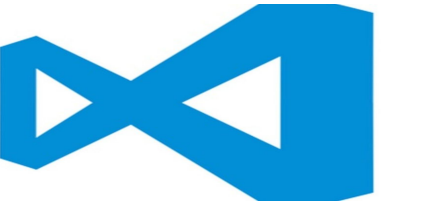**School of Computing & Information Sciences**

CIS 4911, 2017, Spring
BOLO Flier Creator - Version 7.0
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Product Owner: *Jason Cohen*, *Pinecrest PD*
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Problem
- Current Pinecrest Police Department flier distribution method is inefficient
- Criminal flier reports must be written in paper and sent to agencies
- Officers are unaware of current crimes until they pick the BOLO flier
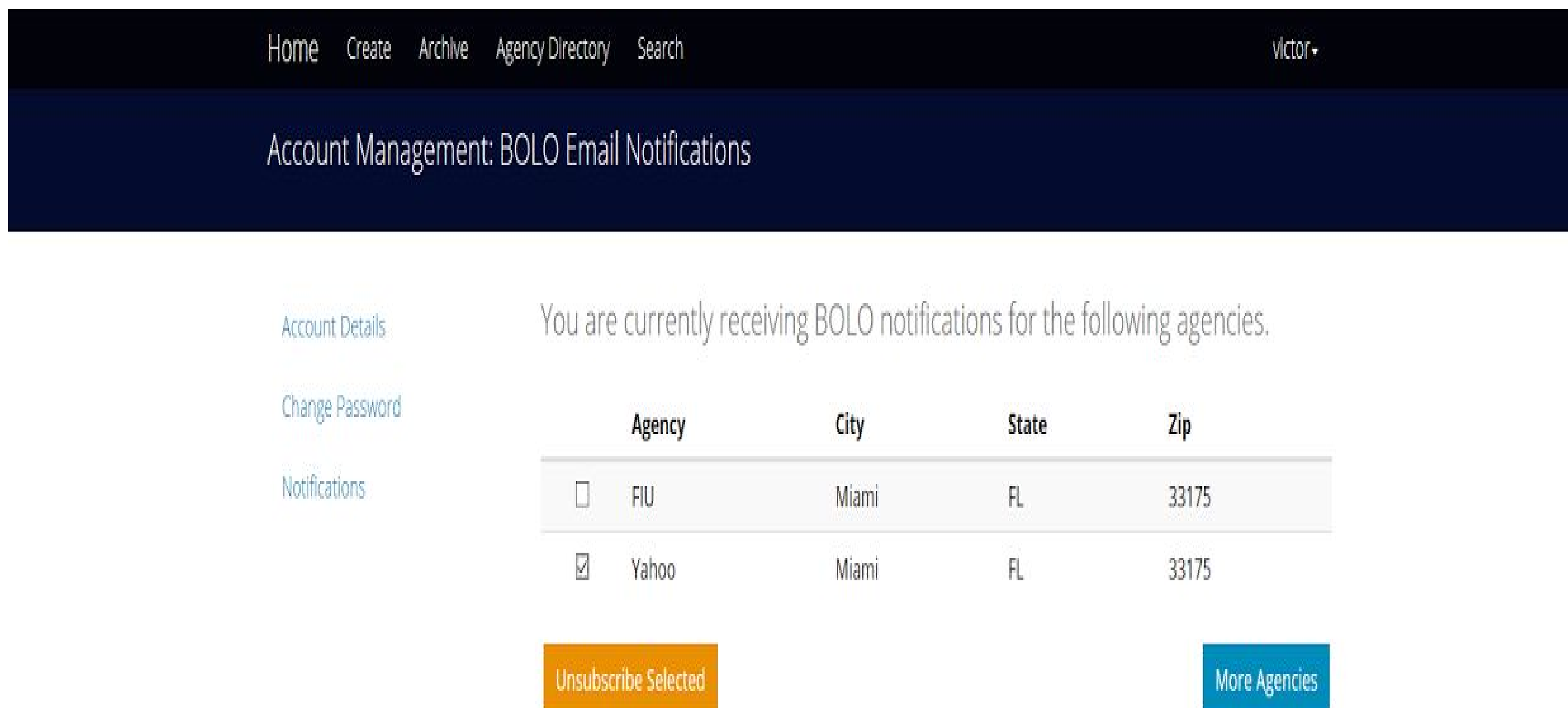- Older fliers tend to be forgotten and crimes unsolved

