*Florida International University*

*School of Computing and Information Sciences*

CIS 4911 Senior Capstone Project – **Software Engineering Focus**

**Requirements Document**

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| Course: | CIS 4911 |
| System: | BOLO Flier Creator |
| Team: | Danae I. Perez Tillan  Icxe Vidal |
| Date: | 01/28/2015 |
| Instructor: | Masoud Sadjadi |
| Mentor: | Samuel Ceballos |

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·         Abstract – one or two paragraphs giving a brief overview of the document.

The main goal of the project is to develop a web application that provide to officers an electronic process to create a BOLO (Be on the Lookout).  This application will give to them the ability to help the community in a faster and easy way.  This will replace the paper process that they have in place now.

·         Table of Contents

**1.**      Introduction

1.1.   Problem definition

The Police Department of the Pinecrest Village wants to develop an application that will assist first responder officers creating BOLO flyers when they arrive on the crime scene and allows them to upload them to a server; so that when a detective is assigned to the case, he is able to retrieve it from the system

1.2.   Background

Currently, when a police officer is called to a crime scene (referred to as first responder) he fills out a report on paper, depending of the circumstances that report may take the form of a BOLO, Wanted for Questioning, Probable cause for Arrest, etc. Once the first responder officer leaves the scene, he submits a paper copy of that report to his supervisor for review. After the supervisor reviews the file he sends it to bookkeeping, where its distributed to detectives, officers, and other police agencies.

The problem they face with this system is how long it takes for the BOLO to pass thru this chain. For example if there’s a case of child abduction a Friday night, the BOLO won’t pass thru the whole system and to a detective desk until after Monday morning; and even longer until officers from other police agencies receive the notice.

This whole process takes too long, they need a fast way of distributing the BOLOs to police officers within the Pinecrest VIllage Police Department and other police agencies in the Miami metro area.

1.3.   Definitions, Acronyms, and Abbreviations

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| --- | --- |
| **Term** | **Definition** |
| Tier1 | This is a type of user. The (first responders) has access to Create, View, and Edit his/her own Bolo. |
| Tier2 | This is a type of user. This officer (supervisor) will have access to Tier1 permission plus edit, and delete a BOLO. |
| Administrator | Tier1 and Tier2 access |
| Registered User | A user that has created an account in the system |
| Bolo | Be on the lookout. The flier created for the officers to capture a suspect. |
| First Responder | first police officer to arrive on the crime scene who collects information on the suspect |

1.4.   Overview of document

Chapter 1 introduces the project. It describes the existing problem and our proposed solution. It also provides background information on the problem that explains our customer's motivation to find a solution to the problem.

Chapter 2 describes the feasibility study done. It describes the limitations and constraints of the current system and the goal of the new system. It defines the high level requirements of the new system and analyses other systems currently available.

Chapter 3 proposes our solution plan and hardware and software requirements. It also provides a breakdown of the work, milestones and deliverables

Chapter 4 contains the appendices to the project

Chapter 5 contains references to other work used, not our own

**2.**      Feasibility Study

2.1.   Description of Current System (Limitations and Constraints)

There is no other system that provides this kind of functionality to our customers. Currently our customers use word editing software (like Microsoft Word) to create BOLOs and distribute them via hardcopies or as pdf documents as attachment on emails. The limitations of this process are the lack of distribution speed, and the inability of doing searches for BOLO (officers would end up with dozens of BOLOs as pdf and no easy way of searching or browsing them.

There are not previous versions of this system. This project will be the initial code base of the system.

2.2.   Purpose of New System

The goal of the new system is to provide a easy to use tool for creating and distributing BOLOs in real time. It will also catalog active BOLOs and provide tools for searching, sorting and viewing them.

2.3.   High-level Definition of User Requirements (must include security/privacy requirements)

The system will provide the following features:

-the system must support three kinds of users:

-Tier1: lowest tier, allows to create, search and view BOLOs

-Tier2: for supervisors, had Tier1 permissions plus edit, and delete BOLOs

-Administrator: has Tier1 and Tier2 permissions, plus create, edit and delete users

-a homepage with thumbnails showing the most recently created BOLOs, buttons to create, search, browse, edit and delete BOLO, create, delete and edit users (these options show depending on the level of user)

-the system should have the ability to send an email to the users each time a BOLO is created. The email should have the BOLO attached to it as a pdf document

-users should have the ability to download the BOLO as a pdf

Security/Privacy:  
-users must login to the system in order to use it by providing a user id + password

-a second step verification after each login will be requested. It will take the form a security question, ie “what high school did you attend to?”, “what’s the name of your dog?”

