

Psychic Peek Around Corners with Glass

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Introduction



Peek around corners with google glass.

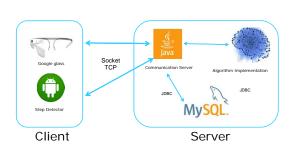
- Enable user to see blind area of his movement direction -- display real-time video stream on google glass screen.
- According to user's location and behavior automatically select and activate different webcam.

Network



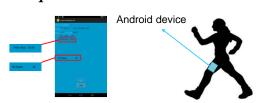
The Real Time Streaming Protocol (RTSP) is a network control protocol designed for systems to control streaming media server and used for establishing and controlling media sessions between end points.

System Design



Position Tracking

> Step Counter Module



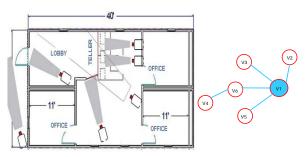
- Apply orientation sensor in Android device to detect step (orientation change when leg lift).
- Direction Module





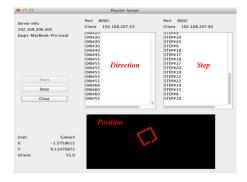
- Apply accelerometer sensor combined with magnetic filed sensor to determine user's direction.
- Algorithm Reference:
 Google build-in app --- Compass

Webcam Selection



Apply graph BFS algorithm to search all the adjunct vertices, then based on the orientation value, activate the corresponding webcam.

Result



Server