Solution
- A secure and fast Flier Creator web app named BOLO was developed on 2015
- Previous iteration, BOLO - 6.0, was buggy and unreliable
- BOLO - 7.0, was developed on top of previous version
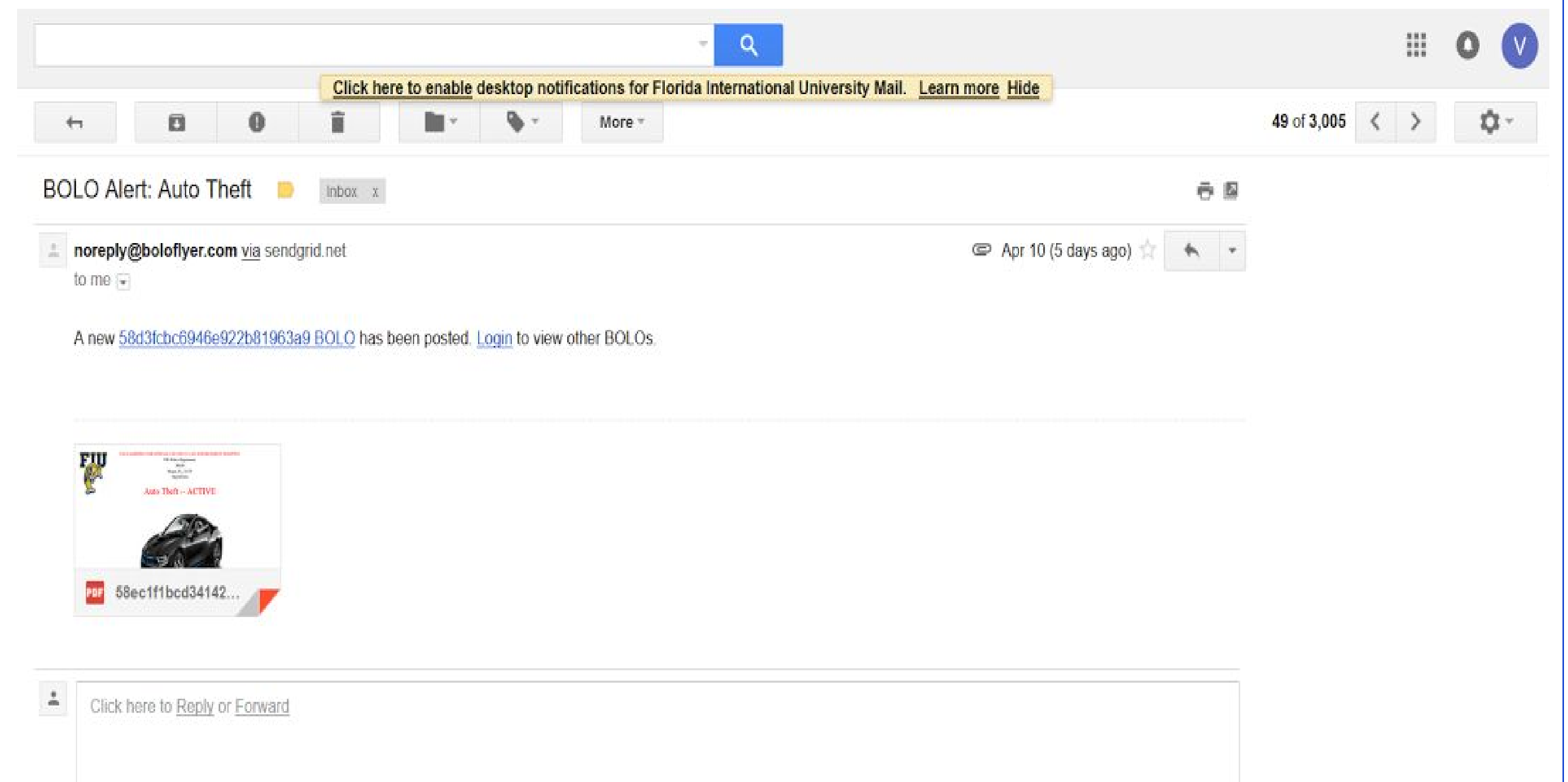- Main priority was fixing all errors

Current System
- Uses Node.js as Backend
- Uses MongoDB as Database
- Uses Pug as Frontend
- Fixes most bugs from previous version
- Adds new important features
- Improves previous implementations

