Smart video surveillance system

ISE Project Report

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# 1. Introduction of Design Document

Smart Video Surveillance System (SSVS) is a surveillance system that allows individuals and organizations to store video when a specific type of object in detected in CCTV camera.

This system provides facility to the user to select specific type of object as recording criteria. In this specification, the graphics and layout of the screens is shown here merely to illustrate the underlying functionality. The actual look and feel will be developed over time with the input of graphics designers and iterative user feedback. This spec does not discuss the algorithms used by this system for image classification, which will be discussed elsewhere. It simply discusses what the user sees when they interact with **SSVS.**

## Scenarios

In designing products, it helps to imagine a few real-life stories of how actual (stereotypical) people would use them. We’ll look at two scenarios.

### Scenario 1: Fareed’s Company

Fareed’s company is a milk production company which needs an efficient CCTV camera monitoring solution for their offices and production areas. The problems this company face include huge cost of storage devices, large space for placing storage devices, a dedicated person to look at cameras twenty-four by seven. The company does not want animals like cats, dogs etc. to enter in their production areas and they want to restrict vehicles entering office area. Smart Video Surveillance System best fit to their requirements. Fareed’s company can install this project in its organization.

### Scenario 2: Bob

Bob is a businessman and he used to go to foreign for meetings. While he attends meetings, no one monitors his house but surveillance cameras. One day he came back to the houses and feels something change in his house. He went to the surveillance room and started browsing all previously recorded videos to confirm if there was someone in his house while he was in foreign. There was seven day’s recording when he was not in his house. He had to browse 168 hours recording only to confirm his doubt which is no more than a daunting task. Suppose Bob had Smart Video Surveillance System (SSVS) his work would have reduced a lot. He only had to check whether there is any recording of not, if not then it was clear that nothing had happened in that house. Additionally, he would have received on time notification if any unwanted object is detected in house.

## Non-Goals

This version will not support the following features:

* Face recognition
* SSVS does not support rain drop removal or it may not perform well in fog

# 2. Sequence Diagrams

A screenshot of a cell phone

Description automatically generated

## 3. Flow chart

A close up of text on a white background

Description automatically generated

# 4. Class Diagram

A close up of a piece of paper

Description automatically generated

# 5. Use case diagram

***A close up of a map

Description automatically generated***

# 6. Interface Design

Interface of our system will be like shown below. The first screen of our interface will contain different labels, widgets, controls etc. To connect camera with the system there are two ways either add a wireless camera or connect it with wire. To connect it with wireless camera system will show screen like shown below to enter Ip address. Once user click on button Run system will connect with the camera. As the system will connect with the camera, screen of surveillance will be shown to the users.

# 7. Founders

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