Requirements Specification

for

Secure Photograph Capture System

Version 1.0

Capstone Design

Oklahoma State University

January 26th, 2016

1.0 Introduction

1.1 Purpose

The purpose of the Secure Photograph Capture System is to allow anyone to set up a secure photography system which captures a picture on motion and access those pictures taken from any Windows PC over the internet.

1.2 Scope

The scope of this project is to take an idea and develop it into a working concept, which meets all requirements laid out below.

2.0 Overall Design

2.1 Function

Turnkey solution to securely monitoring any place the camera is placed

2.2 Operating Environment

Shall operate in any indoor location where a standard 120V wall outlet is present.

2.3 Assumptions and Dependencies

The user has a wireless internet router and access to a Windows desktop computer. They do not need to have any technical experience to use the finished product.

3.0 Hardware Requirements

3.1 Shall be able to take and upload a picture every minute

3.2 Shall be able to take picture of at least 640x480px

3.3 Shall have method of tamper protection that if stolen, the system will not retain any data beyond the most recent photo captured

3.4 Shall be able to store a year's worth of pictures on the server

3.5 Shall store the picture securely off board from the camera to protect from thieves

4.0 Software Requirements

4.1 Shall have a method for the user to retrieve the pictures

4.2 Shall be able to retrieve the pictures remotely

4.3 Shall use AES 256 as the standard for encryption

4.4 Shall have set up process to enable the generation of a unique key for the system

4.5 Shall name each image with time and date stamp for ease of management
4.6 The images shall be accessible from any standard Windows computer
4.7 Shall securely store the key on board so that any user will not be able to locate the key on the system