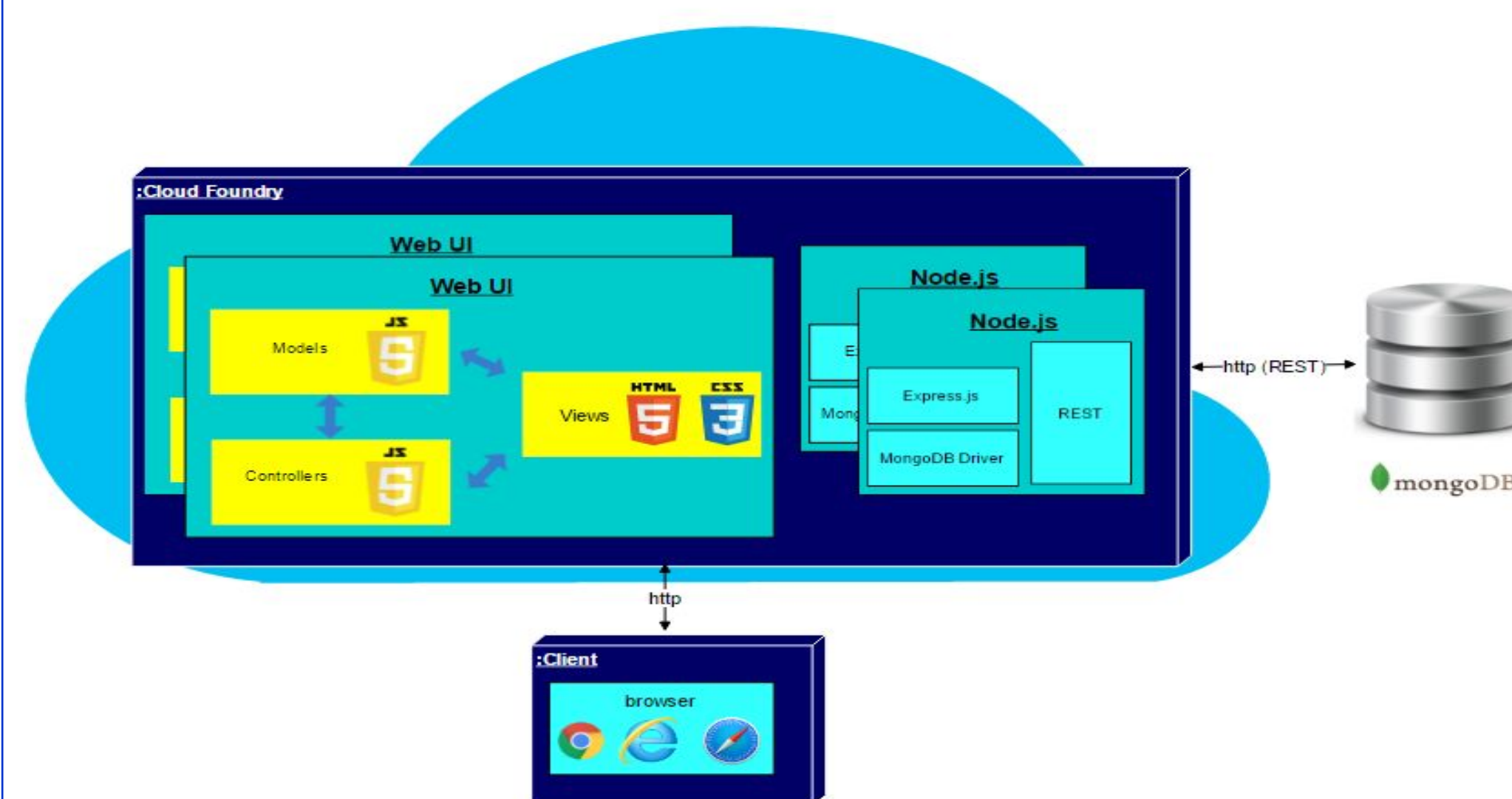## Screenshots

Unsubscribing from agencies

Receiving notification of new BOLO

Requirements
- Ability for any user to subscribe or unsubscribe from an agency
- Notify subscribe users with a pdf when a BOLO is created or updated
- Fix password validation
- Entering a date should be validated to US date format
- PDFs must not show N/A attributes
- Impede users from clicking other tabs when resetting password
- Ability to delete categories not being used by a BOLO