2.4.   Alternative Solutions

2.4.1.      Description of Alternatives

-A possible alternative solution for this system, is having a Google Drive folder shared among police officers where they could create BOLOs and view the BOLOs created by other officers

-Other solution is creating a master-email account where officers would send the BOLOs they create, and then they would be distributed to the rest of the police force from that master-email

2.4.2.      Selection Criteria (Briefly describe the feasibility criteria used in the analysis component)

Speed: how soon, since the creation of the BOLO, it can be viewed by other police officers in the Pinecrest PD or other neighboring agencies

Security: how easy it is for non-authorized users to create or view BOLOs

Ease of use: the learning curve of the new system

Control over the data: how much control over the data the end user has

2.4.3.      Analysis of Alternatives (refer to Appendix C – Feasibility Matrix) – you should provide a score so that the alternatives can be compared.

2.5.   Recommendations

**3.**      Project Plan

3.1.   Project Organization

3.1.1.      Project Personnel Organization

Danae Perez Tillan and Icxe will be working on all the front-end website aspects of the application.

Danae Perez Tillan and Icxe Vidal will work jointly between the backend aspects of the application.

Danae Perez Tillan and Icxe Vidal will work jointly on the documentation of the application.

3.1.2.      Hardware and Software Resources

Hardware:

Windows desktop or laptop computers

Software:

Codeigniter

PHP 5.1.6

MySQL 3.23.23 or greater

JavaScript

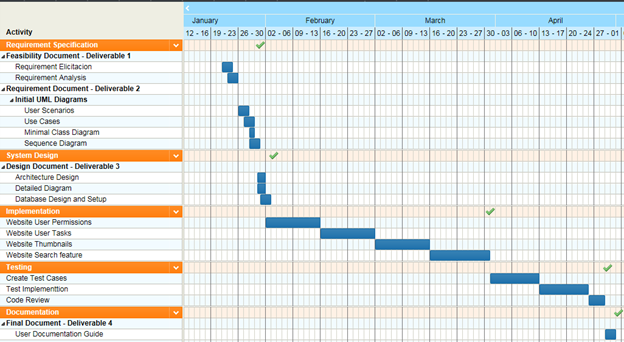
CSS

IIS

3.2.   Identification of Tasks, Milestones and Deliverables (work breakdown)

**4.**      Appendix

4.1.   Appendix A - Project schedule (Gantt chart or PERT Chart)



4.2.   Appendix B – Feasibility Matrix

4.3.   Appendix C – Cost Matrix

4.4.   Appendix D - Diary of Meetings

**Meeting 1:**

    Date: Jan 21, 2015

    Location: Pinecrest Village Police Department Station

    Participants:

Chief Ceballos

            Major Cohen

            Lieutenant Bridges

            Danae Perez

            Icxe Vidal

    Agenda: Gather the user stories from the project owners

    Summary: Product owners stated the problem they had and explained how they envisioned its solution. They described the vision they had about how the system would work immediately and in the future. We coached them on what would be feasible to do on this semester, what was possible but not sure, and about which features could be good follow-up projects in future semesters.

**Meeting 2:**

    Date: Jan 23, 2015

    Location: FIU Undergrad Lab

    Participants:

Danae Perez

            Icxe Vidal

    Agenda: Refine the user stories

    Summary: We went over the user stories that were gathered on the previous meeting. Two user stories were split into two to make them more specific. We added two more stories the owners thought of after our first meeting and sent us via email

**Meeting 3:**

    Date: Jan 26, 2015

    Location: FIU Undergrad Lab

    Participants:

Danae Perez

            Icxe Vidal

    Agenda: Review Product Backlog

    Summary: Gave final touches to user stories, and owners gave their approval of the backlog

**Meeting 4:**

Date: Jan 28, 2015

    Location: FIU Undergrad Lab

    Participants:

Danae Perez

            Icxe Vidal

    Agenda: Initial Feasibility Study, System Design, Object Design, Project Plan

    Summary: Began the initial planning, system and object design of the project

**Meeting 5:**

Date: Jan 31, 2015

    Location: FIU Undergrad Lab

    Participants:

Danae Perez

            Icxe Vidal

    Agenda: Initial Feasibility Study, System Design, Object Design, Project Plan

    Summary: Continue filling out the planning, system and object design documents, analyze possible frameworks to use on the creation of our system

**Meeting 6:**

Date: Feb 1, 2015

    Location: FIU Undergrad Lab

    Participants:

Danae Perez

            Icxe Vidal

    Agenda: Prepare for the presentation

    Summary: Rehearse for the presentation on Monday

**5.**      References (you should reference any work that is not your own)