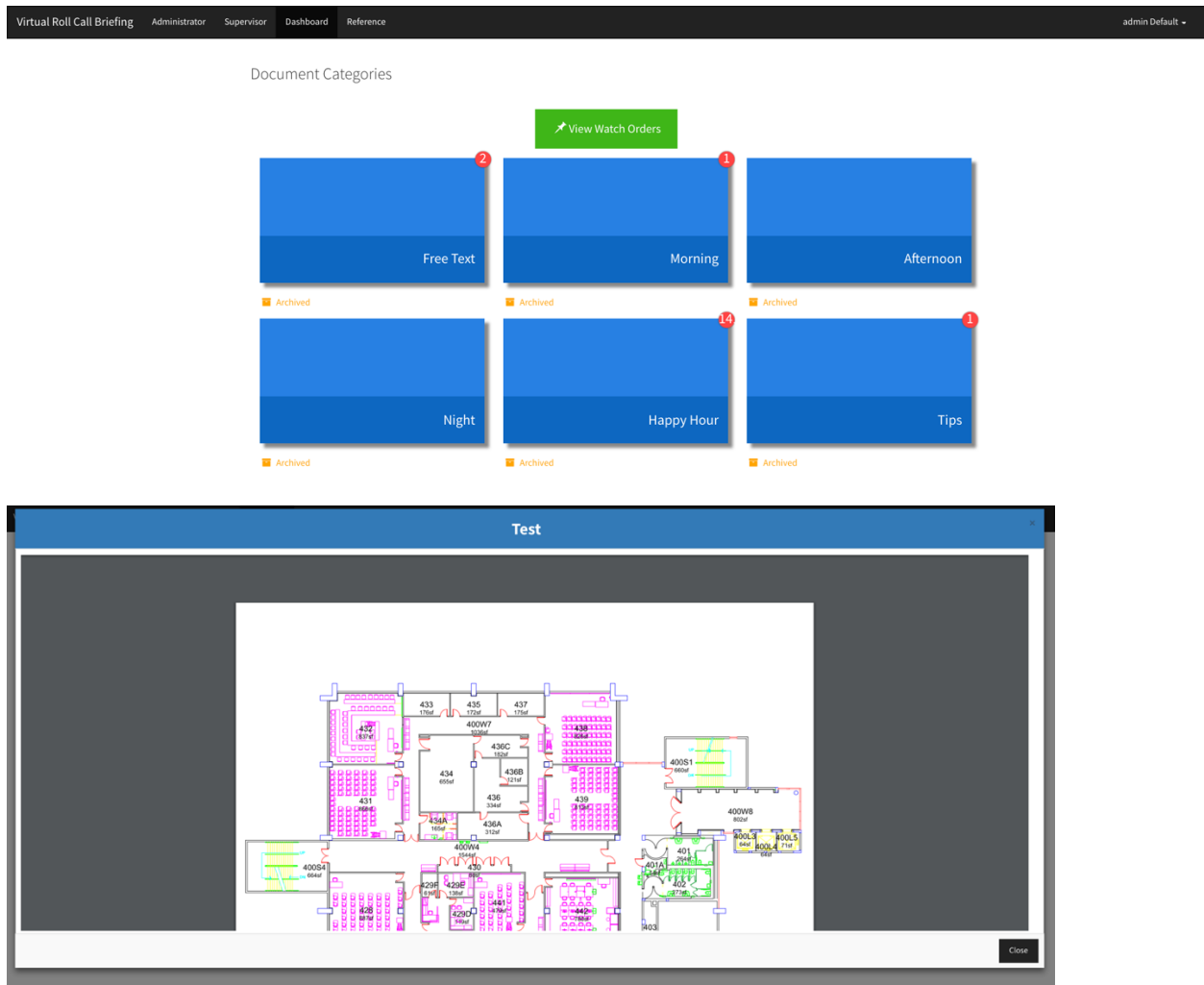


Figure Screenshots 1.10 & 1.11: Showcasing Officer Dashboard and ability to open documents.

Appendix C - Sprint Review Reports

Sprint #1 Review Meeting Minutes

Attendees: Grace Deehl

Start time: 20180916 1700

End time: 20180916 1800

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners: All.

- User Story 1: Establish Framework to use application on local machine
 - Demonstrated to product owners and accepted
- User Story 2: Continue working on debugging issues presented by product owners

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Spring Planning meeting.

- New implementation ideas

Sprint #2 Review Meeting Minutes

Friday, September 28th, 2018

PG6 Tech Station

Attendees

- Developers: Grace Deehl, Darrell Garth
- Product Owners: Jason Cohen, Frank Alvarado

Start time: 2:00 PM

End time: 2:30 PM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners: All.

- VRC5 View logs not updating accurately - showing empty **DONE** : Assigned to Darrell Garth
*"As a **Supervisor**, I would like to have a **functioning view log** so that **I am able to accurately hold officers accountable for the materials they have been assigned to view and sign off on.**"*
- VRC7 - Document "Unpin" Function Not Working **DONE** : Assigned to Grace Deehl
*"As an **Officer**, I would like to be able to **unpin documents** so that **I am able to remove unwanted documents that no longer need prioritization.**"*

- VRC-13 - Familiarize ourselves with Apache, mySQL, PHP **DONE** : Assigned to Grace Deehl, Darrell Garth
Familiarize ourselves with Apache, mySQL, PHP

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Spring Planning meeting.

- N/A

Sprint #3 Review Meeting Minutes

Friday, October 12th, 2018

PG6 Tech Station

Attendees

- Developers: Grace Deehl, Darrell Garth
- Product Owners: Jason Cohen, Frank Alvarado

Start time: 2:00 PM

End time: 2:30 PM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners: All.