System Design
- System uses a combination of three-tier and Model-View-Controller architectures
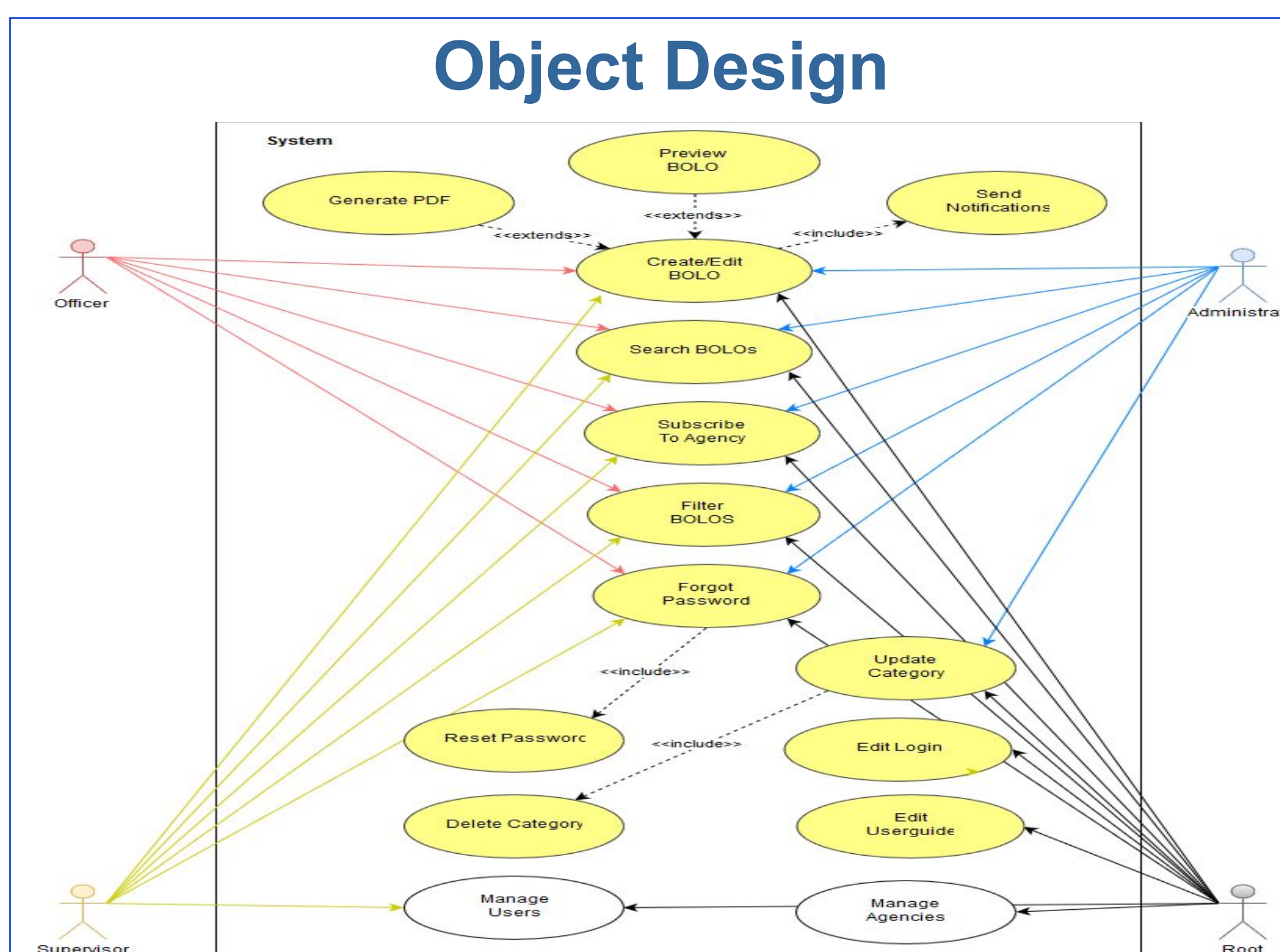- MVC architectural pattern resides in the application tier

Implementation
- BOLO - 7.0 can run on Windows and Linux systems
- MongoDB stores all users, agencies, and BOLOs data
- HTML 5, CSS 3, and Pug render the app's user interface
- Bootstrap was used as the application's theme
- All emails notifications are handled by Sendgrid
- Node.js and other open source modules manage most of the server requests and logic

Verification

Test ID: BOLO_Notifications_4

Purpose:
Create a BOLO and click confirmation email to check if users subscribed receive notification emails.

Preconditions:
User must be log in.
At least one user must be subscribed to the BOLO's agency.

Input: User receives confirmation email and clicks confirmation link.
System receives confirmation.
System send a notification email to the BOLO author and to any user that is subscribed to the BOLO or to the BOLO's agency.
Users receive notification email

Expected Output:
Notifications emails are received for each subscribed user plus the author.

Object Design

Summary
- BOLO - 7.0 was managed using Scrum development process on 7 springs
- Adds more user-friendly features
- Fixes most of BOLO - 6 faults and bugs
- Ensures a faster response to alerts from Pinecrest Police officers