

Functional Specification

Scope

The purpose of the “Camera of the Future” is to make the photographic process more seamless and inconspicuous. This device is an attempt on a faster and more accurate process of taking and viewing photographs, by compression, and reduction of record and viewing through projection instead of directly. Deliverables will include a digital mock-up of the camera and glasses, as well as a magazine advertisement including this device.

Solution Overview

This device attempts to solve the issue of a slow and complicated process of the current photographic process. By incorporating concepts of micro-photography and dry photography, the camera is able to reduce the size of the record and stores images that can be projected in a later process. The main function of this camera is to take photos in plain sight. The camera will be placed inside the bridge on a pair of glasses where it is out of the way of ordinary vision. The camera is small: approximately the size of a hex-nut. Inside the hex nut is a photocell that adjusts exposure for a wide range of illumination. In the temple of the glasses is a photo button. A quick push of the button takes the photo, and without a sound, a photo record has been made. A white light indicates whether the photo was successfully taken. The glasses contain a memory card, which is stored inside the temple, and can be extracted to produce results in full color, to be seen in 2 ways: on a digital screen or as a projection.

Requirements Specification

The camera has a universal focus lens with a short focal length, allowing the camera to be more automatic. The user presses a button on the glasses to take a picture. The camera stores a photographic record, and allows for photos to be projected.

Use Cases

To take the photos, the user:

1. Wears glasses and checks battery
2. Looks at subject and determines the composition for the photo
4. Presses photo button
5. Takes picture, and photo produced on the spot, later to be seen in full color

To charge the camera, the user:

1. Checks for battery percentage
2. Upon indication of orange light, plugs Micro-USB into glasses port located on temple
3. Plugs USB into charger and into outlet
4. Charges device until indication of green light: ready to use signal

To replace the memory card, the user:

1. Slides out memory card from memory card slot
2. Inserts memory card into memory card reader
3. Either Views on digital screen OR on projector
4. Once memory card is full, saves pictures onto hardware, and deletes pictures on memory card
5. Inserts memory card back into memory card slot

Non-Functional Requirements

Adding personal style and touch to glasses through different lens styles, such as clip on lens to go from ordinary glasses to sunglasses.