- VRC29 Google Maps API Account Creation **DONE**
- VRC35 - Add new officer parameter 'Unit' **DONE**
- VRC25 - Watch Orders not recording to DB - not displaying on list or map, contingent on Google API **DONE**
- VRC28 - Category Prepopulated (remove old category message) prior to editing documents **DONE**

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Spring Planning meeting.

User Stories	Assigned To	Estimate	Status
VRC-29: Google Maps API Account Creation	Grace Deehl	2 hours	Completed
VRC-27: Free Messages Error - After creating message, the body of the message only title displays	Darrell Garth	2 weeks	Placed on Backlog
VRC-35: Add new officer parameter 'Unit'	Grace Deehl	1 hour	Completed

User Stories	Assigned To	Estimate	Status
VRC-25: Watch Orders not recording to Google Maps or DB List (contingent upon VRC-29)	Grace Deehl	4 hours	Completed
VRC-30: For Supervisors, add ability to assign documents to specific officer to then put in the officer's personal inbox	Grace Deehl	4 hours	In Progress - Pushed to Sprint 4
VRC-36: For Supervisors, add ability to assign documents to specific unit to then put in the officer's unit inbox	Grace Deehl	4 hours	In Progress - Pushed to Sprint 4
VRC-19: Streamline way to delete documents for Supervisors	Darrell Garth	2 weeks	In Progress - Pushed to Sprint 4
VRC-31: Personal Inbox for Officers	Grace Deehl	6 hours	In Progress - Pushed to Sprint 4
VRC-32: Unit Inbox for Officers	Grace Deehl	6 hours	In Progress - Pushed to Sprint 4
VRC-34: Add easier way to manually archive documents	Darrell Garth	2 weeks	In Progress - Pushed to Sprint 4
VRC-28: Upon editing documents, make Category a required and pre-populated field	Darrell Garth	2 weeks	Completed

Sprint #4 Review Meeting Minutes

Friday, October 26th, 2018

PG6 Tech Station

Attendees

- Developers: Grace Deehl, Darrell Garth
- Product Owners: Jason Cohen, Frank Alvarado

November 30th, 2018

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Start time: 2:00 PM

End time: 2:30 PM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:

- N/A, as all are still in progress

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Spring Planning meeting.

VRC-30: For Supervisors, add ability to assign documents to specific officer to then put in the officer's personal inbox	Grace Deehl	4 hours	In Progress - Pushed to Sprint 5
VRC-36: For Supervisors, add ability to assign documents to specific unit to then put in the officer's unit inbox	Grace Deehl	4 hours	In Progress - Pushed to Sprint 5
VRC-19: Streamline way to delete documents for Supervisors	Darrell Garth	2 weeks	In Progress - Pushed to Sprint 5
VRC-31: Personal Inbox for Officers	Grace Deehl	6 hours	In Progress - Pushed to Sprint 5
VRC-32: Unit Inbox for Officers	Grace Deehl	6 hours	In Progress - Pushed to Sprint 5
VRC-34: Add easier way to manually archive documents	Darrell Garth	2 weeks	In Progress - Pushed to Sprint 5

Appendix D - User Manuals, Installation/Maintenance Document, Shortcomings/Wishlist Document and other documents

USER MANUALS

ADMIN

- Visit Virtual Roll Call Briefing site
- Login with username and password
- As an Admin, users are also able to utilize the Supervisor and Officer dashboards
- The Admin profile provides the following features
 - User Management
 - Document Categories Management
 - Site Settings
 - Archive Documents
 - Shift Management
 - Unit Management

SUPERVISOR

- Visit Virtual Roll Call Briefing site
- Login with username and password

OFFICER

- Visit Virtual Roll Call Briefing site
- Login with username and password
- The Officer profile provides the following features
 - View Documents by Category
 - View Watch Orders
 - Track the Watch Orders already visited by clicking on the specific Watch Order on the list appearing below the map
 - Selecting a Watch Order will turn the listed address from white to blue and remove the Watch Order marker from the map
 - Unselecting a Watch Order will turn the listed address from blue to white and will re-add the Watch Order marker to the map
 - Toggle between Day and Night mode
 - Changes the appearance of the web application to accommodate night shift

INSTALLATION AND MAINTENANCE

The following video showcases how to setup the application in a development environment:

macOS Installation Instructions: <https://youtu.be/AtXayz-YFFc>

Windows Installation Instructions: <https://youtu.be/lx2pcbDUKdc>

SHORTCOMINGS AND WISH LIST FEATURES

Virtual Roll Call Briefing 5.0 has the following shortcomings:

- Limited search capabilities
- Lack of visible success feedback after actions are made on the site
- Prevention from adding duplicate named documents or watch orders

As communicated by product owners Jason Cohen and Frank Alvarado, the following user stories are Wish List items they would like to have implemented in the future:

- Search within the contents of uploaded PDFs
 - Officers and supervisors would be able to search for content within uploaded PDFs.
- Inboxes for Officers
 - Personal: Supervisors can assign documents to specific officers
 - Unit: Supervisors can assign documents to specific units

REFERENCES

Overall, Web Technologies

- W3Schools
- Google
- Github

HTML/CSS

- Bootstrap CSS
- Bootswatch
- Angular UI

AngularJS

- Core AngularJS & Additional Modules
- Ng-Flow
- Code School
- Team Treehouse
- Stack Overflow
- AngularJS Documentation

PHP/MySQL

- Team Treehouse
- Stack Overflow
- PHP Documentation